

# Promoting Cognitive Development in Early Childhood Education



## A HANDBOOK FOR EARLY CHILDHOOD EDUCATION TEACHERS

RAABE
Společně pro kvalitní vzdělávání

DECODE

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DECODE

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## A handbook for early childhood education teachers

DEveloping the CognitivE Potential of Preschoolers from Disadvantaged Backgrounds (DECODE)




RAABE
Společně pro kvalitní vzdělávání

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# About the DECODE project

The DECODE project (full name „DEveloping the Cognitive Potential of Preschoolers from Disadvantaged Backgrounds“) is an international European Erasmus+ project (Erasmus+ programme, KA220-SCH, Cooperative Partnerships, project registration number: 2022-1-CZ01-KA220-SCH-000086145).

The project is coordinated by the publishing house Dr Josef Raabe and involves three European countries: Czech Republic, Slovakia, Slovenia, and a total of eight project partners.

The expert partners of the project are four organisations: Association of Early Childhood Education and Dr Josef Raabe Publishing House (Prague, Czechia), University of Maribor, Faculty of Education (Maribor, Slovenia) and EXPOL PEDAGOGIKA (Bratislava, Slovakia).

A total of four kindergartens took part in the development, preparation of activities and testing of the results in practise: Liběšice Primary School and Kindergarten, Čtyřlístek Kadaň Kindergarten (Czechia), Kalinčiakova Primary School and Kindergarten (Slovakia) and Ivan Glinšek Kindergarten (Slovenia).

The aim of the project was to contribute to high-quality early childhood education (ECE) by introducing a comprehensive approach to promoting children's cognitive development. The project focussed on supporting all children in ECE, with an emphasis on those from disadvantaged backgrounds. The aim was to create freely available resources and online tools to support children's cognitive development.

The project equipped ECE teachers with comprehensive methodological support, developed collaboration between kindergarten and family and provided parents with a digital repository with numerous activities to do at home.

The kindergartens in the project worked together with the families to promote the children's cognitive development and strengthen their key competences, thus preventing learning disadvantages and low levels of basic skills.

# DECODE handbook for ECE teachers

One of the first project results you are holding in your hands is a publication entitled *Promoting Cognitive Development in Early Childhood Education: A handbook for early childhood education teachers*.

The handbook is primarily intended for ECE teachers and is designed to support the readiness of ECE teachers to use optimal pedagogical strategies for a balanced social, emotional and cognitive development of children (not only) from socially disadvantaged backgrounds.

The  handbook in written for teachers in ECE and other professionals who work with children in early childhood. The aim of this publication is to explain the basic concepts of children's cognitive development and to provide some specific insights from an educational perspective into cognition and other areas of development in children. The first chapter represents brief theoretical overview of children's cognitive development in early childhood. This includes perception, attention, memory, thinking and language with definitions, brief explanations of development and possible implications for children from disadvantaged backgrounds. The second chapter describes social and emotional development, physical development and executive functions as important developmental domains of the child's personality. The third chapter addresses current approaches to child development in early childhood education, which include individualization, integrated education and ways of learning. The ways of learning are described using spontaneous and intentional learning, experiential learning and cooperative learning as basic pedagogical concepts of learning in kindergartens. The fourth chapter includes assessment of learning outcomes as an integral part of education that helps us gain insight into the child's unique abilities, requirements and progress. The handbook includes theoretical introduction to cognitive development, personality development, current ap-

proaches to child development, assessment of learning outcomes and 96 engaging learning activities for working with children in the group.

## Other project outcomes

Other outcomes of the project also focus on child development, increasing the competences of teachers and parents of preschool children and strengthening cooperation between kindergartens and parents.

Parents receive a handbook with recommendations for promoting children's cognitive development in the home environment and, in particular, a digital collection of activities for parents working with their children at home, which includes 320 various activities.

The project results support the development of teachers' knowledge and skills in ECE education through a freely accessible online course that has expanded the range of training courses for ECE teachers.

The results of the project are freely available open digital educational resources and free digital repositories in all national languages of the project and also in English.

**All project results are available for free download on the DECODE website**

DECODE | „DEveloping the COgnitivE Potential of Preschoolers from Disadvantaged Backgrounds (raabe.cz)

We believe that the results of the DECODE project will be useful not only for ECE teachers, but also for parents. We hope that the project results will contribute to improving the quality of children's education in kindergartens and schools in all participating countries.

# Introduction

The handbook is designed specifically for teachers in early childhood education and other professionals working with children in early childhood. Its purpose is to empower educators with the knowledge they need to excel in their teaching practices and maximize child learning outcomes. It focuses on explaining the basic concepts of children's cognitive development, while offering specific insights into cognition and other areas of child development from an educational perspective. Furthermore, it presents practical strategies and approaches that educators can easily incorporate into their classrooms, promoting an environment that nurtures optimal cognitive development in children.

The first chapter provides a brief theoretical overview of cognitive development in early childhood. It explores the fundamental cognitive processes underlying learning, such as perception, attention, memory, thinking and language, providing clear definitions and explanations for each. Additionally, the chapter highlights the significance of these cognitive processes for children from disadvantaged backgrounds, emphasizing the importance of addressing unique challenges and providing targeted support.

Every child is unique, shaped by their personality traits and experiences. To create a supportive learning environment, it is vital to recognize and respond to students' emotional, social, and intellectual needs. In the second chapter, the book highlights the holistic nature of child development by exploring key domains of a child's personality. It examines social and emotional development, physical development, and executive functions as important aspects of a child's overall growth and well-being.

The third chapter focuses on approaches to child development in early childhood education, particularly within the context of kindergartens and other early learning environments. It explores the importance of individualisation, integrated education and embracing different ways of learning. The chapter highlights the significance of tailoring instruction to meet the individual needs and strengths of each child, promoting inclusive practices, and using pedagogical concepts such as spontaneous and intentional learning, experiential learning, and cooperative learning.

The fourth chapter highlights the importance of assessing learning outcomes as an integral part of education. It explores different assessment methods and their significance in gaining valuable insights into a child's unique abilities, current progress and individual needs. By using thoughtful assessment methods, educators can effectively enhance the educational experience for every child.

As educators, we are able to make a meaningful difference in the lives of the children we teach. By recognizing and nurturing their individual strengths and providing a supportive learning environment, we can help them thrive academically and personally. Let us embrace this responsibility with enthusiasm and dedication, knowing that our efforts have the power to shape their futures. Together, we can inspire and empower children to reach their full potential.

This publication has been produced in collaboration with experts in early childhood education from the Czech Republic, Slovakia and Slovenia as a result of the Erasmus+ project DECODE – Developing the cognitive potential of preschoolers from disadvantage backgrounds (Project code: 2022-1-CZ01-KA220-SCH-000086145).

# 1. Cognitive development

**Authors:**
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Cognitive development is a lifelong process of intellectual growth acquired through perception, ideas and interactions. Cognitive development occurs in a series of stages: prenatal, infancy and toddlerhood, early childhood, middle childhood, adolescence, early adulthood, middle adulthood and late adulthood, and is related with social-emotional and physical development. Cognitive development is influenced by a combination of biological, social and psychological factors that vary from person to person and can lead to both growth and decline. According to all major theories on this phenomenon, nature and nurture play a significant and interactive role in cognitive development (Deutch, 2009).

Perception, attention, memory, thinking and language are important, complex and interrelated areas of cognitive development that shape the intellectual growth of young children. It is important for teachers in early childhood education to understand these key areas in order to effectively plan activities that support and enhance the cognitive potential of all children and, in our case, especially children from disadvantaged backgrounds. Children from disadvantaged backgrounds face challenges that affect their cognitive development. These difficulties include lack of access to quality education, poverty, limited exposure to language and stimulation, chronic stress and trauma, limited parental involvement, health problems, lack of supportive relationships, etc. (UNICEF, 2021). Teachers in early childhood education should be aware of these challenges and take them into account when planning activities and support for these children by adjusting the level of difficulty and including the motivational effect. The aim of this chapter is to provide ECE (Early Childhood Education) teachers with a basic understanding of specific cognitive areas that need to be addressed in order to accelerate and harmoniously support the development of children from disadvantaged backgrounds and enhance their cognitive potential.

## 1.1 Perception

Perception is the set of processes by which we recognise, organise, and make sense of the sensations we receive from environmental stimuli, using all our senses (Sternberg, 2006). Visual perception is the ability to interpret information we receive through the sense of sight. It plays a crucial role in many aspects of our daily lives, including learning, communication, navigation and creativity. Auditory perception is the process by which the brain interprets and gives meaning to sounds. Tactile perception is the ability to interpret information received through the sense of touch and our skin. Olfactory perception is the ability to interpret information received through the sense of smell and can also have important effects on our emotional and social experiences. Gustatory perception is the ability to interpret information received through the sense of taste and is also closely related to our sense of smell, as taste and smell work together to create our overall perception of flavour.

### Development of perception

A newborn has well-developed basic senses which, with the exception of vision, reach an efficiency comparable to that of an adult in the first months after birth. An infant's ability to focus is similar to that of an adult at about two months of age, and colour vision at four months of age (Kellman & Arterberry, 2006). Visual acuity reaches adult levels between the second and third year (Courage & Adams, 1990), but approaches adult levels by the sixth month (Slater, 2001). Newborn infants are sensitive to colour, preferring to look at coloured rather than grey images, and can discriminate poorly between different colours by the second month of age (Brovn, 1990). Four-month-old children distinguish between the four basic colour categories and between basic colours and compound colours such as orange, pink and purple (Franklin & Davies, 2004). Newborns can hear relatively well and their auditory sensitivity develops rapidly in the first months after birth (Saffran, Werker & Werner, 2006). The

ability to localise sounds increases greatly approaching the sixth month. At this time, the child is also able to judge how far away the source of the sound is, and progress in localisation continues into early infancy (Litovsky & Aschmead, 1997).

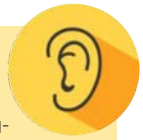
Between the ages of 3 and 6, children's perceptual development progresses significantly as they learn to perceive and interpret information from the environment, and as infants, children understand and explore the world by perceiving and responding to it. They learn about things by seeing, hearing, touching, tasting, smelling, and doing (Sternberg, 2014). In infancy, they begin to acquire representational thinking, which is the ability to use symbols for objects, people, and events. Representational thinking shapes a more intellectual kind of knowledge which is based on perception. For example, they can imagine the consequences of actions without actually performing, sensing them, and they can express more complex ideas with symbols. At this age, children also try to explain how things work and why events occur. New skills build on skills the children already have. They are actively involved in their own development, which is actively exploring and constructing an understanding of the world with all senses (Sroufe et al., 1996). Children age 3 to 6 are also better able to integrate information from multiple senses and use it to create a more complete picture of their environment than toddlers. Perceptual development during this age range is an important foundation for later cognitive, social, and emotional development. Overall, during this age range, children's perceptual abilities become more refined, and they are better able to use their senses to explore and understand the world around them (Deloache, 2014).

### Visual perception includes:



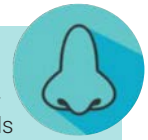
- **Visual discrimination:** the ability to distinguish between different colours, shapes, and patterns by sight.
- **Object recognition:** the ability to recognize and identify objects, people, and places by sight.
- **Spatial perception:** the ability to perceive and understand the spatial relationships between objects in the environment.
- **Depth perception:** the ability to perceive and understand the relative distances between objects in the environment.
- **Motion perception:** the ability to perceive and understand the movement of objects in the environment.
- **Visual imagery:** the ability to predict the visual consequences of performing certain actions.
- **Visual memory:** the ability to remember and recognize visual information over time.
- **Comprehension:** the ability to understand and interpret visual information, such as maps, charts, and diagrams.
- **Visual motor integration:** the ability to coordinate visual information with motor skills, such as hand-eye coordination.
- **Colour constancy:** perceiving the same colour of an object even if the illumination changes.
- **Size constancy:** perception of the size of an object, regardless of its size in the image or on the retina.
- **Pattern recognition:** identifying or categorising two-dimensional patterns.
- **Perceptual organisation:** recognizing and sensibly organizing visual information.
- **Perception of human motion:** interpretation of other people's movements.

### Auditory perception includes:



- **Discrimination:** the ability to distinguish between different sounds and identify specific sounds within a complex mixture of sounds.
- **Identification:** the ability to recognize and name specific sounds, such as spoken words, musical notes, or animal calls.
- **Localisation:** the ability to determine the direction and distance of a sound source.
- **Temporal processing:** the ability to perceive and distinguish the timing and duration of sounds.
- **Pitch perception:** the ability to perceive and distinguish different frequencies of sound, including musical tones and speech intonation.
- **Memory:** the ability to remember and recognize sounds over time.
- **Comprehension:** the ability to understand the meaning of spoken language, including vocabulary, grammar, and syntax.
- **Production:** the ability to produce and articulate speech sounds accurately and effectively.

### Olfactory perception includes:



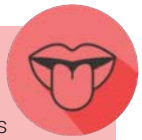
- **Discrimination:** the ability to distinguish between different odors and identify specific smells within a complex mixture of odors.
- **Identification:** the ability to recognize and name specific smells, such as the scent of a flower, a food, or a person.
- **Intensity perception:** the ability to perceive and distinguish the intensity of different odors, such as weak or strong smells.
- **Quality perception:** the ability to perceive and distinguish the quality of different odors, such as sweet, sour, or pungent smells.
- **Hedonic perception:** the ability to perceive and distinguish the pleasantness or unpleasantness of different odors.
- **Memory:** the ability to remember and recognize smells over time.
- **Comprehension:** the ability to understand the meaning and context of different smells, such as the smell of a burning building or a gas leak.

### Tactile perception includes:



- **Discrimination:** the ability to distinguish between different textures, temperatures, and shapes by touch.
- **Identification:** the ability to recognize and name objects or materials by their tactile properties.
- **Localisation:** the ability to determine the location of touch on the body or on objects.
- **Pressure perception:** the ability to perceive and distinguish different levels of pressure, such as light touch or firm pressure.
- **Texture perception:** the ability to perceive and distinguish different textures, such as smooth, rough, or bumpy surfaces.
- **Temperature perception:** the ability to perceive and distinguish different temperatures, such as hot or cold surfaces.
- **Pain perception:** the ability to perceive and distinguish different levels of pain or discomfort.
- **Proprioception:** the ability to sense the position and movement of one's own body, including joints, muscles, and tendons.

### Gustatory perception includes:



- **Discrimination:** the ability to distinguish between different tastes and identify specific tastes within a complex mixture of flavours.
- **Identification:** the ability to recognize and name specific tastes, such as sweet, sour, salty, or bitter.
- **Intensity perception:** the ability to perceive and distinguish the intensity of different tastes, such as weak or strong flavours.
- **Quality perception:** the ability to perceive and distinguish the quality of different tastes, such as the taste of a fruit or a vegetable.
- **Hedonic perception:** the ability to perceive and distinguish the pleasantness or unpleasantness of different tastes.
- **Memory:** the ability to remember and recognize tastes over time.
- **Comprehension:** the ability to understand the meaning and context of different tastes, such as the taste of a particular food in a particular culture.

## 1.2 Attention

Attention can be defined as the ability to actively process a limited amount of information from the enormous volume of information available through the senses, stored memories, and other cognitive processes (Sternberg, 2009). Attention is a cognitive process by which we actively select information. Attention is active when it is directed from the top down by the individual's goals or expectations. In contrast, attention is passive when it is directed from the bottom up by external stimuli (e.g., a loud noise) (Eysenck & Keane, 2015). There is also an important difference between focused and divided attention. Focused attention (or selective attention) is demonstrated when we are confronted with two or more stimuli at the same time and need to respond to only one. An example of focused attention is when a child hears many voices in the playroom and responds when we call the child by name. Working on focused or selective attention provides insight into how effectively a child can select specific stimuli and not be distracted by non-task related stimuli. Divided attention differs from focused attention in the ability to divide attention between two or more stimuli. Joint attention is also important for a child's development and involves sharing a common focus on something (such as other people, objects, a concept, or an event) with someone else. It requires the ability to gain, maintain, and shift attention. For example, a parent and child may both look at a toy they are playing with or observe a train passing by. Joint attention may be gained by using eye contact, gestures (e.g. pointing using the index finger) and/or vocalisations, including spoken words (e.g. "look over there"). Early joint attention skills may include a child reaching out to be picked up by an adult or looking at the same page of a book with another person (Leekam et al., 2000). Maintaining attention requires the coordination of cognition, emotion, and motivation. When the child is exposed to severe stress, this can impair attentional performance (Margolin & Vickerman, 2007), which is often the case for children from disadvantaged backgrounds (Andrade et al., 2009; Murphy et al., 2007).

### Development of attention

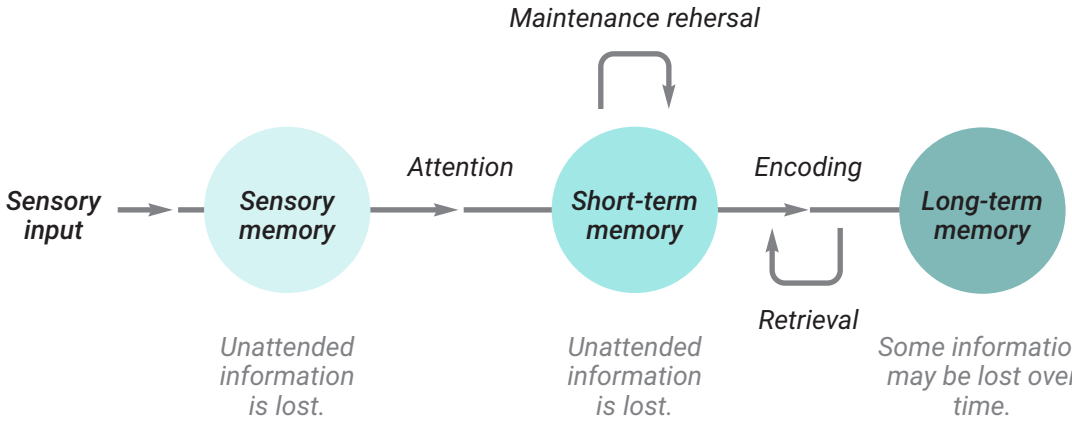
The ability to pay attention develops rapidly in early childhood as the frontal cortical areas of the brain become more functional by the end of the first year of life. The ability to pay attention, be alert and orient, that is, the ability to select information and track stimuli from sensory input, develops in the first six months (Posner, 2004). Executive control of attention develops toward the end of the second year of life. This includes the ability to maintain voluntary attentional control and sustained attention, which is the ability to maintain focus on a particular stimulus (Fuentes, 2004). Compared to the attention of older children, the attention of children in early childhood is relatively weak, i.e. less directed and controlled, and shorter in duration. It transitions from unsystematic or unplanned to systematic or planned (Eysenck & Keane, 2015; Marjanovič Umek, 2020). Between the ages of three and five, attention increases sharply, especially for tasks presented to the child by an adult (Ruff et al., 1998; Zupančič, 2020). Being able to establish joint attention is vital for developing social-communication and cognitive skills. In typically developing children, joint attention skills start to develop soon after birth and by the age of three, children are usually competent at gaining and maintaining joint attention from adults and peers. Children with developmental difficulties may have difficulties with joint attention and other types of attention. The child's engagement with objects and activities and the ability to direct attention to situational demands are considered fundamental skills for the development of self-regulation, executive control of behaviour, and social and cognitive development in various domains (Kochanska et al., 2000). However, the tasks of selecting information, maintaining focus on it, and ignoring irrelevant stimuli all pose challenges to children because their attentional systems are not yet fully developed (Sroufe et al., 1995).

## 1.3 Memory

Memory refers to the cognitive processes of acquiring, encoding, storing, retaining, and later retrieving information (Squire, 2009). Memory defines for us what we've done, who and what we know and who we are. Memory is not a unitary phenomenon, information must be encoded and possibly even related to other information. Memory has a central role in language learning, thinking and action. Learning and memory go through several stages. How and what children remember depends on many dynamically interacting factors and contexts that influence the performance of the children's memory and the development of those abilities (Bjorklund, 2012). To better understand the memory system it is good to know some basic facts related to memory processes presented below.

The processes that take place during learning are called encoding and include many of the same processes that occur during perception. This is the first stage. As a result of encoding, the information is stored in the memory system. Thus, storage is the second stage. The third stage is retrieval, which involves retrieving stored information from the memory system. Forgetting occurs when our retrieval attempts are unsuccessful. These various processes take place within the memory system (Eysenck & Keane, 2015). The three basic components of memory processing are a) sensory memory, b) working/short-term memory and c) long term memory. Figure 1 below shows a simplified representation of the components and the memory process.

*Figure 1: The memory process.*




*Note: Adapted from Eysenck and Keane (2015) by the authors of this chapter.*

**Sensory memory** is the perception related to sight, hearing, smell, taste, and touch information entering through the sensory cortices of the brain and relayed through the thalamus. It lasts only milliseconds and is mostly outside of our conscious awareness. Immediate or short-term memory is the capacity to hold a very limited amount of information in a temporary buffer for a short period of time (from a few seconds to a couple of minutes). The information enters through auditory or visual channels and captures our attention.

Our capacity to manipulate and employ the information stored in short-term memory is referred to as **working memory**. Working memory stores information for a brief period of time. The phonological loop, which processes verbal information, and the visuospatial sketch pad, which processes visual information, are the two components that make up working memory. Both are controlled by the central executive system. Although working memory is dependent on a network of interconnected brain areas, the prefrontal cortex is crucial to this function.

Information that is retained for days, months, or even years is referred to as **long-term memory**. Declarative and nondeclarative (implicit) long-term memory are two different streams. Declarative or explicit memory preserves the details of events and information that we can consciously recall. Semantic memory (information, the meaning of words, concepts…), episodic memory (events, names…) and autobiographic memory (an individual's own

episodic memory) are the three subsystems that make up declarative memory. Implicit memory includes procedural memory (how to ride a bike, how to swim …) and emotional memory (memories of events related to strong emotions and feelings e.g. death, birth, traumatic events).

Memory plays a fundamental role in cognitive development, including sustained attention, reasoning, organisation, speech and language functioning, particularly in the acquisition of language and language comprehension, reading ability and reasoning (Baddeley, 2003; Bull et al., 2008; Cowan, 2005; Engle, 2002; Savage et al., 2006). Children with higher working memory scores also display better social skills (Sabol & Pianta, 2012), more successful goal-directed behaviour, have a better receptive vocabulary and better mathematical performance (Fitzpatrick & Pagani, 2012; Marcovitch et al., 2010). Problems associated with poor working memory skills in children include low performance in reading and mathematics (Alloway et al., 2009), poor overall academic progress, poor problem-solving skills and lack of attention (Gathercole et al., 2008).

### Memory development

Newborn babies develop both short-term (or working) and long-term memory. They learn mainly through habituation, classical and instrumental conditioning, and imitation (Zupančič, 2020). Memory strategies improve with age through their frequency of use and their complexity, although age is not the primary determinant of whether or how long a child will remember an event. Events that children are familiar with or have repeated experience of are remembered well, even over long periods of time (Bauer, 1997). In early childhood, children use memory strategies unconsciously, while those 3 years and older are aware of their memory, but may unrealistically estimate their memory capacity. Toddlers are able to play visual memory games with hidden objects. They usually remember the things they see, while older children gradually become aware of the importance of remembering things they cannot see. By the end of the preschool years (at age 6), children are often aware that a particular task requires remembering, but they are not very good at making a plan to facilitate this memorisation (Sroufe et al., 1996). In everyday activities, preschool children demonstrate memory through recognition (the ability to perceive a particular stimulus as familiar) and free recall (the ability to retrieve information from long-term memory for current use). In the memory process, children attempt to understand the information, but the interpretation of the remembered event is influenced by prior knowledge, scripts[1] and the relations between all these factors. Remembering is not just the mere recalling of perceptions, but a process in which the child constructs the context (Zupančič, 2020). Scripts develop with age, even very young children use scripts for known events and these scripts influence the way children reconstruct past events (Ceci et al., 2003).

All children are better able to develop memory strategies if their environment supports them in doing so. For example, when solving tasks that require them to recognize the similarities and differences in pictures or objects, when they play games related to memory (visual, auditory or kinaesthetic), or when they solve tasks that require them to remember instructions for the task at hand (Marjanovič Umek, 2020). They will usually use memory strategies, but these strategies are limited (they mostly use repetition). In the ECE period, children depend either on a situation that fosters simple memory-related activities or guidance from adults (Bauer, 1997; Sroufe et al., 1996).

## 1.4 Thinking

In everyday language, the word thinking covers several distinct psychological activities. It refers to the conscious cognitive processes that the mind uses to produce thoughts, and these processes can occur without the need for sensory stimulation (Breyer & Gutland, 2015). It includes a range of mental activities such as judging, reflecting, problem-solving, and creating, and relates to any product of the mind such as beliefs and opinions (Matsumoto, 2009). Thinking skills can be categorised as low-order or high-order. Low-order thinking involves the basic pro-

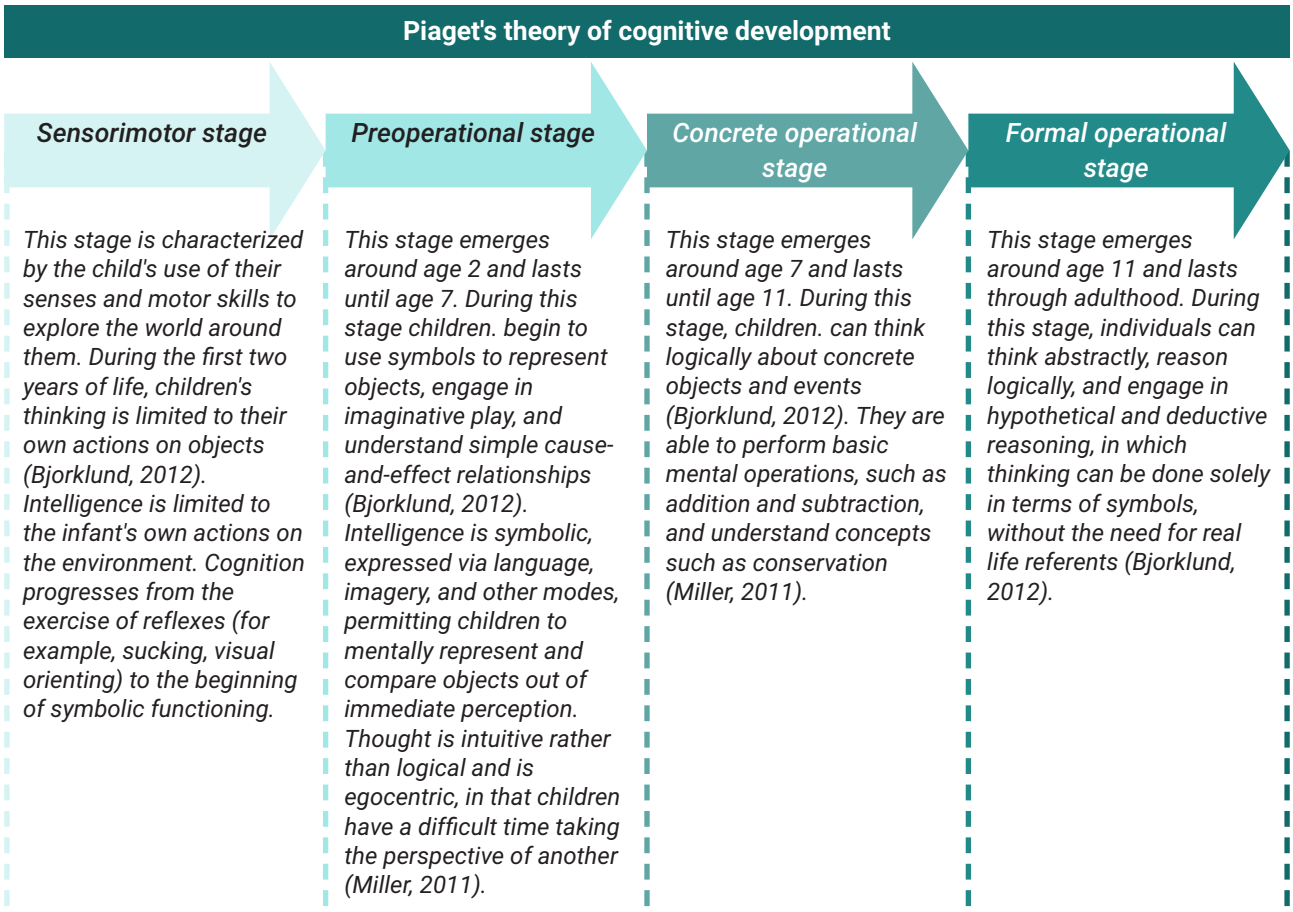
[1] Script is a cognitive schematic structure, a mental road map, containing basic actions. Script memory refers to an abstract general memory for the typical activities that occur during routine events. For example, when we hear or think "restaurant" we probably activate the script "going to a restaurant or eating at a restaurant" (Ceci et al., 2003).

cessing of information, while high-order thinking involves complex cognitive activities such as questioning, interpreting, constructing, and evaluating new knowledge (Foster, 2009).

**Development of thinking**

The development of thinking is a complex and multifaceted process, and there are numerous theories and perspectives that attempt to explain how it unfolds over time. Jean Piaget's theory is one of the most influential and widely cited frameworks for understanding cognitive development in children. It proposes that children are active learners who construct their understanding of the world based on a unique interpretation of their experiences. Piaget's theory emphasized that children are active learners whose thinking reflects a unique interpretation of the world. He viewed cognitive development as a constructive process, where existing knowledge guides how new information is acquired. Children's intellectual accomplishments are governed by a general, species-typical nervous system, and cognitive development involves a series of transformations, rather than a gradual accumulation of knowledge or skills (Bjorklund, 2012). While Piaget's theory on the development of thinking has been popular for over 80 years, research has often questioned it. Piaget may have underestimated children's abilities, and studies have shown that children can display complex thinking skills even at a young age, and are more varied in their thinking than Piaget thought (Bjorklund, 2012).

*Figure 2: Piaget's theory of cognitive development.*




*Note: Adapted from Bjorklund (2012) by the authors of this chapter.*

As children grow and develop, they acquire new ways of thinking and processing information. Some key concepts that shape their thinking are representational thought, centration and egocentrism (Miller, 2011). Understanding

these concepts is crucial for parents, caregivers, and educators to support children in developing their cognitive abilities.

Representational thought refers to the ability to use mental symbols to represent or stand for objects, events, or concepts that are not present. A child can mentally code information and manipulate it in their mind, even when not physically present (Bjorklund, 2012). An example of representational thought would be when a child plays with a toy car and then puts it away. Later, the child can think about the toy car and imagine driving it, even though the car is not physically there.

Centration is the cognitive tendency of children to focus on only one part of a situation and ignore everything else. This is common among children in Piaget's preoperational stage, and it can cause them to overlook important details (Bjorklund, 2012). An example of centration would be when a child is shown two glasses, one of which is tall and narrow while the other is short and wide. If the child is asked which glass holds more water, they may focus solely on the height of the glasses and choose the tall, narrow glass, even though both glasses hold the same amount of water. This is because the child is concentrating on the height of the glass and ignoring the width, which is an important detail for determining the amount of liquid a container can hold.

Egocentrism refers to a child's tendency to view the world exclusively from their own perspective and have difficulty seeing things from others' viewpoints. According to Piaget, egocentrism is characteristic of the preoperational stage of development (Bjorklund, 2012). An example of egocentrism can be when a child is playing a game of hide and seek and covers their eyes to hide, believing that by doing so, they have also become invisible to the seeker. The child assumes that if they cannot see the seeker, then the seeker cannot see them either.

Infants start developing cognitive skills in their first year of life, including future-oriented reasoning, problem-solving using tools and means-end analysis, perceiving cause-and-effect relationships, and making inferences from visual scenarios. These skills are perceptually driven and implicit (Chen, 2020). For example, infants can understand that a toy is hidden under a blanket and use their hands to uncover it. Around 2–3 years of age, children begin to develop symbolic reasoning by appreciating the dual nature of pictures and using spatial information as symbols to guide their search in real spaces. They also start to construct representations of cause-effect relations when solving problems (Chen, 2020). As children get older, their thinking and learning become more sophisticated, more conceptual and explicit. They can solve more complex tasks, make transitive inferences, use conditional and analogical reasoning. They can also distinguish between determinate and indeterminate evidence and understand the logic of hypothesis testing (Chen, 2020). For example, a child might use analogical reasoning to solve a puzzle by applying the solution used for a similar problem in the past. At the age of 5 or 6, children have developed more advanced cognitive competencies such as future-oriented reasoning, route planning, and more complex analogical reasoning. They can also understand the fundamental logic of hypothesis testing (Chen, 2020). For example, a child might plan their route to kindergarten or apply the scientific method to test a hypothesis about a science experiment.

## 1.5 Language

Language refers to the systematic and conventional use of sounds, signs or written symbols with the intention of communication or self-expression. Human language is symbolic and grammatical, and language learning is culturally conditional. Language is also multi-layered and includes speech sounds, rules for combining words into sentences, the meaning of words and sentences and the adaptation of language use for various social interactions. Each of these layers of language evolves and is learned (Bjorklund, 2012).

There are at least five different aspects of language, and they all develop over time (Hoff, 2009):

- phonology (analysis of the speech sounds of language and the rules governing the composition and combination of sound in speech),

- morphology (analysis of word-formation and its relationship to other words),
- syntax (analysis of the arrangement of words and phrases to create well-formed sentences in a language),
- semantics (analysis of the meaning of words) and
- pragmatics (analysis of how context contributes to meaning).

Most of the process of learning to become a competent speaker of a language happens during early childhood. There are several theories about how we learn language, for example that children are already born with a kind of innate universal grammar that structures and constrains language (Chomsky, 1980; Roeper, 2007), that children acquire language competence mainly through cultural learning and other general cognitive processes such as categorisation and analogy (Goldberg, 2006), or that abstract structures of learning emerge from language use through linguistic interaction with the community over time (Heine & Kuteva, 2007). The central fact behind all theories of language acquisition is that children learn language in a particular environment, with particular adults as language models and on particular occasions. In order to become competent in language use, children must therefore reconstruct or adapt the linguistic abstractions for themselves (Tomasselo, 2014).

The functions of language (Halliday, 2003) in Figure 3 are used to explain the context or situation and can also be used by ECE teachers when planning language activities, they can adjust those activities according to the functions.

*Figure 3: Functions of language.*

| | |
|---|---|
| **Regulatory** | ■ Using language to tell others what to do, for example: "Don't eat ice cream." |
| **Interactional** | ■ Using language to make contact with others and form relationships, for example: "I love you, mummy." |
| **Personal** | ■ Using language to express feelings, opinions, and inidvidual identity, for example: "I'm a good boy, I am happy." |
| **Representational** | ■ Using language to exchange information, to convey facts, for example: "My hands are clean, mum." |
| **Heuristic** | ■ Using language to learn and explore the environment, for example: "What is that?" |
| **Imaginative** | ■ Using language to to explore the imagination or to create imaginary systems, tell stories, jokes, fairy tales. |
| **Instrumental** | ■ Using language to express needs, for example: "Water, please." |

*Note: Adapted from Halliday (2003) by the authors of this chapter.*

The usage-based theory of language acquisition asserts that language structure emerges from language use. This applies at the level of words and grammar. Children do this using general cognitive processes such as joint attention, communicative intention, symbol acquisition, pattern finding, abstraction, categorisation, analogy and others. Taken together, these processes explain how children construct their own language from the language they hear around them (Tomasello, 2014).

### Language development

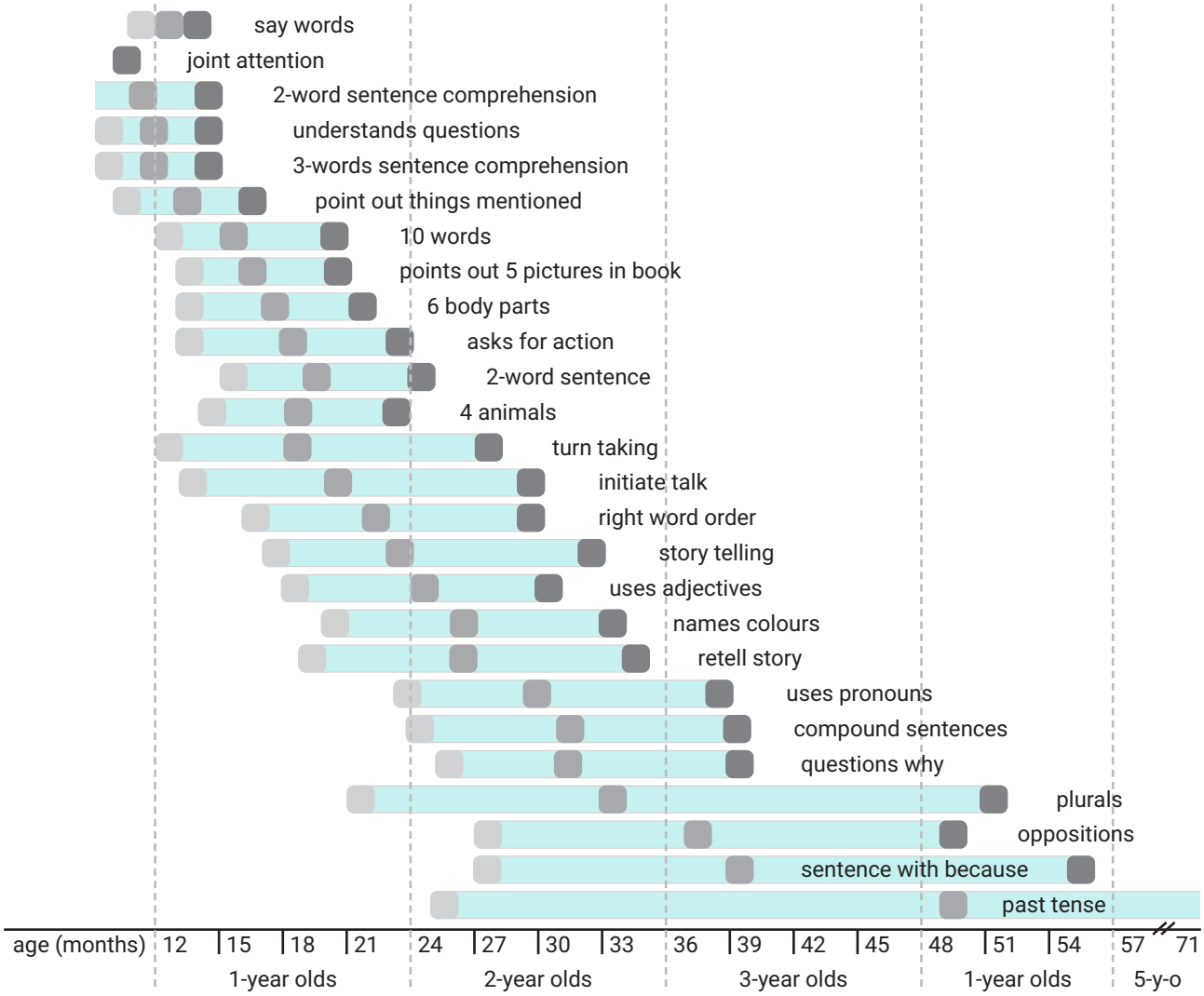
All over the world, children learn to speak on roughly the same schedule. They do this by learning the language or languages of their environment. During infancy, children develop a wide range of cognitive and social skills, as well as the ability to divide the speech stream into meaningful units. They usually produce their first recognizable words between 10–18 months of age and their first multi-word utterances between 14–24 months of age. By age 3, children are often able to produce relatively long utterances and begin to combine more than one sentence into coordinated and subordinate constructions (e.g., relative clauses, split clauses). Between the ages of 4 and 7, children make significant strides in their ability to take into account the listener's perspective and to produce coherent discourse and narrative sequences. These skills, as well as the ability to think about language as an object of knowledge, develop throughout the school years and are strongly influenced by the amount of literacy or other complex language that children are exposed to. Within this developmental timetable, there are major individual differences in the age at which children reach these points and, furthermore, in the balance of skills that a particular child may exhibit at a particular time. There are also individual differences in the way children approach any of these tasks. This is an important point to keep in mind when considering theories that rely on a particular order of development or on a particular relationship between various abilities. It is also important to remember that many children grow up hearing and, at least to some extent, learning more than one language. The evidence so far suggests that this does not have a significant impact on the developmental timetable for language acquisition in the early years (Ambridge & Lieven, 2011).

The time at which children show the first signs of understanding and begin to produce words varies. Understanding of single words such as "no" begins very early, and children can interpret the utterances of those around them from contextual information without dissecting much of what they hear. Although most studies of early word learning have found that comprehension precedes production and begins early, production is more variable. Some children produce their first words (as reported by parents) at around 10 months, while others produce no more than a few recognizable words before 16 to 18 months. For most children, progress in comprehension and production are strongly correlated. The production of utterances also goes through a long process of automation and refinement. Initially, infants' utterances may be quite close to adult form. However, they pass through a further phase in which each child produces a wider range of words, most of which are reduced to a phonological 'template'. The nature of this template varies from child to child. Children's early communicative actions develop into 'protolinguistic' symbols, i.e. each child uses a specific set of sounds and gestures to convey different meanings. After an often slow start, the child's vocabulary grows exponentially, with 9 to 10 new words being added every day between the ages of 2 and 6. In industrialised and urbanised societies, children add about 3000 words per year during kindergarten (Lieven, 2008; Tomasello, 2014).

As a child's language develops, major changes take place. Noun phrases and verb phrases become more complex. The full development of complex verb phrases takes a long time. In the first conversations with young children, there is typically a lot of scaffolding. At around 2 years of age, children are more fluent conversational participants when the conversation revolves around routine activities and when they can join in a conversation at moments they choose. Between the ages of 2 and 3 years, the first, more subtle discourse particles are used (e.g., now and just), but their range and presence continue to develop throughout the school age and beyond. Answering questions and maintaining a topic across a range of turns also improves radically between the ages of 2 and 4. Requests for clarification and children's responses to them also show a clear development: as children get older, they respond to clarification requests with more nuanced responses, and also make more themselves, although even at age 7 in a referential communication task, children do not make as many or as specific clarification requests as the task would properly require (Ambridge & Lieven; 2011Lieven 2008).

Recent study of language development (Visser-Bochane et al., 2020) has identified developmental milestones for language acquisition between the ages of 1 and 6, reflecting children's language development during that period in the areas of vocabulary, grammar and communication. Figure 4 below shows the months/years in which specific language milestones are reached by 15% (light grey), 50% (grey) and 85% (dark grey) of children. The range of the individual milestones can be found in the age range at the bottom of the figure.

*Figure 4: Ages at which each of the milestones is achieved for 15% (light grey), 50% (grey), and 85% (dark grey) of children (Visser-Bochane et al., 2019).*




Language development is a basic skill for all children and essential for participation in everyday life, more specifically, a child's cognitive, social and emotional development, and educational achievements later in life. Atypical language development has a major impact on a child and their environment and needs to be identified as early as possible.

### Why is it so important to support the cognitive development of children from disadvantaged backgrounds?

The basic processes involved in early cognitive control, such as perception, attention, memory and phonological processing, are fundamental to all forms of cognitive activity and social behaviour throughout the lifespan. They are important for child development and social adjustment, academic achievement, self-regulation, resilience and psychopathology (Lipina & Colombo, 2009; Posner & Rothbart, 2005).

Children growing up in disadvantaged environments (e.g., lower SES, immigrant and refugee children, children with low social contacts, children living in toxic areas, children of drug or alcohol dependent parents, neglected children, etc.) show lower levels of achievement on a range of cognitive measures and school readiness (Farah et al., 2006). Growing up in a disadvantaged environment may involve various risk factors, such as a) socio-cultural factors (gender inequality, low paternal education, limited access to education and other services, frequent

change in home environment), b) biological factors (nutritional deficiencies, diseases, environmental toxins), c) psychosocial factors (parenting factors, e.g., aggression, abuse, parental depression, family violence). The consequences of impairments in child development are likely to be intergenerational (Walker et al., 2007).

Studies (National Institute of Child Health and Human Development and Early Child Care Research Network 2003, 2005) have shown that the quality of the home environment (e.g., availability of stimulating toys and learning materials, parents' efforts to provide stimulation, mother's sensitivity, and childcare characteristics) can predict child performance in maintaining attention, inhibitory control, and planning. In addition, the researchers found that the quality of the home environment was more strongly associated with outcomes than the quality of childcare or kindergarten. It was also found that the quality of both environments predicted the child's performance in attention and memory tasks.

Therefore, early intervention programmes, such as the intervention programme in the DECODE project, should include comprehensive cognitive support for all children from disadvantaged backgrounds in order to provide children with adequate opportunities for cognitive development and social inclusion.

# 2. Child Personality Development

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The early childhood period, i.e. the period from birth to the start of compulsory schooling, is often conceptualised in different ways. Psychologists (e.g. Allen & Marotz, 2002; Wagner, 2000) divide this period into neonatal, infant, toddler, and preschool periods according to the developmental stages of the child. According to the International Standard Classification of Education (ISCED, UNESCO 2011), the entire period from birth to the onset of compulsory schooling is coded ISCED 0 and can be fulfilled in different types of early childhood settings. In some education systems, this period is defined separately as the period from birth to three years and from three years to the start of compulsory schooling. Historically, this has been the approach in the Czech Republic and Slovakia. Slovenia is one of the countries where an integrated system of education and care for children is applied for the whole period from age 1 to entry into primary school, as recommended by the OECD. For the purpose of assessing readiness for learning, in this text we focus on the narrower developmental stage, the completion of which will enable a child to make a smooth and seamless transition from kindergarten to primary school. This is the period roughly between the fifth and sixth years of life, when we can observe each child gradually reaching maturity and readiness to enter primary education.

The assessment of school maturity and readiness for learning cannot be seen as a simple exercise in which we compare a child's performance against a set standard. The social, emotional and cognitive development of the preschool child is highly variable, uneven and individual. In addition to developmental prerequisites, a child's development is dependent on other aspects, particularly environmental stimulation, general health and family background. The teacher must be familiar with the developmental specificities and capacities of preschool children, understand the natural differences in the child's cultural and social background and take these into account in their conclusions about the child's school readiness. If necessary, the family can refer the child to a psychologist who has the competence to use their own resources to examine the child's potential to enter school in more detail as well as their ability to learn in the context of the society and culture.

The readiness for learning assessment includes a series of questions, whose answers lead to the formation of an up-to-date picture of the child's personality development in all areas. We are particularly interested in the following attributes of a child's development:

- auditory and visual perception,
- fine and gross motor or graphomotor skills,
- short-term and long-term memory,
- focus on the task at hand,
- speech, vocabulary, communication,
- regulation of behaviour and emotions,
- detachment from the parent,
- reactions to stranger authorities,
- co-operation with peers.

According to Říčan and Krejčířová (1997), a child's psychological maturity can be defined as the maturity of cognitive and intellectual functions and abilities, working maturity, and emotional and social maturity. We have specified cognitive development in the previous chapter, and will now focus on the remaining domains.

## 2.1 Social and emotional development

Every child is unique and their social and emotional development depends on many factors. First of all are the biological and genetic factors. These include temperament and gender. Temperament greatly affects a child's ability to concentrate, control their emotions. Depending on temperament, the child is more or less calm, receptive to cuddling. Gender-adjacent roles in the child are formed largely on the basis of environmental influences. The child forms their own patterns of behaviour and attitudes, taking from other children, from the behavioural patterns of adults, from games and toys.

Another important factor is the environment. Environmental stimuli come mostly from the child's family. Their foundations are laid in the prenatal period by the mother's state of health, then in the postnatal care of the child and mother. Environmental influences include, of course, the socio-economic status of the family, the education of the parents, and membership of a particular social group. All these aspects influence parents' behaviour and their perception of their own responsibility for the child's development. We cannot ignore the interactions that the child is exposed to both inside and outside of the family. That is why, when making a pedagogical diagnosis of a child's psychosocial development, we should focus not only on the child themself, but also consider their background and the family as a whole.

Social and emotional development consists in the ability to identify, to know oneself, to understand, regulate and express emotions appropriately, and to behave pro-socially. As reported by Allen and Marotz (2002), a five-year-old child forms friendships with one or two children, enjoys engaging in collective activities, bringing new ideas to play, sharing toys, and cooperating. The five-year-old child is protective of younger children, generally follows rules and obeys adults, needs encouragement and reassurance of their own needs, the child benefits greatly from descriptive feedback. The child expresses their emotions more often without significant fluctuations. They are able to postpone the fulfilment of their needs, to wait, endure.

Vágnerová (2000) reminds us that at the end of the early childhood period, the child will reach the next developmental stage, internalizing certain basic norms and identifying with them. Whereas in the previous period the child's sense of guilt emerges almost exclusively on the basis of reprimand, in this period the child acquires the ability to feel ashamed of their undesirable behaviour. Feelings of guilt mean that the child begins to accept certain restrictions as unconditionally valid and to experience the violation of these restrictions as unpleasant. This fully supports Erikson's theory of psychological development, where he included the stages of initiative versus guilt, goal-building, and conscience formation among the first eight years of a person's life.

In five-year-old children we notice a significant shift in the development of prosocial behaviour. This development is associated with the achievement of a certain level of empathy, with the ability to control aggression and one's own current needs (Vágnerová, 2000). In addition, social learning through imitation or conditioning, i.e. by modelling the behaviour of close persons or through rewards for desirable behaviour, plays a significant role in the development.

Parents are the emotionally significant authority for the child. Entering kindergarten and the subsequent transition from kindergarten to primary school are significant transitions for the child and their family. Their needs and responsibilities change. All children, even those who are prepared for this change, go through a period of adaptation in which they may react inadequately, sensitively and emotionally. If the family is also exposed to other stressful situations (a family illness, divorce, financial difficulties, unemployment, the birth of another child, etc.), this adaptation to the new environment is even more difficult for the child and their loved ones. ECE teachers should be aware that some of these aspects may remain hidden, not apparent at first sight, and parents will only confide in them when they feel supported, safe and secure with the teacher.

## 2.2 Physical development

At a preschool age, the child goes through several milestones of physical development. These are mostly predictable, occurring in a specific order and time span. Nevertheless, there are individual differences between children even in this respect, which do not affect the overall development of the child. Some children start walking long before their first birthday, others not until long after. *No two children in the world develop and grow at exactly the same rate or manifest in exactly the same way* (Allen and Marotz, 2002, p. 21).

The child usually goes through phases of intense rapid growth, alternating with phases of calming, compared with development. Growth consists of bodily changes in proportions, increments in height and weight. We can all recall a child who is rounding up one moment and suddenly, as if by magic, grows taller, thinner, and suddenly "all arms, all legs." The most pronounced periods of growth occur in early childhood and adolescence. Outside of these periods, growth is slower, with young cells replacing old ones throughout life. Physical development is related to the maturity of the nervous system, muscles and bones.

Motor development closely links physical development and growth with the maturation of the nervous system, the development of sensory perception, the formation of muscle mass, and opportunities to practice gross and fine motor skills. The original reflexive motor skills are gradually replaced by conscious control of the body and its movements. Allen and Marotz (2002) show this interdependence in the example of a child interested in eating by themself with a spoon. In order to acquire this skill, the child needs to have strengthened wrist bones, coordinate eye-hand movement, have a taste for food, and also have a need to imitate others. Later on, cultivation in the form of refining fine motor skills and understanding the principles of table manners will be added to these aspects.

Typical signs of a three-year-old child include a pronounced slowdown in the rate of growth, a decrease in the rhythm of the heart and lungs, the addition of the first tooth. The child's body proportions change, more resembling an adult, the tummy remains bulging and the back is bent. The three-year-old child is agile, easily avoids obstacles, walks safely up stairs, jumps, can stand for a while on one leg, their movements are coordinated.

A five-year-old child walks backwards, switches legs when walking up stairs, balances safely on one leg, and rides a bicycle or scooter skilfully. They can manipulate small objects, use a pinch grip on writing utensils, cut, apply glue, usually already use one hand dominantly.

A child's physical development and the development of motor skills and abilities have a major impact on their perceptual and cognitive development, the development of speech and language.

## 2.3 Executive functions

Executive functions ensure the independent and purposeful actions and thinking of an individual. These include the ability to solve problems, plan and organize activities in a specific place and time, and form insights and make judgments. They enable one to keep information or instructions in mind during the activity being performed, to focus on relevant stimuli during problem solving, and to avoid being distracted by external or internal distractions. Executive functions can be considered a prerequisite for working maturity. According to Blair and Razza (2007), these skills are important in developing volitional control, delay of gratification or cognitive and emotional self-regulation. Thus, in diagnosis, we focus on the ability to plan, on goal orientation, flexibility, attention switching and impulse control. Tests of executive function tend to be part of standardised intelligence packages or exist as stand-alone tests. However, the teacher can obviously gain important information about the development of executive functions by simply observing the child in different situations.

In activities aimed at developing executive skills, we encourage the child's active participation, exercise working memory, draw connections and relationships between information, and strengthen the verbal expression of indi-

vidual steps. The teacher names each step, anchoring its classification (what it was, what will the next step be), teaches the child to work with error as a natural phenomenon, leads the child to continuous control. In early childhood education, it is important to teach children to correctly label the steps, to determine the order of the steps, and also to give them enough time to express themselves.

Fitzpatrick et al. (2014) highlight the possibility of reducing the gap for children with a socio-cultural disadvantage through the development of executive skills. This is because children are usually more focused on outward displays of behaviour than on task performance. Executive functions enable a child to perform a task better by focusing on the relevant information. According to Duncan et al. (2007), one of the important components of executive function is the ability to sustain attention, which predicts children's success in primary education.

At this developmental period, a six-month gap between assessments can correspond to major changes in a child, which is why the implementation of compulsory school enrolment in some countries has been shifted from the winter months to the spring, compared to previous experience. Educational stimulation groups, which are implemented directly in the kindergarten or in counselling centres, are an option to help develop the child – not only in cases of the postponement of compulsory schooling – in their deficit areas of partial function. In these groups, the parents take part in all the lessons together with their child in order to acquire the skills needed for subsequent home preparation.

# 3. Current approaches to child development

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The basic principles of early childhood education, on which the Framework Curriculum for Early Childhood Education (FC-ECE, Ministry of Education, 2021) is based, include individualisation, linking contexts, integration of educational content and different types of learning.

## 3.1 Individualisation

Individualisation is based on a respect for the individuality of each child, based on a perception of their natural development and maturation, taking into account their current needs, abilities and interests. In order to provide the prerequisites and potentialities for the optimal development of each child's personality, it is necessary to apply appropriate methods and forms of work in early childhood education. It is appropriate to use experiential and cooperative learning through play and children's activities, which are based on the child's direct experiences, encourage the child's curiosity and need to discover, stimulate the child's joy of learning, their interest in discovering new things, gaining experience and mastering other skills (FC-ECE, MŠMT, 2021).

The teacher develops the maximum potential of each child through appropriate methods and forms of education. Through situational, experiential and peer learning, group activities and free play, children have the opportunity to develop their abilities and skills within their capabilities, while helping and supporting each other in learning. Individualisation supports the child in knowing themself. The child is thus better able to cooperate with others, to accept new roles, to agree, to be independent and at the same time to benefit the whole group. This is confirmed by Gajdošová and Dujková (2012), who describe the role of individualisation as follows: a correct understanding of individualisation leads to the development of each child's capacity. It develops the uniqueness of their person, including the capacity for cooperation, tolerance and social sensitivity, which prevents excessive egoism.

Splavcová et al. (2023) highlight the importance of individualisation in early childhood education. They closely link individualisation with other teacher activities, especially pedagogical diagnosis, which helps the teacher understand the individuality of each child and set appropriate goals. Based on the findings of the pedagogical diagnosis, the teacher can select appropriate educational strategies, linked to formative assessment and self-assessment. All these aspects complement each other and form the interconnected whole of early childhood education (Splavcová et al., 2023).

## 3.2 Integrated Education

As stated in the FC-ECE (MŠMT, 2021), the target categories cannot be worked with in isolation, but must constantly be viewed in context. Thus, one cannot distinguish and work separately with educational areas as 'subjects'. This is how education, or the education of the child in the nursery school, was previously set up in the concept of the Programme of Educational Work for Nurseries and Kindergartens (1984).

An example of the focus of the ECE objectives, which were based on the content of education, i.e. the educational components, would be the physical education objectives, which were aimed at the child mastering high jumps using muscles from the waist down, the overhead throw and other skills. In the current concept of ECE, the goal is not for the child to acquire only isolated knowledge or simple skills. Instead, the experience acquired should be more complex, easier to grasp and more practically applicable for the child, because this is the only way they can acquire "real activity outputs – competences" (see FC-ECE 2021, p. 8). The thematic focus has become the connecting, i.e. integrating element. This brings together meaningful and useful educational content, based on the child's current needs, capabilities and interests. The use of themes linked to the child's life enables learning in context, forming natural connections. The integration of these objectives can be clearly seen in the Kindergarten Health Promotion Programme (Havlínová et al., 2008). Using the example of the key competency of problem solving, we can illustrate the principle of linking goal categories. Four sub-objectives from the three educational areas are involved in the development of the competence: *approaches problems actively, organizes their activities, does not expect someone else to solve their problems* (Table 1). For each of them, expected outcomes – i.e. indicators of educational achievement – are defined to evaluate the impact of the educational offer on the development of the child's personality (Sedláčková et al., 2012).

*Table 1: Example of the interconnectedness of learning objectives (Havlínová et al., 2008, p. 125)*

| 3/5 APPROACHES PROBLEMS PROACTIVELY, ORGANIZES THEIR ACTIVITIES, DOES NOT EXPECT SOMEONE ELSE TO SOLVE THEIR PROBLEMS. | | |
|---|---|---|
| Individual educational sub-objectives | | Indicators of educational attainment |
| II.3 | ▶ Have and defend your opinion. | ▶ Defends opinion in an adequate form.<br>▶ Is not afraid to speak their mind. |
| III.2 | ◆ Adhere to basic social norms of communication. | ◆ Capable of negotiating, bargaining.<br>◆ Speaks clearly, reasonably loud.<br>◆ Establishes the correct form of contact with peers and adults (greeting, nodding, shaking one's head for no…).<br>◆ Doesn't jump in, lets you talk.<br>◆ Calls other children by their first name.<br>◆ Says hello, goodbye.<br>◆ Doesn't turn their back when talking.<br>◆ Asks politely, says please, thank you. |
| III.3 | ● Want to work in and with a group. | ● Doesn't promote themself at the expense of another.<br>● Can accept a task.<br>● Makes an effort to complete a common task. |
| V.4 | ■ Actively seek solutions. | ■ Cleans up litter left by others in such a way as not to endanger their health.<br>■ Alerts an adult to the harmful behaviour and consults with the adult about possible remedies.<br>■ In various situations, they propose (invent) multiple solutions, discuss them.<br>■ Notices the mess they've created around them. |

When examining the other key competences in greater detail, we find that each of them is always more "saturated" in certain learning areas and less in others (or not at all). On the other hand, some sub-educational objectives

also contribute to the development of multiple key competences at the same time. The key competences, sub-educational objectives and expected outcomes in the FC-ECE (Ministry of Education, 2021) are formulated much more generally than in the Kindergarten Health Promotion Programme (Havlínová et al., 2008). Linking of target categories is only expected in the school educational programmes and then it is directly in the classroom. However, these must be specified by the teacher in the classroom curriculum or thematic section taking into account the chosen topic and the needs of the child group.

## 3.3 Ways of learning

Learning is an *active and creative process that extends the innate genetic program and expands the possibilities of the individual* (Hartl, Hartlová, 2004, p. 637). Simply put, it is the psychological process of acquiring knowledge and skills that a person uses to shape their personality, behaviour, relationships with others, etc… It develops innate abilities and at the same time reproduces the culture of society as a whole through education and training. Learning can be classified according to its various aspects, some of the most commonly used of these include learning that takes place as **spontaneous** acquisition of personal experience, informal transmission of practices and values in the family and society, or as formalised, **intentional** learning and education that takes place in institutions.

### 3.3.1 Spontaneous and intentional learning

Spontaneous learning is a lifelong process that is highly individual, influenced by the genotype of the individual and the environment in which they are situated (see the previous chapters). Thus, each child learns from the range of stimuli that surrounds them and attracts their interest, developing the skills to which they are predisposed. Spontaneous learning is most intensive in preschool, primarily through imitation, in the context of play. Children are motivated to play by developmental needs that serve a learning function. If a child cannot play, they cannot develop.

However, certain games that are unrelated to learning. They can serve a relaxing or therapeutic function. These are often motivated by the need for safety and security. Fulfilling these needs is often prompted by the problems that children encounter, usually within the family. These games are characterised by a tendency towards stereotypical repetition of themes. Children's games can therefore be used as diagnostic and psychotherapeutic techniques. In order for such play to become a *game* in the true sense of the word, the life problems that the child is confronted with must first be resolved. Only then can play resume its learning function.

One of the traits that is associated with a child's deep concentration during play is spontaneity. Through play, the child acquires information about themself, about the world, and learns various skills completely spontaneously and voluntarily, according to their actual needs, capabilities and interests. This means, however, that some experiences might remain hidden from the child. This is the space where intentional learning, usually implemented in preschools, comes into play.

Intentional learning is "*planned and purposeful, oriented towards a specific goal"* (Průcha & Veteška, 2012, p. 283). In early childhood education, we focus on activities that are related to children's actual needs, capabilities, interests, and their experiences. In this way, we support their curiosity, desire for knowledge and motivation for learning, activity and the need to discover. We use more than just the spontaneous activities and play mentioned above, but also other methods, especially experiential, cooperative, situational and social learning.

Experiential learning is based directly on the child's experiences. The child has the opportunity to learn in authentic situations or circumstances mirroring actual life. Situational learning is based on using situations that happen in real life to help the children to better understand the world around them.

The main tool of childhood socialisation is social learning. Through social reinforcement, imitation and identification, children learn complex ways of behaving and acting. This can be put to good use in children's cooperative learning. Each child has a role to play, while leaving plenty of room for them to express themselves and develop in accordance with their own disposition. We will look at experiential and cooperative learning in more detail.

## 3.3.2 Experiential learning

Experiential learning is naturally intertwined with a child's spontaneous learning. Despite the fact that the stimulus for action is coming from outside – i.e. from the teacher – it is at the child's own spontaneous initiative with intrinsic motivation (Havlínová et al., 2006). Its essence lies in the child's deep experience of and involvement in the activity. This is fully in line with the constructivist approach that forms the basis for early childhood education in the FC-ECE (Ministry of Education, 2021).

Experiential learning is often confused with the mediation of an experience in an activity prepared by the teacher, who shows or tells the children something. This is a way for the teacher to exploit the children's natural curiosity. The children will quite naturally and willingly engage in the activity, but the expected effect is not achieved. According to Sedláčková (2008), this is because there is no inner experience, something which leaves deep traces and influences the development of personality.

A teacher who understands the nature of experiential learning uses group activities to support children's intentional learning. However, for experiential learning to truly occur, children need to be given the choice, the opportunity to enter into activities on their own, without external prompting from the teacher. *By allowing the child to 'give something a go' there is an acknowledgement and respect for the fact that every brain is different. Each child naturally chooses ways of learning and doing that are more effective and reliable for them. They start a process of experiencing that leaves a lasting mark and a sense of satisfaction* (Sedláčková, 2008, p. 1).

In experiential learning, teacher-prepared activities should have the following features (Havlínová et al., 2006, p. 200):

- Spontaneity, which is related to the choice of activity.
- Discovery means that the activity is offered to children as a problem to solve or discover and create something new and original.
- Communicativeness is a trait that is related to cooperation (collaboration). Activities should be planned so that a group or pair of children must participate.
- Activity and creativity are other hallmarks of experiential learning. They do not allow you to provide ready-made information or instructions. These features are characterised by an environment rich in a variety of materials and tools.
- Concreteness means that the activity does not take the form of a verbal transfer of ready-made information and knowledge, but is a direct activity in which children make, create, explore, etc.
- The last feature is wholeness, indicating that children engage all their senses in specific activities, thus developing their whole personality.

The above features show how, with the well-thought-out organisation of education, a teacher can achieve effective learning for each individual child, thereby developing their personality in a meaningful way and laying the foundations for key competences in accordance with the FC-ECE.

## 3.3.3 Cooperative learning

There are many theories that deal with learning and the development of cognitive processes. According to Piaget (1999), learning can be viewed as the process of extending and refining pre-existing cognitive schemas, concepts.

The teacher optimizes this process by creating appropriate conditions in which it is the child who shapes their view of the world, putting new knowledge in relation to that which has already been acquired. Vygotsky (2004) emphasizes that learning is social in nature. A child learns effectively with the help of an adult or in a group of peers.

In the current concept of early childhood education, we emphasize the development of children's social skills. The aim is to teach children to value themselves, communicate, share, cooperate, and resolve conflicts. According to Smith (1993), those children who show a greater willingness to act in harmony with others, cooperate rather than compete, suppress the need to prove their abilities by way of forcibly controlling others, and do not compare themselves to others, will more easily pursue personal and collective goals. Cooperative activities foster a healthy self-esteem and sense of teamwork in children. Cooperation builds bridges, breaks down barriers. The ability to work as a team is an important life skill that influences participation in social and work environments. Collaborative problem solving and cooperation should be encouraged as early as kindergarten. Cooperative learning, in which the teacher can focus on the natural process of effective cognition as well as the cognitive and social development of children, is one effective tool for acquiring these skills.

Cooperative learning benefits both children and teachers. It is an opportunity for children to develop their thought operations, the range and level of speech. It helps them integrate into the learning processes, to achieve a higher level of independence, self-esteem and self-confidence. When cooperative learning is included, the teacher can focus more on the pedagogical diagnosis of individual children, the assessment of learning processes and outcomes, the planning and implementation of further activities. According to Kasíková (1997), both children who learn from their peers and teachers who are more satisfied with their work derive more satisfaction from cooperative activities. The contribution of cooperative learning towards building a good relationship between teacher and children can also not be neglected.

The main feature of cooperative learning is that children work in small groups, this is mainly because (Kasíková, 1997, p. 72):

- each member of the group is stimulated to verbal activity, thus developing their speech;
- the group brings greater intimacy, opportunities to respond;
- the children come up with more ideas;
- the children learn from each other;
- the children learn that their own experience and ideas are valuable.

Group activities cannot always be described as cooperative learning. The authors Johnson and Johnson (1999) identified five basic features of cooperation that are necessary for us to be able to talk about cooperative learning. These are:

1. **Positive interdependence**, which is achieved by setting a common goal and dividing up roles in the group. It is the knowledge that an individual cannot succeed if all members of the group fail.
2. **Personal accountability** is when the performance of each individual member of the group is evaluated by the group as a whole. The purpose of cooperative learning is to enhance the individuality of each person. When they work together, they are able to achieve a higher performance level than when they work alone.
3. **Face-to-face interaction** is characterised by mutual support and assistance in achieving a common goal. This includes verbal explanations of individual ways of solving a problem, discussing and bringing new knowledge to other group members, the ability to influence each other's reasoning and conclusions, mutual rewards, social support, and mutual learning. A prerequisite for this approach is the small size of the group, preferably 2–4 members.
4. **Social skills** are necessary to achieve success in cooperative activities. Group members should be able to manage for example communication, decision making, conflict management, group leadership, etc.

5. **Group reflection** is an effective approach to support group relationships and practices. Group members discuss how they are achieving their goals, what activities individuals are doing that are or are not helping make decisions, how to proceed or what to change, as well as managing conflict resolution within the group.

Familiarity with these features can help teachers decide when to use cooperative learning in practice. According to Slavin (1980, pp. 337–338), the use of cooperative learning, among other things, promotes *"performance, reciprocity, increases self-esteem, and improves a child's relationship with school. It also promotes the development of other social skills"*. The child learns to know themself better, to accept responsibility for their own behaviour, to be aware of their weaknesses and strengths, to appreciate individual differences, and to manage their feelings. In doing so, they strengthen their own self-confidence, become empathetic. They are able to listen to others more, to give support or ask for help, to communicate and to resolve conflicts (Kasíková, 1997). The experience of practitioners' suggests that the formation of cooperative skills is best applied directly in natural learning situations.

The cooperative activity is usually carried out in such a way that children in the group strengthen their skills at social, emotional and cognitive levels. This is already taken into account by the teacher when setting objectives. At the core is a predetermined goal that is known to the children, acceptable to them and predictable. Cooperative learning requires good organisation, thoughtful time management and the teacher's own involvement as an observer and guide. Planning also involves setting up the group so that each member has a role to play in achieving the goal. In their final reflection, the children evaluate the progress of the activity, the results of the group, using evaluation and self-assessment.

We must not forget the quality of the learning environment, which supports the children in their efforts and is an important prerequisite for improving the quality of the learning process and educational outcomes. Cooperative learning is one of the most effective approaches. Its use is recommended at all levels of education.

## 3.4 Teaching strategies

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Marta Licardo

This chapter presents basic information on the methods and strategies for learning and teaching that are suitable for children from underprivileged backgrounds and encourage cognitive development in ECE.

It is recommended to use the following **general strategies** (Whitebread & Coltman, 2008):

- Guided activities should be adapted so that the words are easier to understand, if necessary, work instructions should be prepared using visual materials and be bilingual in cases where the child doesn't speak the teacher's language.
- Activities should be planned taking into account how the child will be able to follow them. When assessing that a child is unable to follow a planned group activity, a substitute activity should be prepared.
- Use of verbal and non-verbal instructions. Non-verbal instruction means that the child is led by hand and shown what we expect of them. Illustrations and practical demonstrations are used. We also allow the child to lead.
- Use parallel speech, where adults talk about what a child is doing. Parallel speech should be highly simplified at the beginning of learning, so that we can gradually help the child choose the appropriate words in relation to a certain activity or state.
- Expanding word phrases. The adult repeats the child's word, though in a longer form, e.g. "Do you want the ball?" or "Choose a red ball." or "The red ball is really big." The child is asked to repeat the extended phrase.
- Individual encouragement and praise. The teacher may use praise verbally or non-verbally. They provide individual incentives to the child.

- The more difficult tasks are divided into smaller steps that make it possible to perform the difficult task in parts.
- If there are appropriate non-verbal responses or special responses used by parents, the educator may use them initially, especially during the earliest age period (1–3-year-old children).
- The teacher should be a role model and demonstrate the desired action, behaviour or task.
- Use reinforcements, which can be a specific event or consequence that increases the enjoyability of learning and cognitive processes, influences repetition of behaviour and motivation to learn. Reinforcement can be through an object (concrete toy) or in the form of an activity (social – going to the playground, a sticker, extra play, seeing animals, etc.). The target behaviour is nurtured and reinforced for sufficiently long until a degree of automaticity is reached.

Ideas for teaching strategies by cognitive domains:

### Perception

Provide activities and experiences that allow the child to problem solve and reach conclusions with visual, auditory, kinaesthetic or other perception. Provide various stimuli for the development of perception: sounds, textures, tastes, sights, visuals, smells, temperatures found in environment. Provide various stimuli for perception in games, free play, daily routine activities, while waiting, and in guided activities.

### Attention

Use different ways to encourage attention such as puzzles, social play, board games, observation of the environment (e.g. animals, weather, traffic). Encourage joint attention with an adult. Provide the child with uninterrupted time to work on activities. Be available for the child and recognize when they need guidance. Support the child in building attention by extending interactions (e.g. adding a new experience to the current interaction).

### Memory

Listen to the child's stories, ask open-ended questions, read stories and ask the child if they can remember what happened in a certain part. Use play to communicate about previous events or experiences, play all kinds of memory games (e.g. memory, hiding cards, who is who). Engage the child by participating in word rhymes that also include numbers and math. Use reverse order of steps – when learning, we start by learning the last step of a task and then move towards the start. This is usually helpful in developing the ability to help oneself (e.g. a puzzle is put together and then the child takes it apart in turn and puts it back together again by themself).

### Thinking

Use "W" questions: what, where, when and why. Encourage the child to use objects in creative ways to help problem solve, label and narrate actions, objects and experiences, interact with the child during pretend play and follow their lead, discuss cause and effect in everyday interactions (e.g. put sugar in the tea and ask the child what will happen).

### Language

The basic guidelines for language learning in the preschool and early school period are as follows (Wittmer & Petersen, 2018):

1. **Create a child-friendly relationship**
   The environment in which a child learns a language has to be safe, loving, and the adult has to take the role of an empathetic counterpart that arouses pleasant emotions in the child and encourages them to master the language and other tasks. The feelings of security and acceptance, which form the foundation of a relationship in the learning process, create an appropriate environment in which the child dares to learn.

2. **Respond to the child's speech and take turns in sharing conversation with the child**
   The largest share of language learning is performed during the adult–child interaction. It is important for the adult to actively respond to the child's speech, thereby teaching the child that language is the most effective means of fulfilling their own needs. When the child uses words, we respond, and then wait for the child to respond to our response. The adult should not dominate the conversation but play an equal partner-like role in exchanging dialogue with the child.

3. **Respond to the child's non-verbal communication**
   When the adult understands the child's non-verbal communication and responds to it, the role of a partner in the conversation with the child is achieved. Non-verbal communication includes understanding the child's gestures, body position, and different voices created by the child when trying to tell us or to communicate what they want or how they feel. When the child, for instance, comes and shows something, we respond and name the item or action; if the child looks away or is sullen, we react and try to find out what it is they do not like, or we take a break from learning.

4. **Use a monologue or parallel speech**
   Here, a monologue means speech where an adult describes what they are doing together with the child. If, for instance, we give the child an apple, we say: "now, we will eat an apple". Parallel speech is where the adult describes what the child is doing "Tony is eating an apple now, the apple is juicy, yummy". Monologue and parallel speech connect words with actions, and thus the words are ascribed meaning and become meaningful.

5. **Talk to the child frequently and expand their vocabulary**
   The frequency and quality of conversation with a child directly affects language learning. We need to talk to the child as much as possible and when we do, we also have to pay attention to expanding their vocabulary. Nevertheless, we cannot overload the child with too much new information. We can include quality conversations in the everyday routine and daily interactions, or in guided activities, for instance, jointly reading picture books.

6. **Use strategies of joint attention**
   Joint attention means that the adult focuses on the objects that attracted the child's attention, puts them into words, and vice versa. Joint attention means the time when the attention of the adult and child is focused on the same object. Joint attention is the basis for connecting objects with the vocabulary and, consequently, the foundation for language learning.

# 4. Assessment of learning outcomes

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Assessments are an integral component of education that help us gain insight into individuals' unique abilities, requirements, and advancement, starting from early childhood and continuing throughout their lives. The term assessment refers to the process of systematic collection, analysis, and interpretation of evidence related to a child's development (Wortham, 2014).

## 4.1 Assessment of child development

### Why should we assess?

Assessment is a valuable tool that can be used for a variety of purposes, particularly in early childhood education. Following are a few main points that emphasise the importance of assessment:

The primary goal in assessing young children is to support them in learning and development by adapting forms and levels of instruction to better meet their individual needs (Shepard et al., 1998). Assessing a child's performance helps teachers recognise where each of their students stands in relation to the rest of the class and the curriculum (Wortham, 2014). It can help find children who might be at risk of having poor educational outcomes or who might need special education services (Gullo, 2005).

Assessments can also detect potential health issues or developmental delays early on, which allows for immediate support and an increased chance of overcoming many developmental deficits or differences (Wortham, 2014). Assessments can also be used for research purposes, such as examining young children to better understand their behaviour, evaluating the quality of their environments or monitoring trends (Wortham, 2014).

In summary, assessment is critical in supporting young children's learning and development by providing valuable information that can guide instruction, identify areas of need, and promote early intervention.

### Principles for assessment in early childhood

***Assessments should help children learn.***
An assessment should only be done if it will lead to real benefits for the children, like better support for individual learning, better access to services, or higher standards in the classroom (Shepard et al., 1998).

***Assessments should use multiple sources of information.***
Each method of assessment has advantages and disadvantages, so it is best to use more than one to get a more accurate picture of the child's development (Wortham, 2014). Using different types of evidence, such as standardised testing, observation, parent and teacher reports, etc., can help make assessments even more accurate (Shepard et al., 1998).

***Assessments should be fair for all children.***
In the early years, every child develops and learns at their own pace and in their own way, and it's crucial to acknowledge and value these differences. When evaluating children from diverse backgrounds and with varying predispositions, it's important for educators to conduct fair and accurate assessments. The evaluator should remain mindful of any limitations and be open to alternative strategies for gathering the necessary information (Wortham, 2014). In order to be meaningful, assessments have to be valid, reliable, and fair for the intended purpose (Shepard et al., 1998).

***Assessments should involve the child's family.***
The child's parents should be regarded as both a valuable source of assessment information and the audience for assessment results (Shepard et al., 1998).

***Assessments should be appropriate.***
The younger the child, the more challenging it is to collect accurate and valid data. It is important that both the content and the methodology used in assessments are suitable for the age of the children. When assessing young children, use assessment methods that are age-appropriate and familiar to them, and take into account their language proficiency as it plays a significant role in most assessments and can be affected by limited exposure to language in certain home backgrounds (Shepard et al., 1998).

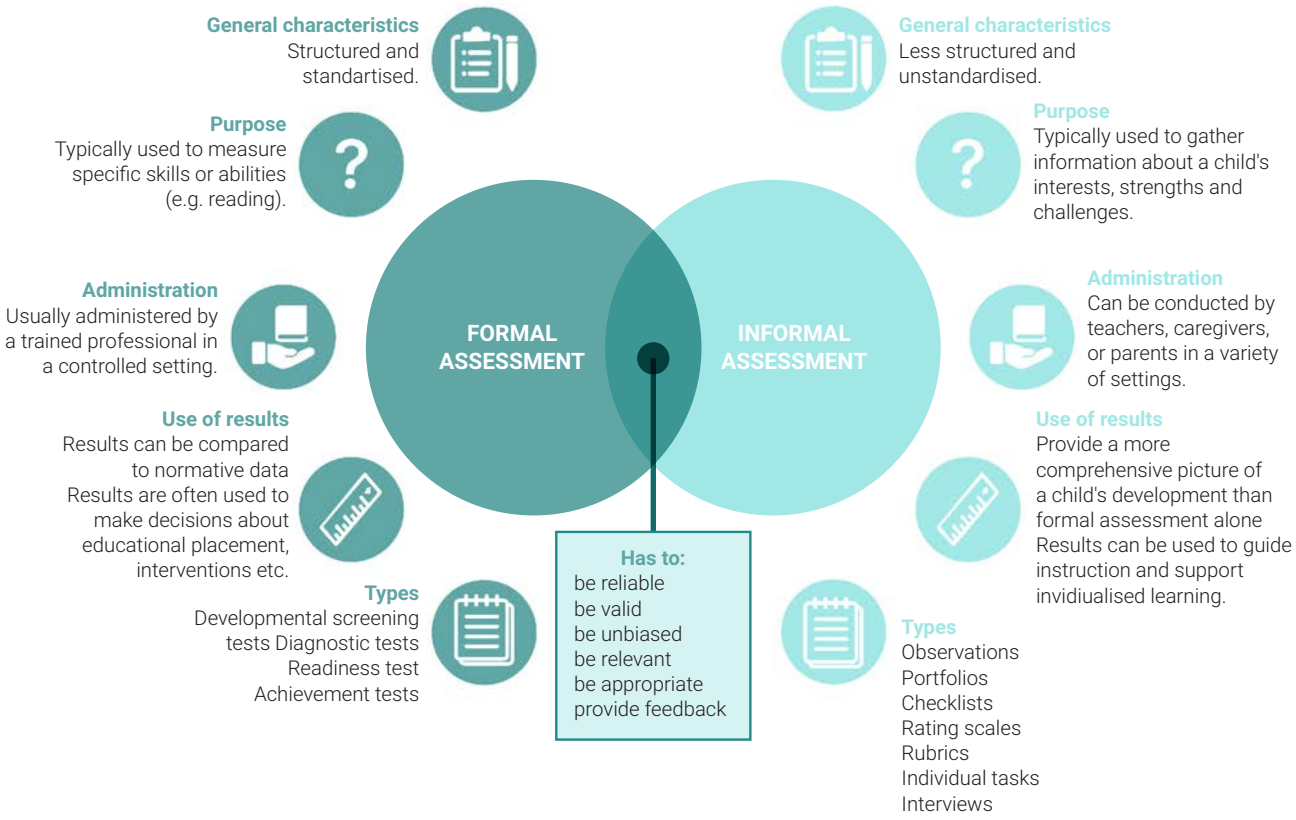
**Different ways to assess (cognitive) development in early childhood**

Children's cognitive development can be assessed using a variety of methods and tools, both formally and informally. Because every type of assessment has is benefits and limitations, it is critical to have a comprehensive assessment system that includes a range of methods and tools. Informal assessments usually refer to gathering information about a child's development through everyday observations and interactions, while formal evaluations use more thorough and well-established methods. In early childhood, observation of a child's behaviour in everyday situations can provide valuable information about their development. When evaluating student progress in class, teachers also often rely on assessments they create themselves (Snow & Van Hemel, 2008).

On the other hand, formal evaluations use methods that are more thorough and well-known. Test and measurement experts make tools that measure the required traits and then use a large number of children to test them. This type of assessment is known as a standardised test, because a standard has been established through its use on children who are representative of the general population (Wortham, 2014).

When choosing a testing tool, it is crucial to consider the purpose of the testing, the child's age and developmental abilities, and the cultural context.

*Figure 5: Assessment*




*Note: Adapted from Wortham (2014) by the author of this chapter.*

### Assessing children from disadvantaged backgrounds

Assessing young children from diverse socioeconomic and cultural backgrounds can be challenging, as standardised tests have been shown to have potential bias and may not accurately identify their learning needs (Biggar, 2005). As a result, children from disadvantaged backgrounds, particularly those with limited language proficiency, may be at risk of misdiagnosis or underdiagnosis of special needs (López et al., 2005).

Early childhood teachers can address assessment biases and support diverse learning needs by:

- Using multiple assessment methods and strategies to gain a more complete understanding of the child's individual learning and developmental needs.
- Recognising and ensuring that assessments are culturally and linguistically appropriate.
- Being aware that standard tests might be biased and considering more inclusive assessment strategies.
- Creating opportunities for children from different backgrounds to share their cultural experiences, languages, and traditions in the classroom.
- Seeking professional development and training to support culturally and linguistically diverse children's learning.

Early childhood teachers can use these strategies to help all children thrive and reach their full potential, regardless of culture, language, or socioeconomic background.

## 4.2 Self-assessment of children

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A very important element in early childhood education, something that is often underestimated or even neglected, is leading children to self-assessment. This area is also identified as problematic by the CSI. In addition to the fact that *a large number of teachers do not know how to promote self-assessment in children, they are often not convinced of its importance. The reasons for this include the fact that the training of kindergarten teachers has long neglected this area.* (CSI, 2017, p. 58)

Kratochvílová (2011) argues that self-assessment together with teacher assessment has an impact on the formation of a child's self-concept and healthy self-esteem (Kratochvílová, 2011, p. 79). Assessment and self-assessment form a unified whole that can be considered both a means and an end of education. Self-assessment develops a key competence for learning: it *rejoices in what it has achieved and mastered by itself; it estimates its own strengths; it learns to evaluate its personal progress and to appreciate the achievements of others.* (FC-ECE, MŠMT, 2021, p. 11) And it is also part of the key competence of activity and citizenship: *[the preschool child] can recognise and use their own strengths, and recognise their weaknesses*. (FC-ECE, MŠMT, 2021, p. 13)

Children must be guided to self-assessment, gradually learning it. In order for children to learn to evaluate their own learning and behaviour, and eventually to use peer assessment based on descriptive feedback, the teacher must support them in this skill. According to Kratochvilová (2011), a teacher who is convinced of the importance of self-assessment needs to develop it:

- to create the right conditions, which include in particular the creation of a positive social climate, including the creation of a safe social environment and the use of specific descriptive feedback;
- build a daily routine that allows time for self-evaluation;
- use learning strategies that include reflection on learning activities during the learning activity, presentation of an evaluation of one's own work or the work of the group;
- Combine types and forms of self-assessment that support both passive assessment through non-verbal communication (e.g., thumbs 👍 👎) or graphic representation (e.g., emoticons ☹😐☺ or expression through colour such as a traffic light) and assessments with active means of verbal communication (e.g. the presentations of the children in a reflective circle, where they answer questions such as: what they learned from the last topic; how they managed to complete the tasks; how well they cooperated; what would they like to improve next time);
- Share the importance of self-assessment with parents, involving them in promoting self-assessment.

# Conclusion

Early childhood education is the basic building block for lifelong learning. In today's very achievement-orientated society, it becomes a ECE teacher's professional duty to support quality experiences in childhood, to give them a sense of achievement based on creative activities in which each child is actively involved based on their current needs, abilities and interests, regardless of the end result, but with the emphasis on the process, i.e. the experience of satisfaction, the joy of progress, of overcoming a problem, of finding a solution. To do this, the child needs a inclusive, accepting environment and support to build social relationships with peers. Kindergarten is a place that complements family education. Here the child is given the opportunity to explore and experience new social roles, develop communication skills and is surrounded by sufficient stimuli for cognitive development. The teacher uses their professional and personal skills to get to know the child and specifically promote their learning progress and the communication of attitudes and values.

This handbook covers a wide range of ECE issues and includes many important aspects. It is certainly not an exhaustive and exclusive source of information, but it does provide an insight into these issues, making it clear that the teacher cannot focus on one area, but must be able to consciously and purposefully link theoretical knowledge with practise. From knowing the child's personality to choosing suitable educational strategies and then deciding on the next steps by evaluating the educational process. The aim is for the child to achieve their optimal development in all areas by the end of preschool, ready to continue learning, take on new social roles and face the new challenges that await them.

Interconnectedness of early childhood education with the family environment is crucial. Communication and co-operation with the family is becoming increasingly important. It is more than appropriate for the family and the kindergarten to work together to influence the child based on their current needs, abilities and interests.

The teacher should be able to equally mitigate the pressure from the family on the child's performance, mitigate the effects of protective parenting and support families from socially disadvantaged backgrounds so that everyone acts in the best interests of the child. To support communication with the family in favour of the development of the child's cognitive potential, this handbook is followed by another DECODE project handbook aimed primarily at parents. It provides them with a wide range of activities to support their child in the home environment. It offers teachers the opportunity to present the benefits of the project to parents or to find further inspiration for their work.

All activities in both handbooks have been tested in kindergartens. We would like to thank all those who have read the materials, used them in their work and passed on the results to the parents.

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# 5. Suggestions for working with children

In the activities below, we present possibilities for developing the child's personality using such methods and strategies, that promote the child's communication skills and cognitive development through cooperation between children.

All the activities have been implemented in the mother schools involved in the DECODE project. They are described in a uniform structure that ensures clarity.

In addition to the basic data, you will find the area of cognitive development targeted by the activity, recommendations for work with a child with special educational needs, a description of the task for the children – clear, simple, what the teacher tells the children, a description of the situation. An important part is the feedback during the activity – direct speech, what the teacher the children, how the teacher supports them, what kind of feedback he gives them, and also questions for reflection – how the teacher asks the children, what they are finding out, how they are checking their learning progress and competence development.

# 5.1 Thinking

## 5.1.1 Everybody is different

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| **Author** | **Marcela Dietlová, Naděžda Husová** |
| **Title** | **Unique no-bake cupcakes** |
| **Topic** | **Everybody is different** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Identify and name objects and elements in their surroundings.<br>■ Express thoughts, ideas, feelings, opinions.<br>■ Collaborate effectively with others.<br>■ Utilize all senses intentionally, actively observe, and keenly notice details.<br>■ Solve problems, address tasks and navigate various situations.<br>■ Share tasks and responsibilities with other children.<br>■ Formulate questions, provide responses, evaluate verbal performances, and engage in verbal interactions.<br>■ Apply creative thinking and present innovative ideas.<br>■ Engage in negotiation with peers and adults in their environment, seeking mutually agreeable solutions (independently in straightforward situations, with assistance in more complex ones). |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Organize the children into groups. The optimal group size is 3-4 children. |
| **Preparation/materials** | Cake tin (or multiple smaller ones), bowl, soup spoon, teaspoon, cutting board, knife, pastry biscuits, small round biscuits, sour cream, sugar, assorted fruits for decoration (such as raspberries, strawberries, blueberries, kiwi, banana), recipe and procedure instructions. |
| **Instructions** | Our theme today is 'uniqueness.' Let's discuss how each one of us is different from one another. What does it mean when we say we're all unique? If we were all exactly the same, how do you think it would be? Imagine if we all had identical faces, hair, preferences, dressed the same, and acted the same way—what would that world be like? How can you tell when someone is different in some aspect? Which senses can you use to notice those differences in others? Take a moment to look at your friend. In what ways is he or she different from you or others? What does the term 'uniqueness' mean to you? How can you express your own uniqueness? What makes you unique? Can you describe what it looks like when someone appears unique, has a distinct scent, speaks in a unique way, or tastes differently? How about when someone does or can do something that is distinctive?<br><br>Now, shift your attention to the table. What do you see there? What could we create today to highlight our uniqueness? Observe the various fruits on the table. Which ones do you recognize? What qualities make a fruit unique? |

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| **Instructions** | Remember, each one of you is different and possesses your own uniqueness. Today, your task is to work together as a group to create a unique no-bake cake. You'll be provided with the essential procedure, tools, and ingredients. However, how you choose to decorate and flavor your cake is entirely up to your group's creativity. Collaborate within your groups to determine roles, the process, and the ingredients you'll use. Make your own arrangements. Do you all understand your task? What will you begin with? Does anyone need a reminder, or can someone repeat the task for us? Can someone describe our shared goal again?<br><br>Lastly, when handling the knives, please be cautious and handle them carefully. |
| **Description** | The children gather in a circle to engage in a discussion about the uniqueness of individuals. The teacher encourages the children to explore what sets them apart as unique individuals. She gradually poses open-ended questions to prompt the children to reflect on their own distinctiveness and differences. The children attentively observe one another, listening to each other's voices and exploring how their friends are distinct and unique. If they wish, they can also share gentle gestures of recognition.<br><br>On the table, each group has at their disposal a mold, instructions, and the necessary ingredients. As a group, the children collectively decide on their initial steps and formulate a plan for their cake-making process. They allocate roles among themselves, reach a consensus on the procedure, select flavorings, and choose fruits to enhance the uniqueness of their cake. Ultimately, each group presents and describes the distinctive features that make their cake unique. |
| **Feedback and support during the activity** | Have you decided who will follow the instructions and who will handle the mold and biscuits? Who will be responsible for mixing the cream and measuring the sugar? And who will take care of cutting the fruit? Please exercise caution when working with the knife. Are you all verifying that you're following the correct procedure? Who is responsible for checking the sugar quantity on the scale to ensure the cake isn't overly sweet? Make sure to reach a consensus on the choice of fruits. Do you all understand the task at hand? If any mistakes occur, how will you address and rectify them? |
| **Questions for reflection** | How did your collaboration go? Who took the first step? How well did you work together? Who was in charge of using the scale? Were there any challenges you encountered? What sets your cake apart and makes it unique? Can you explain your choice of pastry biscuits over round biscuits? What led you to select strawberries? Is there anything you would do differently if you were to do this again? |
| **Anticipated challenges and suggestions** | Consistently reinforce the importance of mutual agreement among the children regarding roles, such as who will follow the instructions, who will handle mixing and measuring, who will perform cutting tasks, and who will manage the mold and biscuits. Emphasize the need for teamwork and cooperation. Additionally, regularly remind them about safety precautions when using sharp knives. |




*Image – Aids*



*Image – Division into supine groups*



*Image – Instructions for the procedure*



*Image – Cooperation 1*



*Image – Cooperation 2*



*Image – Cooperation 3*



*Image – Finished group work*

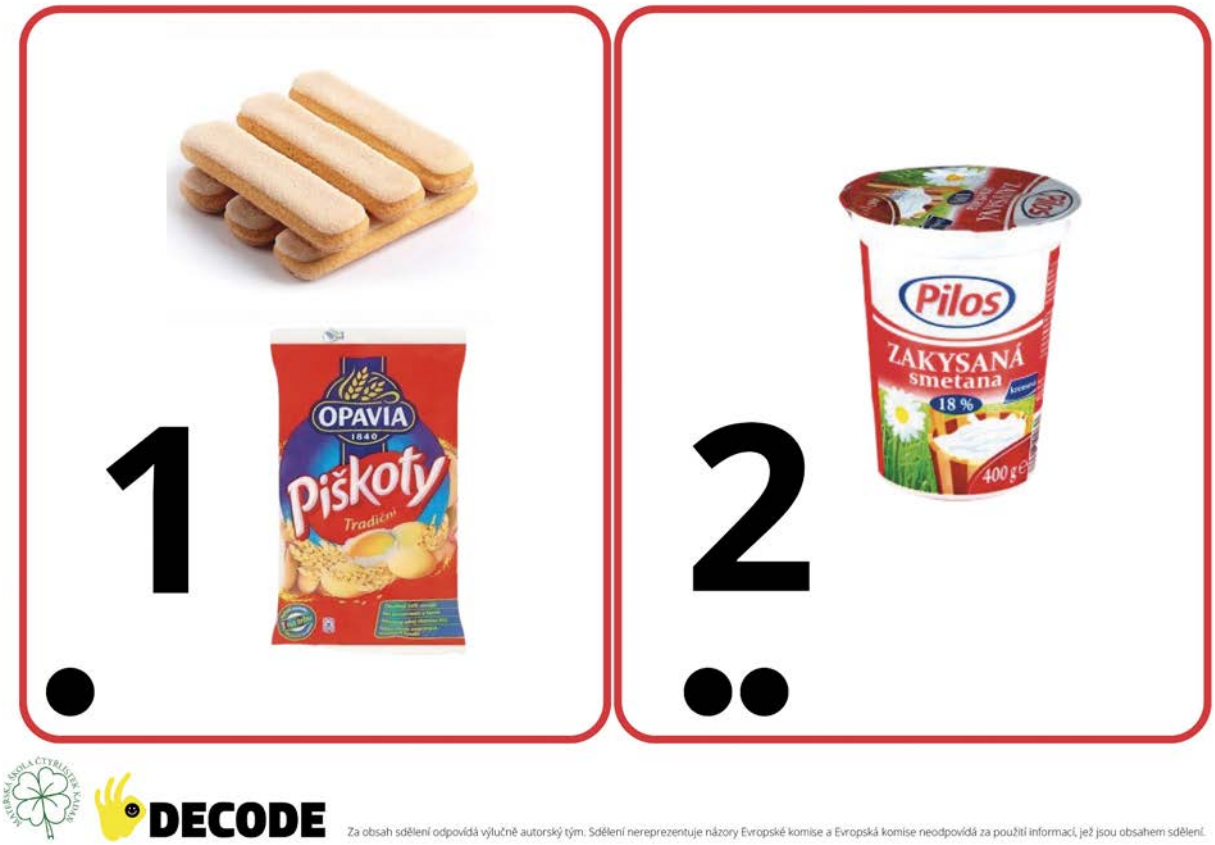


*Image – Basic procedure*

## 5.1.2 What I like to play with

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| **Author** | **Naděžda Husová, Erika Zelenková** |
| **Title** | **Our city** |
| **Topic** | **What I like to play with** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | name most of what surrounds them; express thoughts, ideas, feelings, opinions and judgements independently and meaningfully in appropriately phrased sentences; carry on a conversation (listen to others, wait for the other person to finish a thought, follow the speaker and the content, ask questions); understand what is heard (catch the main idea of a story, follow the plot and repeat it in correct sentences); formulate questions, answer, evaluate verbal expressions, respond verbally; distinguish some pictorial symbols (pictograms, landmarks, road signs, danger signs, etc.); identify some pictorial symbols (pictograms, landmarks, road signs, danger signs, etc.); understand the meaning of the words; understand the meaning of the words; understand the meaning of the words; understand the meaning of the words; understand the meaning of the words; understand the meaning of the words Understand their meaning and communicative function; concentrate deliberately on the activity and sustain attention; think, make simple reflections and express what they are thinking and reflecting about; follow and learn from instructions and directions; understand spatial concepts (right, left, down, up, up, middle, behind, below, above, near, next to, between, etc.); understand the spatial concepts (right, left, below, below, above, near, between, etc.); understand the spatial concepts (right, left, below, below, below, above, above, above, near, between, etc.). To solve problems, tasks and situations, to think creatively, to come up with ‚ideas'; to find new solutions or alternatives to conventional solutions; to express their imagination and fantasy in creative activities (constructive, artistic, musical, movement or dramatic) and in their verbal expression; to be aware of their independence, to have their own opinions and attitudes and to express them; to make free efforts, to concentrate on the activity and its completion; respect rules that have been explained and understood in advance, accept responsibilities that have been explained and justified; cooperate with others; exercise individual needs, wishes and rights with respect for others (defend one's own position or opinion, respect the position or opinion of another), accept and compromise, resolve conflicts by agreement; treat one's own and others' tools, toys, everyday objects, books, money, etc., with care. |
| **Age of children** | 5–6 let |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into groups. The ideal number in a group is 5 children.<br>Divide the activity over three to four days. |
| **Preparation/materials** | Pictograms of important buildings in the city (railway station, petrol station, hospital, shopping mall), wooden scraps and blocks for building houses, buildings and monuments, 25× wooden pads measuring 30x30 cm, engraving machine, writing utensils, wooden material for making vehicles, tools for working with wood (ponk, hammer, nails, glue, drill, etc.), protective work equipment, different sizes of paper, instructions for making a vehicle, a map for demonstration. |

| Instructions | |
|---|---|
| | Our theme is play. A game that you can create yourself. Yesterday we talked about our city. Do you know the symbols in the pictures in front of you? They are pictograms. What do they represent? When you see what I have laid out in front of you, do you have an idea of what you could build? Tell me what is interesting about our city? What interesting buildings can you find here? Who can tell us something interesting about this building? What if you could build our city today? What is the name of our city? Do any of you live in another city? In what city? What is it called? How far is it from Kaduna? How long have you been going to kindergarten from another town? Do you use any means of transportation to get there? What kind?<br><br>We agreed to build Kaduna together. Your job now is to build the city. The houses, interesting buildings and monuments of our city. Imagine that the land is not lino, but a meadow. What will you start with? What will you build first? What do you need to build a house? Do you need tools? What kind? Work in groups and agree what you will build and how. It is up to you where you place the building and how big it will be. But remember that you can only use what you see in front of you. The tools can be found on the pontoon. All the groups only have this pile of materials that you see in front of you. Groups must also agree among themselves and take only as many cubes as they really need. Do you know what to do? What are you going to do with the cubes you have left? Have you run out of cubes to build with? How will you solve it? Can you ask someone?<br><br>When you have finished your building, mark it with a pictogram that you make yourself. Do you know what a pictogram is? Can you ask someone? Can a more experienced friend give you advice?<br><br>**Day two:** Who can tell me what your task was yesterday? Does anyone else want to add an answer? You have in front of you the buildings you built yesterday in groups. Each building is labelled with a pictogram that you created in groups. Who can name your buildings according to the pictograms?<br><br>You have buildings, monuments and important places. What do you need now to make your city complete? What is missing in your city? What could you use to connect the buildings? You have wooden boards in front of you. Does anyone have any ideas on how to use them in connecting? What do you use when working with wood? What kind of machine can paint in wood? How do you work with such a machine so you don't get hurt?<br><br>Today you will be given two tasks. Create paths and connect buildings. You will work in the same groups as yesterday. What do you have to do first? How will you proceed? Is there any other way to do it? As a group, decide who will have what role. First you need to draw the paths on the mat with a pencil and then burn them with an engraving pen. The groups must agree among themselves who will draw a curved path, who will draw a straight path, who will draw a crossroads or a roundabout. What would happen if everyone only drew straight roads? Are you wearing protective work gear and have your team scarf tied in a visible place?<br><br>I see that all the roads are done. Please use them so that all the buildings are connected. Work together in groups, but also groups with each other. Do you know how to do this? How do you do it to connect all the buildings? Don't you have enough paths? How do you solve this? |

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| **Instructions** | **Day Three:** What was your task in the past days? Who will repeat what we see in front of us? How can you check that there is a path to each building today? When you see the material in front of you, what could you make of it to verify the accuracy of your connection? Again, you will work in the same groups. Take a scarf.<br><br>Your task is to make a vehicle and use it to verify the connection of the lines of force. You have the material in front of you. What tools you use is up to you. Discuss among yourselves in groups what your vehicle will look like and how you will make it. Do all the groups understand the assignment? Can a friend from another group give you advice? What is the problem? Will the vehicle drive? And how will you solve it? I can see that the vehicles are ready in all groups. Make sure the buildings are connected.<br><br>**On the same day or the fourth day:** A few days later you played builder. What did you manage to build and produce? Your last task is to draw a map based on your building. What is the name of the person who draws the maps? Who has ever heard this word? Let's whip it out. Who will try to draw this word themselves? What does a cartographer need to know? What happens if he draws a station (police station, hospital...) somewhere else than it really is? What kind of maps do you know? What is different about them? What kind of map is it? What do you need it for?<br><br>Now you are going to draw your own map. A map of Kaduna that you have built. Each group will choose one sheet of paper. How big the paper is is up to you. What you paint it with is also up to you. In groups, decide who will paint the roads and who will paint the buildings. Remember to mark all the buildings with a pictogram. Do you know what to do? Do you understand how to make a map? Will someone repeat the task? Then compare the maps together. |
| **Description** | The children sit in a circle, the teacher introduces the topic and shows pictograms of buildings in the city. The teacher puts on the ground various cubes and wooden materials. Using open-ended questions, she asks about the city in which they live. The children divide into groups and tie their group's scarf in a visible place. The teacher gives a task. Children work together in groups, building houses, monuments, buildings. They argue in groups, but also groups argue with each other. The groups take only as many blocks as they really need for their building and choose a place where the building will be placed. The teacher lets the groups work completely according to their imagination and does not interfere with the constructions. The children mark their building with a pictogram that they create in the group.<br><br>**Day two:** The children sit in a circle among their buildings. The teacher has them summarize what task they did the previous day. There are empty wooden planks on the ground. Using open-ended questions, the teacher asks the children what is missing between the buildings. The children divide into the same groups as the previous day, mark each other with coloured kites and make paths. They work together in and between groups. They agree who will paint the crossroads, who will paint the straight roads and who will paint the curved roads. Using the engraving machine, they work together to create roads that connect their buildings.<br><br>**Day Three:** The children will stand in front of the city they have built. In front of them they have the materials and tools to make the vehicles. The teacher gives the task of checking that all the buildings are connected. The children work in groups to make the vehicles. They agree on what kind of vehicle they will make and what materials and tools they will use. The groups borrow each other's woodworking tools and take turns on the pontoon. |

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| **Description** | At the end, the children sit down to build a city and the teacher asks them what they have managed to build and produce in a few days. Together they all explain what maps are and what we need them for in life. The teacher sets the last building task. He gives each group one piece of paper. He leaves the size of the paper and the tools to the groups' choice. The children draw a map and on it all the buildings and roads. They will draw pictograms for the buildings. In groups, they agree on the tasks and work together on the task.<br><br>The groups compare and evaluate the finished maps. |
| **Feedback and support during the activity** | **Day one:** How big will your building be? Where in Kadana can you find a building like this? Have you run out of materials for the building? How will you solve it? Can you ask someone for more blocks? I see you have a lot of blocks laid out and you're not using them. What are you going to do with them? When you look around, is there a group that is missing blocks? How many more blocks do you need?<br><br>**Day two:** If you all just make straight paths, what happens? Who in your group hasn't tried working with an engraving machine yet? Why? How can you do this so that you have more path options? Do you think you will have enough paths? What are you going to do about it? Has everyone in your group laid any part of the path? If you don't already have parts of the paths and you still don't have connected buildings, what could be done differently? I appreciate you talking about things and trying to resolve difficulties.<br><br>**Day Three:** Will your means of transportation work? Why don't the wheels of your means of transport turn? If you turn it on, how will the wheels turn? Are the roads properly placed so that no structure is left without a path? How do you solve this? If you turn this piece of road, what happens?<br><br>Why did you use this size of paper? Why don't all the buildings fit on your map? What is the pictogram for this building? Did you redraw it the same way? What is drawn on the pictogram? Name this building.<br><br>How is your map different from the maps of the other groups? What has changed? What is different? How can you fix it? |
| **Questions for reflection** | How did you do? Did you have any problems during the construction? How did you solve them? What was difficult for you? Why? What tools did you use? Which woodworking tools were difficult for you to use? Why? Is there anything that surprised you? What did you find interesting? What did you learn? How did you find working with another group? |
| **Anticipated challenges and suggestions** | Remind children to work together in groups as well as with other groups. Point out to children that they can paint on both sides of the wooden mats to give them more opportunities to paint paths. |



*Image – Pictograms of important buildings in the city*

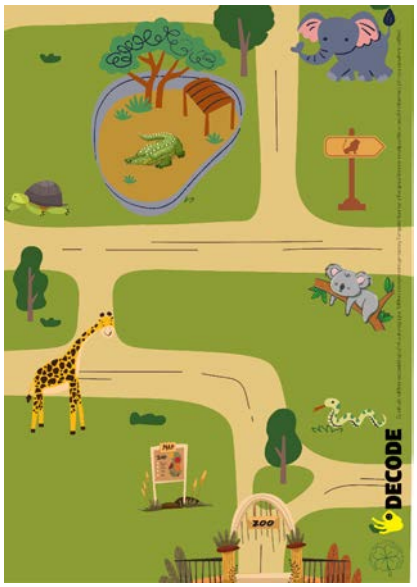


*Image – Map for demonstration*




*Image – Instructions for the production of a means of transport*



*Image – Pictograms of buildings*



*Image – Cooperation in construction planning*



*Image – Cooperation in the construction of buildings*



*Image – Buildings with pictograms from children*



*Image – Preview of the city*



*Image – Cooperation in the creation of a map 1*



*Image – Cooperation in the creation of a map 2*



*Image – Production of a means of transport*

## 5.1.3 The water around us

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| **Authors** | **Věra Isáková, Naděžda Husová a kolektiv MŠ Čtyřlístek Kadaň** |
| **Title** | **Water purification from nature** |
| **Topic** | **The water around us** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Demonstrate control of hand-eye coordination.<br>■ Proficiently develop fine motor skills while handling materials.<br>■ Independently and coherently articulate thoughts, ideas, and judgments in well-structured sentences.<br>■ Effectively communicate through words and gestures, displaying improvisational abilities.<br>■ Provide accurate descriptions of the current situation.<br>■ Consciously engage in activities with sustained focus and attention.<br>■ Communicate naturally and without inhibition with peers.<br>■ Negotiate and collaborate with both children and adults in their environment to reach mutually agreeable solutions.<br>■ Acquire foundational knowledge about their immediate surroundings, which is pertinent, meaningful, and conducive to their learning, demonstrating interest and comprehension for further educational and practical applications.<br>■ Demonstrate awareness of the significance of the environment. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We will begin by introducing the children to the water cycle in nature and the process of water purification, using a video or visual aids to demonstrate natural purification. Following this, we will explore the water purification process in the classroom.<br>To ensure inclusive participation, we'll divide the children into group. Within each group, the children will collaborate to select a captain who will coordinate activities for the group. |
| **Preparation/materials** | PET bottles, canning jars, scissors (or a knife), filter papers, cotton wool, pulp, pebbles of various sizes, sand, moss, and water from a natural source such as a pond, river, or stream. Additionally, visual instructions for water purification within the classroom, as well as visual aids for understanding the water cycle, should be prepared. |
| **Instructions** | Where does water come from in nature? How does water get into the water tank? What is the difference between potable and commercial water? You saw a video and a picture that explained how water from rivers, ponds, and dams is cleaned. Now you will try the experiment and clean the water from the river yourself.<br>Who can explain what an experiment is? What is the difference between a trial and an experiment? You will experiment with water from the river. What impurities do you see in the water? What could you use to clean the water of impurities? On the work table, you will find everything you found in nature and in kindergarten. |

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| **Instructions** | Each group will have a picture guide on the table. It depends on you how you agree in the group. The group captain should guide you and determine who will do what activity. Do you know how you will proceed? Is there a problem? How will you layer the individual materials? If you need help, there is a station in the classroom where you can find instructional literature and a video. This station is marked with a light bulb. You can also ask an older or more experienced friend from another group. If you still can't find the answer to your question, ask the teacher for help. When you pour water, what happens in the bottle? What kind of water comes out of your glass? Where did you encounter difficulties? Did you follow the instructions? |
| **Description** | Children first become acquainted with the topic. They sit in a circle, and the teacher engages with the children to learn about the natural purification of water. If possible, the teacher plans a field trip with the children to visit the local wastewater treatment plant. In cases where visiting a treatment plant is not feasible, the children are introduced to the purification process through videos or visual aids.<br><br>As part of the water purification process, the children collaborate to decide on the water filtering equipment they will require. They collect tools and materials during their trip to the river or another natural water source. Back in the classroom, the teacher explains how the purification process might function. The teacher organizes the materials and tools on the worktable, sets up a help station with instructional materials or a tablet containing videos and instructions. All tools and materials are readily accessible to the children. |
| **Feedback and support during the activity** | "Can someone assist in holding the bottle? Who will be responsible for pouring water from the river? How do you plan to layer the materials? Are you following the instructions provided? Is your water purifier functioning as intended? Does the water coming out appear clean? I notice that the water still seems polluted; can you identify where something might have gone wrong? How did your experiment progress? I commend your ability to cooperate, assign roles, and work together." |
| **Questions for reflection** | Did everyone in the group manage to reach a consensus? What materials did you use inside the PET bottle? How did you successfully layer the materials? What was the result when you poured the dirty water through your filtration system? Did you obtain clean water without any leaks? Where do you think things may have gone awry? How would you approach water purification differently in the future? |
| **Anticipated challenges and suggestions** | Reinforce the importance of mutual cooperation. Continuously ask open-ended questions and patiently await the children's responses, comments, and ideas. Encourage them to seek solutions independently. Emphasize the significance of accuracy, cleanliness, and caution throughout the activity. Verify the correctness of the procedure. Remind the children that they can seek guidance from older and more experienced peers from other groups, utilize the assistance station, or request help from the teacher. |



*Image – How water is purified*



*Image – Taking water from the river*



*Image – Collection of material*



*Image – Material offer*



*Image – Selection of material*



*Image – Cooperation – layering of material*



*Image – We pour water into the purifier*



*Image – We monitor the cleaning process*



*Image – Aids and material*



*Image – Aids and material*



*Image – Feedback*



*Image – Water purifier in the kindergarten*




*Image – Picture Guide to Cleaning Water in the Classroom*



*Image – Image support – Water cycle in nature*

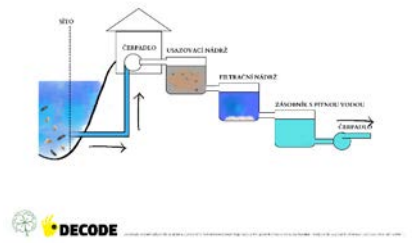


*Image – Image support – Water purification in nature*



*Image – Help desk*

## 5.1.4 The World Around Us

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|---|---|
| **Authors** | **Naděžda Husová, Erika Zelenková and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **We can count outside and in kindergarten** |
| **Topic** | **The World Around Us** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Experience the joy of mastering and learning.<br>■ Understand basic numerical and mathematical concepts, elementary mathematical connections, and use them practically as needed (compare, organize, and sort sets of objects according to a certain rule, understand elementary numbers up to about six, comprehend number sequences within the range of the first ten, recognize more, less, first, last, etc.).<br>■ Follow and learn according to directions and instructions. |
| **Age of children** | 2–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into pairs so that a child with difficulties cooperates with a more active child. Empower the more active child to become a guide and explain the task to their friend.<br><br>The teacher can make the assignment more challenging by, for example, having the children identify only one type of natural object for each number, etc. Once all the children have completed the assignment, they should arrange the plates with numbers in such a way that the number sequence is observed. |
| **Preparation/materials** | Insert a plate with a specific number, wooden hands, and natural materials. |
| **Instructions** | What can you collect in the forest? What are natural products? When you see these plates in front of you, what do you think we could use natural materials for? Your task now is to collect as many natural items as the number shown on the insert tile, and then place the full tile in a row according to the number series. You can use the wooden fingers you see in front of you to help. It's up to you to decide who will count and who will search. Do you know how to do it? Do you need any advice?<br><br>Can you name what you found? What about others? Do you know how you will proceed? What will you do first? Do you see any errors in the numbers? How would you solve them? |
| **Description** | From the beginning of the topic, children see the content of the activities on the cards, which contain an overview of all the activities offered. The activities are represented by pictograms, and these pictograms are placed at specific stations. Children can choose activities based on their needs. During this activity, the children agree on roles and cooperate in both preparation and implementation.<br><br>We place the insert plates next to each other following the number series. To assist the children, we provide wooden hands that they can use easily. Each pair takes turns choosing a tile and searches for natural objects accordingly. |

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| **Feedback and support during the activity** | I see that you have agreed on who will search and who will count. How did you resolve the issue of not being able to find enough? It's good that you thought about where to search for different items. I noticed that you have arranged the table in a row. Try to review the number series again. Why did you place the table right next to the number...? What number do you think comes next? I appreciate that you are taking turns during the search. |
| **Questions for reflection** | What was difficult for you to find? And what was easy? Did you find something you couldn't name or count? Did you encounter any challenges with a particular number, and if so, why? How could you assist a friend in completing the task? |
| **Anticipated challeng** | We encourage children to complete the task. |



*Image – Real hands and tiles*



*Image – In practice 1*



*Image – In practice 2*



*Image – In practice 3*

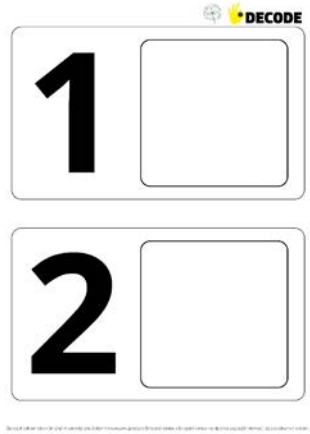


*Image – Insert plate with a specific number*

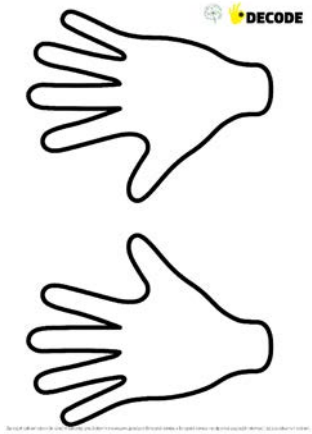


*Image – Hand template*

## 5.1.5 Life event

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|---|---|
| **Authors** | **Denisa Dušková, Erika Zelenková** |
| **Title** | **International Children's Day – Herbal Syrup** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Express thoughts, ideas, feelings, opinions, and judgments independently and coherently in appropriately worded sentences.<br>■ Engage in conversations by actively listening to others, allowing them to finish their thoughts.<br>■ Comprehend spoken information, including grasping the main idea of a story, following the plot, and accurately summarizing it in complete sentences.<br>■ Formulate questions, provide answers, evaluate verbal performances, and respond effectively through verbal communication.<br>■ Describe real-life situations or those depicted in pictures.<br>■ Engage all senses intentionally, practice mindful observation, and develop insight.<br>■ Concentrate deliberately on an activity, sustaining attention as needed.<br>■ Think, engage in basic reasoning, and effectively articulate thoughts and opinions.<br>■ Follow instructions and guidelines provided for learning and various tasks.<br>■ Understand fundamental numerical and mathematical concepts, including basic mathematical relationships, and apply them practically as required (such as comparing, arranging, and sorting sets of objects based on specific criteria, basic numerical recognition up to approximately six, comprehending number sequences within the first ten, and understanding concepts like more, less, first, and last).<br>■ Solve problems, address tasks and situations creatively, and present novel ideas or innovative solutions.<br>■ Display awareness of individuality, express personal opinions and stances, and effectively communicate them. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children are organized into groups, ensuring that each child has a specific responsibility. The maximum number of children in each group is limited to 5. To form these groups, the teacher employs colored cubes. Initially, the teacher manually distributes some cubes to the children, while the remaining cubes are drawn by the children from a hat. Each child joins a group based on the color of the cube they draw.<br><br>This activity should span several days, with the herbal infusion requiring a 24-hour steeping period. Additionally, the teacher offers the children the opportunity to select which syrup they would like to create. The teacher must allocate time for preparing the visual recipe guide, or she can collaboratively create the recipe directly with the children. |

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| **Preparation/materials** | Hat, colored cubes, fresh herbs, lemons, citric acid, sugar, water, measuring cup, scale, bowl, cutting boards, knives, spoon, pot, wooden spoon, stove, sieve, funnel, sealable bottles, jug, glasses, pictorial instructions for preparation. |
| **Instructions** | **Day one:** International Children's day. What is this life event? How will you celebrate it? Who would you like to celebrate it with? What is part of the celebration? What do you like most about the party? What kind of lemonade could be healthy and medicinal? What kind of lemonade can you make? What will you make it out of? How do they make sodas before you buy them at the store? Where do we get the ingredients? You have a herb garden in front of the nursery, what can you use it for? What herbs grow there? Do you know any species? What kind? Today your task will be to prepare or make healthy lemonade. Divide into groups. Agree on the roles. Each group selects and plucks an herb from the garden to use in making the syrup.<br><br>In front of you is the production manual. Follow it. Who can explain to us what they see in the instructions? What will be the progress of your work? Who can repeat it again? Do you know all the instructions you see in the manual? Who could advise you?<br><br>**Second day:** Yesterday, you agreed to make lemonade to celebrate. Who can repeat what you prepared yesterday? What will be the next step? According to the instructions, what needs to be done today? Your task today is to finish the syrup. You will use the same instructions as yesterday. Work in the same groups as yesterday. Cooperate and negotiate. What tools do you need to prepare? Divide the roles and agree as a group. |
| **Description** | **First day:** Children sit in a circle, where they collectively explore the topic of preparations for Children's Day. Using open-ended questions, the teacher guides the discussion towards the production of a healthy syrup and assesses the children's existing knowledge about syrup-making. The teacher encourages the children to brainstorm ideas for the drink they want to prepare for the celebration and the ingredients they will need. The teacher remains flexible in response to their suggestions, searches for instructions, and either creates a visual recipe or develops one collaboratively with the children.<br><br>The children are then divided into groups, gather the necessary tools and ingredients, and begin the first phase of syrup preparation. The mixture is left to infuse overnight.<br><br>**Second day:** The teacher prompts the children to recall what they had planned and accomplished the previous day. Together, they review their objectives. The children continue to work in the same groups, following the visual instructions. They assign roles and collaborate to complete the syrup-making process. Once finished, the syrup is poured into bottles and stored in the refrigerator. |

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| **Feedback and support during the activity** | What happens if you don't follow the procedure and instructions? Can someone from another group offer advice? Where do you begin? What's the first step? What tools do you need for this task? How many herb leaves should you pluck? How much is a handful? What's the next step after plucking the herb leaves? How should you prepare the lemons? How many lemons need to be sliced? What do you use to measure the water? How much water do you need? How long should the mixture be left to infuse? Who is responsible for each role in your group? What do you use to strain the infusion? How do you accurately measure the sugar? At what point should you turn on the stove? How do you know when the sugar has completely dissolved? How many teaspoons of citric acid should you use?<br><br>How do you transfer the finished syrup into bottles? What can assist you in this process? |
| **Questions for reflection** | How well did you follow the instructions during your work? Which fruits did you use for the syrup? Did you encounter any issues while preparing it, and if so, how did you resolve them? Were there any particularly challenging aspects of the process? Can you list the tools you utilized during this task? Did anything about the process surprise you, or was there anything that particularly piqued your interest? Lastly, how do you like the taste of the syrup? |
| **Anticipated challenges and suggestions** | Remind the children to collaborate effectively within their groups. Stress the importance of each team member having a designated role and taking turns when necessary. Encourage them to work with precision and care. |



*Image – Collection of herbs*



*Image – Cooperation in the production of lemonade 1*



*Image – Group work according to the recipe*




*Image – Cooperation in the production of lemonade 2*



*Image – Ready-made lemonade*




*Image – Instructions for preparing lemonade*

## 5.1.6 Our surroundings

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| **Author** | **Hana Zárubová** |
| **Title** | **Visiting a friend** |
| **Topic** | **Our surroundings** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Name most of the things around them.<br>■ Orient themselves in their surroundings, in the surrounding space.<br>■ Develop hand-eye coordination.<br>■ Distinguish some picture symbols.<br>■ Cooperate with others. |
| **Age of children** | 5–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | If necessary, the teacher can provide verbal clues, such as describing the pictures of animals or zooming in on the habitat photos. |
| **Preparation/materials** | Map of the village. Pictures of significant buildings (both in the town and the village, including those not present in the village). Chalk. |
| **Instructions** | My friend Peta has come to visit us from the city, and we want to show him around our village. We'll take a walk through the village and describe the important buildings and places we come across. To start, let's familiarize ourselves with the village map. Use chalk to draw the basic layout of the village, including the roads, on the parquet floor.<br><br>Place the pictures of buildings on the map to represent their locations as we observed during our walk. Identify the pictures we didn't use and discuss what these buildings and places are for.<br><br>Can you point out the differences between a village and a town?Do you know who lives where in our village? |
| **Description** | Our friend Peta (the puppet) has come from the city, and we want to introduce him to our village so he can become familiar with it.<br><br>Here's how we'll do it:<br><br>We'll take a walk around the village and point out important places such as the shop, school, library, municipal office, church, pond, park, and more. Each place will be represented by a picture held by one of the children.<br><br>We'll also take a look at a map of our village.<br><br>The teacher will create a simple chalk drawing of the village on the floor, including roads and buildings (without labels).<br><br>The children will then try to match their pictures to the correct location on the chalk drawing.<br><br>We'll discuss the pictures that don't belong in our village, like the cinema, theater, and department store, and explain what they are. |

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| **Description** | Together, we'll share information about who lives where in our village.<br><br>We'll also explore the differences between a village and a town. |
| **Feedback and support during the activity** | The teacher uses simple questions to help the children remember the names and purposes of the places or buildings:<br><br>"What is this building/place?"<br><br>"What is it used for?"<br><br>"What is it located near? What can you find nearby?"<br><br>While using the map, the children will try to recall and name all the places and buildings they've identified. If they can't remember the location of a particular building or place, the teacher can provide hints by mentioning what is nearby.<br><br>If the children are still unsure, the teacher can offer guidance through well-phrased questions. For example, she might ask, "Where are films shown?" (in a cinema) to help them remember.<br><br>Throughout the activity, the teacher provides positive feedback to reassure the children that they are on the right track. She encourages them to collaborate and engage in constructive communication. |
| **Questions for reflection** | What can we find in our village?<br>Did we succeed in creating an accurate map of our village?<br>How well did you work together?<br>Did you encounter any challenges or problems?<br>What are the distinctions between a village and a city?<br>What do we appreciate about our village?<br>What aspects do we like or dislike?<br>Are there any changes we would desire?<br>How can we contribute to maintaining its charm?<br>Why do we cherish our village/town?<br>How can we contribute to its preservation and enhancement? |
| **Anticipated challenges and suggestions** | Observe safe behavior on the roads. |



*Image – Introduction to the village – church*



*Image – Getting to know the village – school*



*Image – Getting to know the village – shop*



*Image – Naming images*



*Image – Difference of village × city*



*Image – Orientation in space*

## 5.1.7 Gifts of nature

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| **Author** | **Petra Staňková** |
| **Title** | **Natural elements** |
| **Topic** | **Gifts of nature** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Distinguishes between activities that can support the health of the surrounding environment and those that can harm it (natural disasters – wind, rain, floods, heat, drought, frost).<br>■ Recognizes the significance of the environment (both in nature and society) for humans and understands that people's behavior can impact their own health and the environment.<br>■ Actively contributes to the care of the surrounding environment. |
| **Age of children** | 3–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | When we have a child with SEN or difficulties in the class, we aim to help the child understand the natural elements. We simplify the activity by using a smaller number of cards, focusing on Earth, Water, Fire, and Air. |
| **Preparation/materials** | Created dominoes with natural elements – i.e. Earth, Water, Fire, Air. |
| **Instructions** | During the morning circle on the carpet with the children, we discuss the natural elements. We ask them the question: 'Do you know any natural elements? Does anyone know how many we have and what they are?' There are four natural elements: Earth, Water, Fire, and Air.<br><br>1. What does Earth mean to us?<br>2. What role does Water play in our lives?<br>3. What significance does Fire hold for us?<br>4. How does Air benefit us?'<br><br>We engage in this discussion together."<br><br>Now, let's form pairs and prepare to play a game. We will play dominoes with 25 cards. Distribute the cards, with each pair receiving 12 cards. Place the one remaining card between you on the table or carpet. |
| **Description** | We are playing a game of dominoes with 25 cards. Each child receives 12 cards, and the remaining card is placed between the children on the table or carpet. The objective of the game is to match your card with the one already placed, ensuring that the images on both cards are the same. Cards can only be placed at the ends; branching is not allowed. If a player cannot make a move, they forfeit their turn. The game concludes when one of the players lays their last card or when no one can make any more moves. The children are divided into pairs, either randomly or by drawing pictures with elements. Then, two pairs compete against each other, and within their pairs, they decide which card to use on their turn. |

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| **Feedback and support during the activity** | The teacher encourages the children to take their time, carefully examine the pictures in front of them, and consider which element they should match."<br><br>Are you able to communicate with each other? Why did you choose this card? I notice that you're unable to continue playing; what steps are you taking to address the situation? Is there another card you could use? |
| **Questions for reflection** | Afterwards, the children gather in a circle on the carpet to reflect on their experience with the activity (what they liked and disliked).<br><br>What did you like or dislike the most today?<br>How did your teamwork go?<br>Were you able to reach a consensus?<br>Is there anything you would do differently next time?<br>What stood out to you?<br>What was your primary challenge, and what was bothering you?<br>What part of the activity did you find easiest?<br>How many elements do we have?<br>Can you name the natural elements we discussed?<br>Do you know what natural disasters can affect us?<br>What does Earth mean to us?<br>What role does water play in our lives?<br>How significant is Fire to us?<br>What are the benefits of Air for us? |
| **Anticipated challenges and suggestions** | We will divide the children into pairs because this will help them concentrate better, ensure that everyone gets their turn, and minimize waiting times. |



*Image – Assigning an image*



*Image – Playing dominoes*



*Image – Matching the correct element*



*Image – Finding the right image*

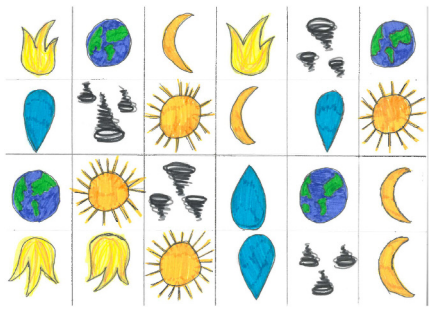

*Image – Dominoes*

## 5.1.8 Human body

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| **Author** | **Veronika Fusková** |
| **Title** | **Sudoku – Human Skeleton** |
| **Topic** | **Human body** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | Expected outcomes:<br>■ Name parts of the body and some organs, and understand basic terms related to health, movement, and sports.<br>■ Identify visible body parts, including some sub-parts (e.g., shoulder, knee, elbow, wrist), and recognize certain internal organs (e.g., heart, lungs, brain, stomach).<br>■ Identify and name most of the objects and elements in their surroundings.<br>■ Express thoughts, ideas, and feelings independently and meaningfully through appropriately worded sentences.<br>■ Utilize all senses for perception and discrimination.<br>■ Focus on cognitive priorities.<br>■ Develop communication and cooperation skills with peers.<br>■ Collaborate and find solutions together.Develop mathematical literacy.<br>■ Learn from mistakes and work with errors. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We can choose a simplified version of Sudoku. In this version, one picture is missing, or two or three pictures are missing, depending on the severity of the SVP difficulties.<br>Another option is to have variations where each individual completes only one row or column with the missing picture of a human skeleton. |
| **Preparation/materials** | Basic playing materials include a laminated grid, gum glue cubes, and laminated skeleton pictures (both whole and parts of the skeleton). |
| **Instructions** | 1. "Complete the missing pictures so that the same picture is not repeated in the rows or columns."<br>2. "Work together with a friend to find a solution." |
| **Description** | The children need to complete the skeleton pictures (such as the whole skeleton, jaw, skull, etc.) in such a way that there are no repetitions in the rows or columns. The number of pictures completed will vary according to age and individual abilities. The pictures are affixed to the playing surface using 'chewing gum' blocks. The children are grouped by randomly drawing pictures (which they will later use in the Sudoku). Together, they work to find a solution to the Sudoku puzzle. |
| **Feedback and support during the activity** | The teacher observes the children's communication and cooperation. If the children ask for help, he/she assists in finding solutions using guiding questions such as, 'What picture is missing in this column?' 'What picture is missing in this row?' 'Have you checked all the rows?' 'Is there a repeated picture somewhere?' To simplify the children's work, we can complete the first table together as a group (e.g., on the board), and then the child can try the next table on their own. |

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| **Questions for reflection** | We assess the children's thinking skills, their problem-solving approach, their creativity, and how they handle challenges.<br><br>Did you encounter any problems during the activity?<br>If so, why did these problems arise?<br>How did you go about solving them?<br>Tell us about your teamwork and collaboration.<br>Were there any aspects of the task that you found easy?<br>Were you able to identify and name your friend's body parts?<br><br>These questions can help evaluate the children's performance and learning outcomes. |
| **Anticipated challenges and suggestions** | The teacher takes on the role of an observer. If they notice that a group is struggling to make progress, they intervene to identify and address the issue. The teacher provides guidance to steer the children in the right direction, facilitating their ability to work together to complete the task. |

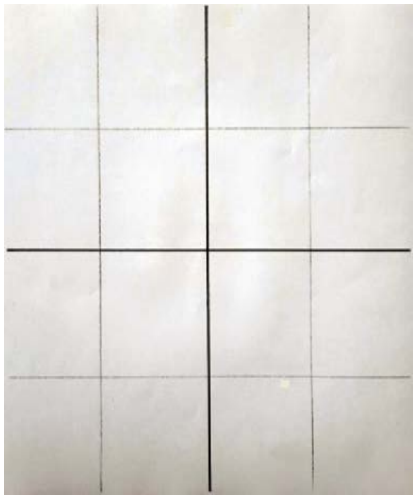

*Image – Basic sudoku table*



*Image – Photos of sudoku No. 1*

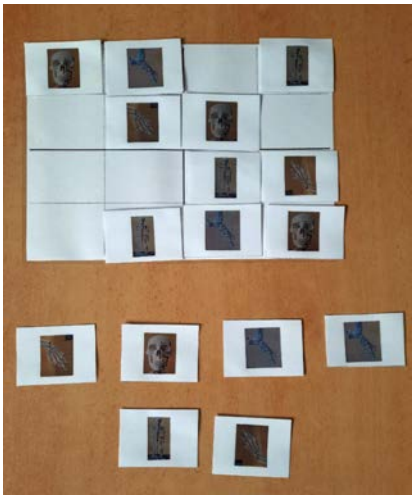

*Image – Photos of sudoku No. 2*



*Image – Photos of sudoku No. 3*

## 5.1.9 Plants

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| **Author** | **Vladimíra Andrtová** |
| **Title** | **How a plant grows – a time sequence** |
| **Topic** | **Plants** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Understand concepts related to time.<br>■ Grasp mathematical concepts.<br>■ Learn new information and skills. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Break down the task into stages, provide additional verbal guidance, and offer illustrative examples. |
| **Preparation/materials** | Pictures illustrating the growth stages of beans, including beans alone, beans with roots, beans with cotyledons, beans with leaves and flowers. Additionally, for a practical example, you'll need beans, a cup, cotton wool, and water. |
| **Instructions** | Dear children, let's try to grow a bean from a seed together. Do you know what a plant needs to survive? What should we do first, and what comes next? Can you come to an agreement on how to proceed? Let's divide into groups and attempt to plant beans together. First, we'll place cotton wool in the cup, moisten it, and then add the beans. Every day, we'll observe what happens.<br><br>But before the beans start sprouting, let's illustrate this process with pictures. Each group has been provided with a set of images depicting the stages of bean sprouting. Try to arrange them in the correct order as the development progresses. Later, we will present and review the solutions together with the other groups. |
| **Description** | We discuss with the children how a plant grows and what parts it consists of. We also talk about what a plant needs to survive. In their respective groups, the children come to an agreement on the planting procedure and then proceed to plant their own beans. After planting, each group is given a set of pictures illustrating the stages of bean sprouting. Their task is to arrange these pictures in chronological order to depict the development process. Following this activity, the groups compare their solutions with each other and engage in a discussion about their respective approaches. |
| **Feedback and support during the activity** | Which picture comes first? And which one follows? What's the next step in the sequence? Can you explain what a plant needs to grow, and have you followed all the necessary steps to help your beans sprout? I see that you've already completed your task. Could you clarify the reasoning behind the order in which you arranged the pictures? Did everyone in the group participate in the activity? In your opinion, will the plant grow its roots or its stem first? What did you use to water the plant? How long do you think it takes for a plant to grow? Do any of you help with growing plants at home as well? |

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| **Questions for reflection** | How did your group come to an agreement? Did you encounter any issues that required resolution? Did you seek assistance from the other members of the group, and if so, how did you do it? How did you distribute tasks among yourselves? Have you established a consensus on the next steps in caring for the bean? |
| **Anticipated challenges and suggestions** | One of our beans didn't sprout, so next time, I would plant it in a deeper pot, and it's essential to ensure that the cotton wool remains consistently moist. We used this outcome as a learning opportunity with the children to illustrate the requirements for plant growth. |



*Image – Beans in cotton wool*



*Image – Monitoring bean sprouting*



*Image – A set of images of growing beans*



*Image – Work with a set of images*



*Image – Image Manipulation*

## 5.1.10 Life anniversary of a child

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|---|---|
| **Author** | **Hana Zárubová** |
| **Title** | **How we baked a cake with a dog and a cat** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Understand what is heard and be able to retell the story.<br>■ Perceive and distinguish using all senses – sounds, tones, shapes, smells, tastes.<br>■ Be able to manipulate everyday objects.<br>■ Joyfully engage in festive activitiesfoster imagination and creativity in creative endeavors.<br>■ Collaborate with peers. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Either condense the fairy tale or break it down into several shorter sections. Attempt to retell it step by step, using pictures or visual aids after each shorter segment, gradually building the plot. It would also be beneficial to include images of children, sand cakes, dogs, cats, etc. Vary the activities more frequently (to maintain attention), making it easier for the child to retell the story (based on the sequence of events) with the help of the pictures. |
| **Preparation/materials** | Fairy tale: "The Story of a Dog and a Cat Baking a Cake" Laminated pictures of various types of food, a pot, a wooden spoon, small cake bases (or larger round cookies), marmalade, Nutella, whipped cream in a spray can, raisins, small fruits. |
| **Instructions** | Let's read the fairy tale 'The Dog and the Cat.' Listen carefully because we will retell it together. Select the pictures that show how the dog and the cat mixed up the ingredients for the cake and place them in the pot. Would you like a cake like this too? We will form confectionery groups and attempt to decorate your cake using the provided ingredients. Collaborate with your friends to decide how your cake will look, who will add each ingredient, and how you will divide the cake for tasting. Before you start, create a 'photo' of it together for us, or craft your cake from paper. We'll also draw an illustration for the fairy tale, and then we'll visit the exhibition of your artwork together. Can you spot something special about this piece? Who might be the author? |
| **Description** | The teacher reads the children a fairy tale about a dog and a cat baking a cake.<br><br>Then the children retell the story in their own words.<br><br>They recall the foods that the dog and cat used in the cake, search for corresponding pictures in a pile, and place them in a pot while stirring with a wooden spoon.<br><br>Each group receives a base (a large round cookie) and decorates it with the prepared foods according to their preferences. Subsequently, they collectively create an illustration or craft a cake using the provided materials to match their decorations. The group then divides their small cake equally and enjoys it.<br><br>Towards the end, each child draws a picture related to the fairy tale "How a Cat and a Dog Baked a Cake." All the children participate in an exhibition where they can view the pictures, identify unique details, and potentially guess the authors. |

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| **Feedback and support during the activity** | After reading the fairy tale, the teacher engages the children with questions:<br>What did the children make a cake for the dog and the cat?<br>How did they decorate it?<br>Why did the dog and the cat decide to bake a cake?<br>Can you identify the foods that shouldn't be in the cake? Why?<br>Who had a dislike for jam, the dog, or the cat?<br>Who ended up eating the cake, and what happened to them afterward?<br>Why were the dog and the cat relieved that they didn't eat the cake?<br>If you were to add something good to the cake, what would it be?<br>Do you think cats and dogs can actually bake a cake in real life?<br>Have you ever baked a cake at home with your parents or guardians?<br>How does it feel when someone is celebrating a holiday or a birthday? |
| **Questions for reflection** | What did you like or dislike about the fairy tale?<br>Were you able to identify the foods that the dog and the cat used to make the cake?<br>Did you enjoy decorating and eating the cake you made?<br>If you could decorate the cake differently, what would you add or change?<br>How did your teamwork go? Was it challenging to reach a consensus?<br>How did you find drawing or creating from a template?<br>Were there any details or unique aspects you noticed in the pictures?<br>Do you think you might want to try baking a cake at home with your parents?<br>What precautions would you take when doing so? |
| **Anticipated challenges and suggestions** | The fairy tale should be kept relatively short to ensure the children maintain their attention. |

## FAIRYTALE – HOW THE DOG AND THE CAT MADE A CAKE FOR THE HOLIDAY

The dog's holiday was supposed to be tomorrow and the cat's birthday.

The children knew this and wanted to somehow surprise the dog and the cat for the holiday and birthday. They wondered what they would give or do to the dog and the cat; then they remembered and said, "You know what, kids? We will make a cake for the dog and the cat for the holiday!"

As they said, so they did. They took a mold for it and made a beautiful cake out of sand for the dog and the cat; they put five pretty white stones on top, they were like almonds, and the cake was like the real thing.

They brought it to a cat and a dog. "You know, we brought you a cake for your holiday and birthday. He is very good; you can eat it whole."

The dog and the cat took the cake, said over it: "Yum, yum, yum, it's good, you did well," and pretended to eat it. "Thank you," they said to the children, "we have never eaten a cake like this." The children were happy and went home.

"It's a pity that the dogs and cats don't eat sand," said the dog to the cat when the children left, "such a beautiful cake, I would like to enjoy it!" Do you know that I got a huge craving for some real cake over it. But he'd have to be real, I tell you!"

"I've got a taste for real cake, too," said the kitty. "You know what, since it's my birthday tomorrow and it's a holiday, we should make some cake! I just don't know how to make such a cake.'

"It's nothing," said the dog, "it's easy, I know how to make such a real cake!" Everything that is best for eating, everything that you like to eat the most, can be put into such a cake, and then the cake is the best. If you put five of the best dishes there, it's five times as good, if you put ten of them there, then it's ten times as good. But we'll put a hundred of them in there and we'll have a cake a hundred times better!'

"That's right," said the cat, "we'll make the best cake."

The dog and the cat took their aprons and started cooking.

They took flour, milk and egg and mixed it together. "The cake must be sweet," said the cat, pouring sugar into it. "And a little salty, too," said the dog, putting salt in there. "Now let's put the butter and jam in there," said the cat. "Jam, not here, I don't like that," said the dog, "we'll put curd instead of jam, I really like that." So they put a few curds in there. "It seems a little greasy to me," said the cat, "we need to put some bacon skins in there." "And nuts, so we don't forget," said the dog, pouring in a cone of nuts. "Nuts are good," the cat approved, "but surely there should be a cucumber too," and she put the cucumber in there. "And the bones," cried the dog, "we have to put some bones in there!" So they put a lot of bones in the cake. "And a mouse, I really like mice!" the cat remembered and put four mice in the cake. "Okay, and now a few burritos with a lot of pepper, that's something for me," said the dog and put a few burritos in there. "And the main thing!" said the cat. "We have to put the whipped cream in there!" They put a full pot of cream in there. "And some onion," said the dog, and he put the onion in there. "And chocolate," said the kitty, adding chocolate to it. "And sauce!" thought the dog, and they put sauce there.

So they put and mixed everything possible into their cake, and they also put garlic and pepper in there, and mixed in there lard and candy, crackers and cinnamon, semolina and cottage cheese, gingerbread and vinegar, cocoa and cabbage, one head of goose and raisins, and everything else they may have put it in the cake, but they didn't put bread in there, because dogs and cats don't really like to eat bread.

When they mixed and stirred it all, it made a cake as big as a wagon wheel. "Sir, that's going to be a big cake, we're going to eat it somehow!" they praised each other. "Now let's take care of it."

They put the cake in the oven and looked forward to it being baked. It smoked, it bubbled, it sputtered and hissed, it crackled, hissed and steamed, it fried and burned, it boiled and overflowed and sizzled like old rags on fire.

When they thought the cake was baked enough, they put it outside the door to cool. "You know what," said the cat to the dog, "and if the children were so good as to bring us their cake, we will invite them to our cake."

"Come on then," said the dog, "we'll go and invite the children."

They held hands and went to invite the children. The children were in the garden in front of the house playing with marbles. They invited the dog and the cat to a cake and played with them for a while with marbles and then with a ball and a little with dice.

But in the meantime, there was a bad dog walking around the cake, and as the cake cooled, it smelled all kinds of things in his nose. "Haf haf haf," thought the bad dog, "it smells like something in here, it must be something for my tooth!"

He sniffed, sniffed, sniffed until he smelled the dog and cat cake. "Ha ha!" he said when he smelled the cake. "Here it is, I'll have it!"

And so the bad dog got down to the cake. He gulped and gulped until tears came to his eyes, how hot the cake was inside, he gulped until he choked several times, gulped and gulped until he swallowed it all. Then he drank another whole jug of water and rolled away.

When the dog and the cat had played enough with the children, they remembered the cake. So they all held hands and went to see if the cake had cooled enough. "Mister, we're going to enjoy it, children," said the dog and the cat, "you don't even know what good things we put in there!"

They arrived: they look and – what? The cake is gone! "Jemin," said the dog and the cat, "the cake is gone, someone took it from us!" They look and look and voila! There is a big bad dog under the bush and howling loudly. He ate too much of that cake and now he's sick. His stomach aches excruciatingly. "It hurts, it hurts!" wailed the evil dog. "That's what I had, what was it all mixed up in that cake that it gave me such an excruciating pain!"

"Heh, that's all you got," said the dog, "you should have left it when the cake wasn't yours!"

"You know, dog, I don't care that the bad dog ate our cake," said the cat, "maybe our cake would make us sick too and spoil our holiday and birthday."

"That's true," said the dog, "just let him wail and howl, that bad dog, it belongs to him, but I'm hungry, I'd like to eat, come what may!" But we don't have anything to eat at home, we put everything in the cake. And I wouldn't want to be hungry on my holiday after all."

"Never mind, dog and cat," said the children, "come to us, and we'll give you some of our lunch."

So the dog and the cat went to the children for lunch. "Come on, children, eat!" the mother called to them, and the children said: "Mother, it's the dog's holiday here and the cat's birthday, we must also give them something for lunch." So they gave the cat and the dog lunch; they gave them soup and there was also meat and potato dumplings. And a piece of cake from yesterday, somewhere, mommy had concocted for them.

The cat and the dog really liked it. They thanked the children for lunch and went home happily. "We had a blast on our holiday and on our birthday!" they gloated. "Such a good lunch! And our bellies don't hurt a bit after it."

They got home and the big bad dog was still there in the thicket howling and wailing. They went to bed after the good lunch and reveled in how well the holiday and birthday had turned out after all.

And that bad dog howled and wailed in that thicket for another fortnight after their cake.

*Autor: Josef Čapek*



*Image – Talking to children about a dog and a cat*




*Image – Children's picture – Dog, cat and cake*



*Image – Children's creation – Cake*



*Image – Children create their own cakes*

## 5.1.11 Communication between us

| | |
|---|---|
| **Authors** | **Zuzana Sádovská, Veronika Ojo** |
| **Title** | **Recipe** |
| **Topic** | **Communication between us** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Counting to 5.<br>■ Allocating quantities by counting.<br>■ Executing various basic positions following instructions (lying, sitting, standing, ...).<br>■ Working with a condition.<br>■ Handling errors.<br>■ Collaborating and communicating. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | |
| **Preparation/materials** | A4 cards with recipes, fruits and vegetables, cards with different positions (standing, sitting, lying down, on the stomach, ...). |
| **Instructions** | Baskets filled with various fruits and vegetables are placed in different areas of the kindergarten (classroom, playground). In one pile, the teacher has prepared 'recipes' for the children. The children are divided into groups by drawing lots of fruits. Each child selects one recipe for which they had collectively chosen several pieces of fruit and vegetables beforehand. |
| **Description** | Now, have the children select from the baskets precisely the same number of pieces of fruit and vegetables as they have drawn on their papers, ensuring they choose the exact same fruits and vegetables as indicated on their drawings. You can use these bags to store the fruits and vegetables. Children work together in pairs, cross-verifying the accuracy of their quantities by matching them.<br><br>After collecting the fruits and vegetables, we will play a game called 'Kubo is in charge.' The teacher announces a specific piece of fruit and vegetable aloud and then holds up a piece of paper above her head (so that all the children can see it) with a particular position drawn on it (such as lying on their side, sitting with their legs crossed, or standing on one leg). Children who have the mentioned fruit and vegetable in their recipe will carry out the provided instruction. Children communicate with one another and verify the accuracy of tasks, offering remedies if necessary. |

| | |
|---|---|
| **Feedback and support during the activity** | "Are you certain that this specific fruit is in your recipe?<br>Have you included a sufficient number of peppers in your bag?<br>Were carrots part of your recipe? Did you confirm the exact quantity? I notice you have one extra apple. Perhaps you can double-check the quantity with a friend." |
| **Questions for reflection** | "Was it challenging to take on the role of a teacher? Why?<br>Did you find it difficult to recall the fruits in your recipe and then promptly assume a different position?<br>What other foods would you be interested in including in the recipes?<br>Did you enjoy our game? Why? What specific aspect did you like the most? Did you encounter and resolve any issues during the game? Can you describe your teamwork as a pair?" |
| **Anticipated challenges and suggestions** | In the game where Kubo gives orders, the children are spaced far enough apart to prevent any harm to one another.<br>Each type of fruit and vegetable is limited to a maximum of 5 pieces in the recipes. We can introduce additional fruits and vegetables to make the game more challenging. Kuba mentioned that this will require the children to pay attention to more conditions during the game. |



*Image – Purchase no. 2*

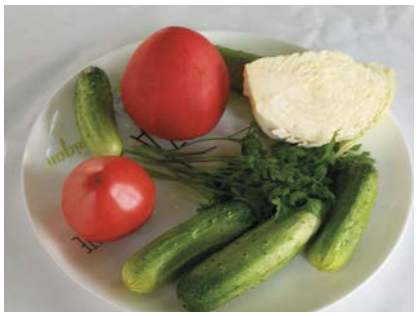

*Image – Recipe no. 2 – Salad*



*Image – Recipe no. 3 – Mint*



*Image – Zucchini*



*Image – Eggplant*



*Image – Peaches*



*Image – Kale and parsley*



*Image – Purchase*

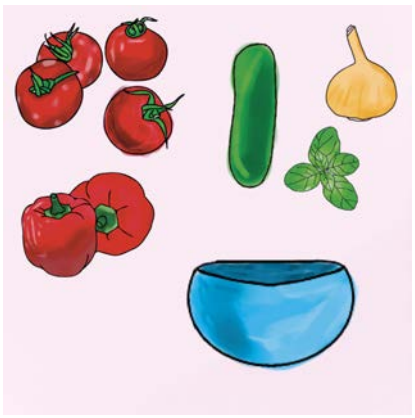

*Image – Recipe no. 1 – Salad*




*Image – Recipe no. 2 – Salad*



*Image – Recipe no. 3 – Lemonade*



*Image – Milka cuts boiled potatoes*

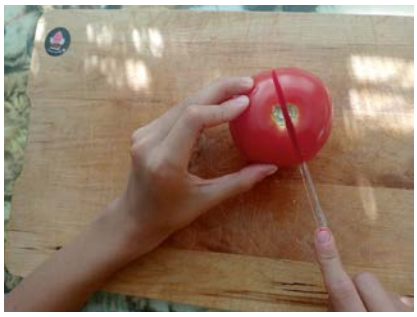

*Image – Dianka cuts a tomato*



*Image – Leila is peeling a cucumber*

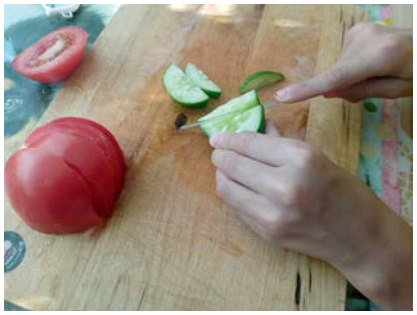

*Image – Milka is making a salad*



*Image – We cut the onion*



*Image – We are making a salad*



*Image – My favorite lemonade*

## 5.1.12 Four Seasons

| | |
|---|---|
| **Author** | **Yuliia Barzhak** |
| **Title** | **Lost friends** |
| **Topic** | **Four Seasons** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Allocation of quantities based on conditions.<br>■ Working with a scenario involving a concept or challenge.<br>■ Solving single-step contextual problems through quantity determination.<br>■ Development of cooperation and communication skills.<br>■ Promoting prosocial development. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | If a child is unable to calculate the displayed quantity independently, the teacher assists by gently guiding their finger from one element to the desired amount. Alternatively, she counts with the child using her fingers while softly vocalizing the name of each quantity shown on the fingers.<br>If a child is uncertain about their solution to the task, the teacher encourages them to verify or repeat their solution. |
| **Preparation/materials** | LEGO bricks, "color circle", colored pegs, cards with animals, paper with cartoon, animals and dots. |
| **Instructions** | We're going on a mission trip where we'll practice colors, numbers, and finger coordination. Match the corresponding number of pegs, LEGO cubes, or polka dots to the designated stations based on the provided images. Divide the tasks within your group and verify your solutions. Ensure that all group members are correctly positioned at their respective stations. |
| **Description** | The teacher divides the children into four groups, ensuring that each group consists of children with varying levels of ability and age. Each group will commence at a different station and then rotate to the other stations. The pace of rotation is determined by individual group speeds and available open spots. The teacher oversees the smooth progression of the activity. The children collaborate to find solutions to the tasks and work together to complete the activity.<br>**Station 1:** On the carpet, there are paper circles with dots drawn on them, ranging from 1 to 5 dots. The children's task is to place an equivalent number of LEGO bricks on the paper circles. By precisely positioning the LEGO blocks on the dots, beautiful blooming spring flowers will be created. See Attachment 1.<br>**Station 2:** Children have papers in front of them. Some papers display various animals drawn in varying quantities, while others feature different numbers of dots. The children's objective is to match papers with the same number of dots. Refer to Appendix 2.<br>**Station 3:** In the center of the classroom, there's a large paper circle divided into several distinct colored segments. Each colored section has dots drawn along the edge, always within the range of 1 to 5 dots (or a variant with dots up to 10). The children's task is to attach pegs of the same color as the designated section of the circle to the corresponding dots. Note: It's important that the dots are positioned near the edge for possible peg attachment. |

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| **Description** | **Station 4:** Each child receives three cards. Their task is to affix pegs to the section of the card corresponding to the number of dots depicted on that card. See Appendix 3. |
| **Feedback and support during the activity** | Are there the correct number of pegs as required? How can you confirm this?<br>Did you draw the exact number of balls that correspond to the number of pictures?<br>Have you placed the correct number of LEGO pieces in the circle, matching the number of dots drawn there? How can you verify this?<br>Did you correctly assemble the individual pieces together?<br>Double-check to ensure that you have accurately connected/drawn the balls according to the number of pictures. |
| **Questions for reflection** | What did you enjoy about our game?<br>Which game presented the greatest challenge for you?<br>Which game could you play all day long?<br>Is there a game you no longer wish to play? If so, why?<br>Have you assisted a friend when you were uncertain or didn't know the answer? |
| **Anticipated challenges and suggestions** | It is important to evenly distribute the children among the station.<br>Aids should be placed at clearly separate and adequate distances.<br>It's advisable to laminate smaller tools to prevent damage and discourage their repeated use. When creating dots, children can use markers on the board instead of crayons. |



*Image – Lego flowers*



*Image – A sample of the stand*


*Image – Adding pegs*


*Image – Adding multiple pegs*


*Image – Step by step addition of pegs*


*Image – Activity pattern*

## 5.1.13 Sport

| | |
|---|---|
| **Author** | **Yuliia Barzhak** |
| **Title** | **My best friend – sports** |
| **Topic** | **Sport** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Being able to adapt sports equipment and clothing to the specific sport.<br>■ Sorting items into groups based on a given property.<br>■ Being able to name and describe various sports. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We ask the children the most questions about the sport to ensure they understand the task correctly and engage their thinking more deeply in the activity. |
| **Preparation/materials** | Mannequin, sports game images, mannequin sportswear/equipment. |
| **Instructions** | Our Ferko (the mascot of our kindergarten) is getting ready to play sports, but he can't decide what to pack, what he needs. Let's take a look together to see if we know everything. |
| **Description** | The classroom and the playground are set up like a "sports equipment store." The teacher and the children lay out pictures of sports clothing and sports equipment. After becoming familiar with the equipment and clothing, the children are divided into teams. Each team receives a picture of an athlete with sports equipment (e.g., skier, climber, swimmer, hockey player). The children's task is to select the correct sports clothing and equipment from the pictures based on the sport they have drawn. At the same time, they will determine whether the sports equipment shown in the picture next to the athlete is correct and complete.<br><br>In the end, each team arranges the clothing and sports equipment next to their picture. The time it takes the children to complete the task is not important. |
| **Feedback and support during the activity** | What are the children doing in these pictures? What do these items have in common? Who are they designed for? What are their purposes? When are they typically used? Which sport did you choose? Have you ever participated in it? What did you pack? Did you make the right choices? What was incorrect in the picture and not suitable for your chosen sport? Why? What sport was it meant for? Do you think you might have overlooked something? |
| **Questions for reflection** | Was it challenging to locate the appropriate clothing and equipment for your chosen sport? If so, why was it difficult? If you were to choose a different sport, which one would you prefer, and why? Could a hockey player use items typically used by swimmers? How did your teamwork go? Did everyone get a chance to contribute and speak? Do you think working in groups might have been more effective? What aspect of the task did you find most enjoyable? |
| **Anticipated challenges and suggestions** | If the children are unable to reach a consensus on selecting the captain, the teacher can propose various methods for making the choice. Ensure that there is sufficient space to lay out the pictures. |



*Image – The mascot rides a bicycle*



*Image – Footballer mascot*



*Image – Mascot swims*

## 5.1.14 Animals

| | |
|---|---|
| **Author** | **Yuliia Barzhak** |
| **Title** | **Happy Farm** |
| **Topic** | **Animals** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Determine the number of objects in addition, subtraction, addition, or subtraction.<br>■ Within a range up to 10, determine the number of objects in a group through counting one by one.<br>■ Select all objects with a given attribute from a group of objects (e.g., color, shape, size, material, etc.).<br>■ Create a simple sequence of objects following a given pattern or rule.<br>■ Identify a circle, square, rectangle, triangle among a group of shapes. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | If the child cannot count on their own, count with them and point to the dots with your finger. |
| **Preparation/materials** | Animal pictures, coloring pages, A4 paper with pictures of chicks, blank small papers, magnetic geometric puzzles (circle, triangle, square, rectangle), tape, branch, string, chalk, t-shirt, mug, pencils, farmer grandfather and girl doll. |
| **Instructions** | Today, children, we are going to the farm. We will get to know the animals. However, the farmer is not sure if all the animals are in the pen, so he needs some help. Even Mrs. Hen can't count her mischievous chicks, which run around here and there. Some of them even have trouble finding the path that would lead them to their mother. But because she's not finished yet, they urgently need to complete her on the animal farm. And the farmer's granddaughter, Caroline, can't compare which animals and things on the farm are bigger and which are smaller.<br><br>We will split into groups so we can help each other with the tasks.<br><br>At the first station, you will be counting dots based on how many animals you see in the picture in front of you.<br><br>At the second station, you will draw a paper with a certain number of dots. This will determine how many chicks you will color. Don't forget to check the task together.<br><br>At the third station, you will build a path back to the farm for the chicks according to the template. Examine how the farmer started building the path. Lay out the shapes in front of you in the same order as the farmer did.<br><br>On the last station, you will help the farmer's wife compare objects. Examine the objects, discuss among yourselves, and decide which one is big – small, long – short, narrow – wide, etc. The pictures will give you hints. Divide the parts of the tasks within your group so that everyone takes turns, and help each other. |

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| **Description** | **1st Station:** In the designated area/blanket, the children have various animal pictures stacked on top of each other in different piles, up to a maximum of 5 pictures per pile. In the corner of the blanket, they have pencils and small pieces of clean paper. The task for the children is to select one pile of animals and count how many animal pictures are in it. Then, each child takes a blank piece of paper and a pencil and draws as many dots as there were animal pictures in their pile.<br><br>**2nd Station:** The children have a hat filled with pieces of paper, each with a different number of dots up to 5. The children divide these papers into two groups. They also have a sheet of A4 paper in front of them with 10 chicks drawn on it. Their task is to color as many chicks as there are dots on their paper.<br><br>**3rd Station:** These puzzles are arranged in a predetermined order selected by the teacher. The task for the children is to complete the path in the same order using all the puzzle pieces available at their station.<br><br>**4th Station:** The task for the children is to compare objects and determine which object is smaller – larger, shorter – longer, narrower – wider (belt, branch, rope, chalk, T-shirt, mug...).<br><br>Each activity has a clearly defined space, both for safety reasons and to focus the children's attention on the task at hand. Each group of children, while working with animal pictures, names the animal depicted in the picture. The children are divided into groups so that there are children with different abilities and knowledge in each group. The teacher monitors the progress of each station and how the children complete their tasks. After completing the tasks at all stations, the teacher gives a clear signal, which was previously agreed upon, for the groups to switch stations. The teacher motivates the children with a short story. |
| **Feedback and support during the activity** | Are you sure that's its name? How many animals did you have in your pile? How many dots did you draw on your paper? How do you know it's correct? Could you check it with your group? How many chicks have you colored so far? How many more do you need to color to match the number of dots on your paper? What geometric shapes do these magnetic puzzles have? Do you know other geometric shapes? Which ones are they? Are you sure you've assembled the path correctly? Which branch is longer? How can you tell? Why is this belt wider than that one? I see that you're taking turns in completing the tasks. Have you all taken turns? Are you discussing the solutions? |
| **Questions for reflection** | Which role did you like the most? Which task was the most challenging for you? Which activity was the most demanding? What did you enjoy the most? During which activity did you need the most help? Which game would you not want to play again? Did anyone in your group help a friend? What other animals would you like to have instead of the ones we played with today? Did you have to solve any interesting situations? How did you handle the division of roles? |
| **Anticipated challenges and suggestions** | If necessary, children/the teacher can help the child count the animals and draw the correct number of dots.<br><br>Children can either take turns at each station, or we can change stations after at least 5 children have completed the task. |

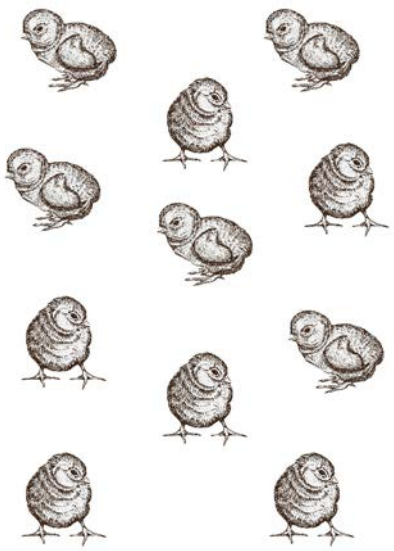

*Image – Chicks*

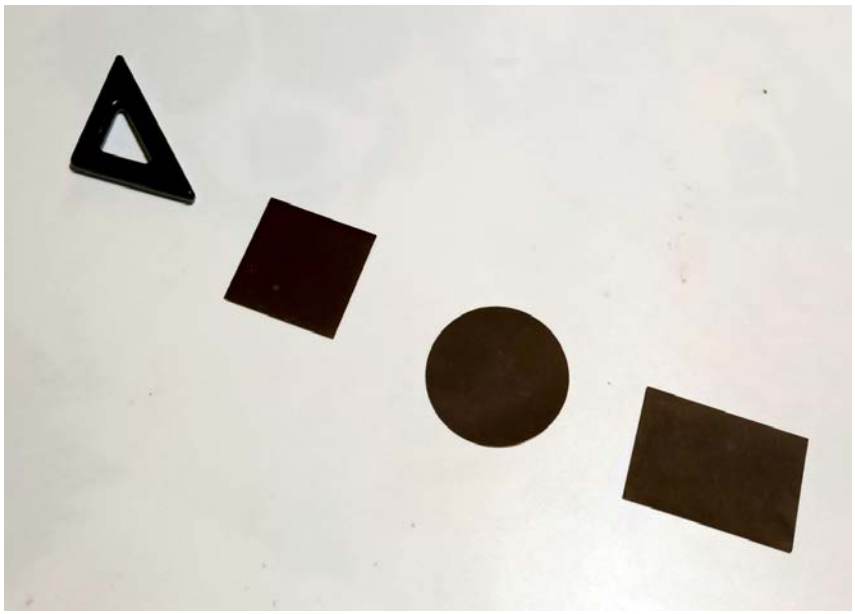

*Image – Way*

## 5.1.15 Child's life events

| | |
|---|---|
| **Authors** | **Veronika Ojo, Yuliia Barzhak** |
| **Title** | **Where I am?** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Sort pictures according to given criteria.<br>■ Draw your own family. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We pay more attention to children with SVP to always focus on where their parents are in outdoor areas.With children with SVP, we spend more time on information fixation until they remember it, and during the activity, we continuously ask fixation questions to ensure they have memorized and understood the information. |
| **Preparation/materials** | Pictures of characters (grandfather, grandmother, children, man, woman, police officer), printed pictures of buildings around the kindergarten, A4 paper, coloring pencils. |
| **Instructions** | Children, sometimes it may happen that you unintentionally get separated from your parents without realizing it in time. Do you already know what you should do? How to act safely? It's important to stay where you are in case your parents return to the last place you were together. How would you behave if some time had passed, and your parents still hadn't come back? Where should you seek help? You can either approach the lady who has children with her or, if you see them, the police officers. What would you say to them? What could help you? Do you know your name, last name, and address? If we're here in our small village and if you know the way home 100% and follow the rules of the road, you can go home. Do you all know your way home? Could we build it together? Each of you, children, will choose pictures of buildings or houses on the magnetic board that you and your parents see when you travel to kindergarten. Those who have a longer way to kindergarten can try to draw what unusual buildings they usually see on their journey (post office, shopping center, pharmacy, round house, not a square). Then we'll divide into groups, and you can describe each other's way home, tell us what your address is in your place of residence. Now that you've arrived home, draw what your house looks like. Can we then place it on the map? Ask your friends in the group where they live, and based on that, try to arrange your houses. Finally, you can draw all the members of your household who live with you next to your house. |
| **Description** | The children sit in a circle. In the center of the circle, there are pictures of men, women, children, policemen, and old people. We have a conversation about how to behave safely in case of getting lost. How to act. The children suggest solutions, argue, and discuss. After this conversation, the children construct their way home from kindergarten. Since most of the children live very close to the kindergarten, they will choose buildings on the magnetic board that they encounter on their way to and from kindergarten. Then the children divide into groups and describe their way to kindergarten to each other. The children can ask additional questions. We encourage group activity. Then the children draw what their house looks like and, through discussion with other children in the group, try to place the picture of their house in the right spot on the map. Finally, if the children feel like it, they draw their family members who live in the house. |

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| **Feedback and support during the activity** | Have you ever been lost? If yes, how did you find your way back to your parents? Who would you go to if you got lost? Where would you go if you got lost? On the roads, you must be careful where you step. Remember that when you're outside, you always need to make sure your parents are nearby! How did you find out where your friend lives? What did you ask? Do you know how to get home? Are you able to describe the way? I see that you're helping your friend with describing the way. Do you know where they live? Is this friend your neighbor? How did you find out? |
| **Questions for reflection** | How would you feel if you got lost? Why? Before we talk about what to do if you get lost, what would you do first? Do you know anyone who has ever been lost? How did they find their way back to their parents? How was your cooperation? Was it difficult to remember the way home? Did you recall the surroundings of the route? What would help you? Were you able to figure out where everyone lives? How did you proceed? |
| **Anticipated challenges and suggestions** | It's important to note that in case of being lost, you should not move from the spot initially; only after some time, approach a stranger. If you approach a stranger, it's important to advise the children to approach a mother with children or the police/firefighters/rescue personnel if they happen to see them nearby.<br>When returning on their own, it's important to remind the children that they must follow traffic rules. Remind the children that it's extremely important not to lose sight of their parents while they're on the street.We also recommend checking whether the children know the names of their parents and siblings. If not, it would be beneficial for them to learn them in the coming days at kindergarten or at home with their parents. |



*Image – My journey (drawn by Alička Valentovičová)*



*Image – The police came to visit us*



*Image – My family*

## 5.1.16 Safety in road traffic

| | |
|---|---|
| **Author** | **Julijana Kološa** |
| **Title** | **Which traffic sign will I assemble?** |
| **Topic** | **Safety in road traffic** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Practicing logical thinking.<br>■ Recognizing and revising the meaning of traffic signs.<br>■ Developing language and communication skills. |
| **Age of children** | 4–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children are divided into smaller groups using picture cards. Within their groups, they exchange ideas and revise knowledge about the traffic sign depicted on their card. They describe the traffic sign and explain its meaning to the best of their ability, and demonstrate its meaning through pantomime or with their own words. Children listen to each other, help explaining and share opinions. Adjusting for individual needs, the educator provides opportunities for children to independently gesture and actively participate in the group. |
| **Preparation/materials** | Picture cards with traffic signs and puzzles (cutouts) of various traffic signs. |
| **Instructions** | Our topic is road safety. "*Which traffic sign does your group have?", "Do you all know what it means?", "Have you seen it anywhere before?", "What should we pay attention to when we see it?"* We provide the group with jigsaw puzzles, and encourage the children to do the task. Each group has several puzzle pieces on the table. "*Which part will you assemble first? Look at the edges of the pieces. What color and shape do they have? Which traffic sign do you think you will assemble? What does the traffic sign mean? On the table, you have several puzzle pieces of different colors and shapes. Try to assemble them by feeling the edges and figure out which traffic sign you have assembled.*" |
| **Description** | On the tables, we have prepared several puzzle pieces of different traffic signs that children are already familiar with. We encourage them to work together and engage in dialogue about the meaning and characteristics of each traffic sign. During the activity, they can engage in conversation, actively listen to each other and help when needed. Let's remind them that we have already learned about different traffic signs and that they should pay attention to the shape, color and meaning of each sign. |
| **Feedback and support during the activity** | *"I can see that you observe well and successfully participate in the assembly of the traffic signs."* We motivate and encourage children. During the activity, it is important to have conversations about the recognized traffic signs and to discuss their importance for traffic safety. If the children's concentration starts to wane, additional motivation and encouragement with praise can help them refocus. "*Well done! You are doing great! Great thinking! Keep paying attention.*" |
| **Questions for reflection** | How did you work together? Do you already know these signs? What are they like? What do they mean? Where did you spot them? How did you feel doing the task? Did you find the task challenging? How did you go about solving the task? What did you learn? |

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| **Anticipated challenges and suggestions** | The game is played in a calm, relaxed atmosphere. We give children time to think and provide answers. Children listen to each other and help each other explain and share experiences. We can limit the game time (e.g., using hourglasses) or adapt it to the children's abilities. The jigsaw puzzle templates can be cut into a different number of pieces, depending on prior knowledge and level of development. This allows us to adjust the difficulty of the activity. |
| **Appendix** | Retrieved 17/04/2023 from: https://site-317310.mozfiles.com/files/317310/catitems/Prometni_znaki-b31d7d598037a3fdaa4fc383310f0fce.jpg |



*Appendix 1 - Revising the meaning of traffic signs*



*Appendix 2 – Traffic sign puzzles*



*Appendix 3 - Dialogue between children (explaining the meaning of an assembled traffic sign)*



*Appendix 4 – Conveying the meaning of an assembled traffic sign 1*



*Appendix 5 – Conveying the meaning of an assembled traffic sign 2*




*Appendix 5 – Traffic signs*

## 5.1.17 Materials and their properties

| | |
|---|---|
| **Authors** | **Sumedija Agić and Špela Dovjak** |
| **Title** | **Metal and magnet** |
| **Topic** | **Materials and their properties** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Identifying material properties through logical reasoning.<br>■ Asking meaningful questions.<br>■ Formulating and expressing an opinion.<br>■ Comparing opinions with each other.<br>■ Finding different solutions (problem solving).<br>■ Justifying individual solutions to a problem. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children are divided into 4 groups. You can use a counting book or a colour cube to sort them into groups. The groups are formed based on the colour the child names when rolling the dice. If the spaces in a group of a certain colour are already filled, the child rolls the dice again.<br><br>For children who have difficulty understanding the language, we provide additional individual explanations and visual, pictorial instructions. They are encouraged to talk to each other, share tasks and help each other. |
| **Preparation/materials** | Dice game with colours, magnets, balloons and small objects made of different materials (e.g. Lego bricks, plastic, glass and wooden beads, plastic and wooden buttons, pebbles, metal clips, etc.). |
| **Instructions** | Start a conversation about materials. Ask the children which materials they know and can they name them.<br>Encourage children to think about materials they are not familiar with.<br>Do you see any materials that you can't name? Can your friend name it?<br>Discuss different materials from the environment.<br>Where do we all find the materials we have chosen? Which material do you think is the most abundant in our playroom? Explain why? What are the Lego bricks, the chairs, the window made of? Do your friends share your opinion? What is the table made of, the radiator?<br>Encourage children to think about the properties of materials.<br>Do all materials have the same properties? What can we use to identify metals?<br>Divide the children into groups. One of the groups finds small objects made of different materials in the playroom and fills balloons (of the same colour) with them. Only one balloon should contain metal objects. Tie the balloons and invite the other groups to find out.<br>Other groups try to use all their senses to find out what is hidden in the balloons. Encourage them to talk, give answers and compare their findings with the group that filled the balloons.<br>Ask the group that knows what is in the balloons to answer any questions and help with clues and additional questions. If necessary, the teacher can also help.<br>Once the groups have found out what is in the balloons, a new task follows: the children are now asked to find out which balloon contains the metal objects without having to feel for them. Encourage the children to try to find different ways to solve the problem themselves. How would they find out? Does anyone have any ideas? |

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| **Instructions** | The children use the suggestions given to them to check which balloon contains the metal objects. Before each challenge, the balloons are shuffled.<br>Encourage the children to think about how they could use a magnet for this task. |
| **Description** | In the week before the activity, the children explore the environment and the different materials together with the teacher.<br><br>The children are encouraged to perceive the materials and their properties with all their senses (observe, touch, smell, etc.). |
| **Feedback and support during the activity** | They take photos of some of the most common materials, print the photos and attach them to the board and name the materials.<br><br>In the playroom they repeat several times the materials of the objects we have explored, photographed and learned about. |
| **Questions for reflection** | Were you all of the same opinion about what was in the balloons? How did you solve the problem? Why did some objects connect to the magnet and others not? How did you find out what the solution was? Is there anything you would add or change? What objects could you play with using the magnets? Find them in the playroom. |
| **Anticipated challenges and suggestions** | To encourage children to come up with ideas, use brainstorming, a group problem-solving method. Explain to them that all ideas are great and welcome and should be tried out because they will make an important contribution to solving the problem. In this way, we also motivate children who are reluctant to communicate and find it harder to participate in group work. |



*Appendix 1 - Grouping*



*Appendix 2 - Preparing the activities*



*Appendix 3 - Explore, find out what is in the balloons*



*Appendix 4 - Reflect, work in groups*



*Appendix 5 - Magnet check*



*Appendix 6 - Exploring in the playroom*

## 5.1.18 Healthy diet

| | |
|---|---|
| **Author** | **Maja Geršak Banović** |
| **Title** | **Where does it belong?** |
| **Topic** | **Healthy diet** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Perceiving with different senses (visual perception).<br>■ Identifying food groups (fruits, vegetables, dairy products, meat products, sweets, grains).<br>■ Categorizing foods into food groups. |
| **Age of children** | 3–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The educational game is suitable for 2–6 players. It is suitable for all children as it contains visual materials. |
| **Preparation/materials** | A game cube with pictures of different types of food (fruits, vegetables, meat products, dairy products, grains, sweets), a large game cube with dots, 6×6 large pictures on the floor, and a table to track game progression. The game can be played in the playroom, gym, hallway, or the playground. Children should have enough space to move around the pictures, which are placed in the room. |
| **Instructions** | Our topic is healthy food, and today we will learn about individual types of healthy food. We have prepared 6 boxes, each labeled with a specific food type (fruit, vegetables, sweets, dairy products, meat products, grains), and 36 pictures of various food items. Let's sort the pictures together into their respective boxes by asking questions such as, "*Where should we place the strawberries? What type of food are nuts? Where do sausages go? Where does the yogurt belong*?". We continue asking such questions until we have sorted all 36 pictures.<br><br>Once the pictures are sorted into their respective boxes, we place them randomly on the floor, ensuring that the food items do not touch each other. Then, we distribute the game dice and begin playing. Each child takes turns rolling the picture die, which determines the food item they need to name and describe. Afterwards, they roll the dotted die, which determines the number of items they must find on the floor (in correspondence with the food group indicated by the first die). For example, if the first die shows meat products and the second one shows the number 4, the child, who has rolled the dice, must step on 4 pictures with meat products and name each product.<br><br>If the child is unsure of the name of a particular food item, they can ask for help from a friend by asking, "Do you know which food this is?". For each successfully completed task, the child receives a stamp on the sheet.<br><br>If a child needs assistance in naming all the foods, a friend can help them. In such cases, both children receive a stamp. |

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| **Description** | The educator presents the children with an activity on the topic of healthy food.<br><br>In the week leading up to the activity, the children have already been engaged in various preparatory activities. They have created a nutrition traffic light with different types of food, explored picture books on the topic of nutrition, and participated in vocabulary-building activities related to healthy foods.<br><br>To further support the learning process, posters displaying the content of previous activities have been placed on the walls of the playroom. This allows children to easily refer to and discuss the topics we have covered.<br><br>The children are divided into groups of 2 to 6 players using any method of numbering, and they follow the instructions provided for the educational game.<br><br>Initially, the game is demonstrated by one group under the guidance of the educator, allowing all the children to observe and understand the rules of the game. Once the children have grasped the game mechanics, they can play independently without adult supervision.<br><br>In order to ensure engagement and cooperation of all players, the children have the option to choose a friend as a helper. |
| **Feedback and support during the activity** | Did you all understand the instructions? Do you know what your task is? Did you actively participate in the group? Did anyone need help from a friend? Have you completed the task successfully? Who managed to collect all the stamps on their sheet. |
| **Questions for reflection** | How did you solve the game? Was the sorting and naming task challenging? How did you help yourself if you didn't know how to sort something? Where in the playroom could you look for answers? |
| **Anticipated challenges and suggestions** | To encourage children to search for ideas, we use the method of group problem solving (i.e., brainstorming). This approach motivates children who may be hesitant to collaborate with their friends and who find it difficult to join group work. |



*Appendix 1 – Sorting of food items*



*Appendix 2 – Arranging images in the playroom*



*Appendix 3 – Rolling dice*



*Appendix 4 – Completing tasks*

## 5.1.19 Traditions and folk tales

| | |
|---|---|
| **Authors** | **Špela Petrovič Štempihar, early childhood educator (BA), and Alekseja Glinšek, early childhood educator (BA)** |
| **Title** | **Thinking grid** |
| **Topic** | **Traditions and folk tales** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Fostering thinking.<br>■ Developing concentration, building working memory, and encouraging creative thinking.<br>■ Cultivating decision-making, reasoning, planning, and presenting skills, building memory and the ability to draw conclusions.<br>■ Fostering advocating and argumentation skills, searching for different answers. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children are divided into smaller groups, consisting of 5 or 6 children. To start, we recommend using a 3×3 grid, as it is among the least challenging. As the children become more proficient, we progress to a 4×4 grid, and finally introduce a 5×5 grid. If we notice that the children are quickly grasping the task and are in need of a greater challenge, we offer them a grid with a larger number of squares, such as. 6×6 or 7×7 grid, along with corresponding pictures. This increases the level of difficulty. |
| **Preparation/materials** | We prepare educational materials, such as worksheets with a grid. Alongside the grid, we also provide pictures of characters from *The Three Bears* fairy tale: the girl, baby bear, mommy bear, and daddy bear. The children can cut out these characters themselves. It is important to create a calm and quiet space, free from external factors or distractions, as this will ensure an efficient working environment. |
| **Instructions** | Let's prepare the grids and pictures of characters from the folk tale *The Three Bears.* Together, we will look at the worksheets and the selected pictures. We will guide you with some questions: What do you see on the worksheet? What does this grid remind you of? Have you seen anything like this before? Where or for what purpose could you use this? What do you think your task will be? What are we going to do? What instructions would you give to your friends in the group? How would you explain to them what we are going to do?<br><br>First, the children are divided into small groups. Each group will receive a 3×3 grid and 9 bear pictures. Their task is to fill the grid by placing one bear in each square. They must make sure that the same bear does not repeat in the same row or column.<br><br>Once they have successfully completed the task, they can move on to a 4×4 grid with 16 pictures. If they have successfully completed this task, too, they can continue with a 5×5 grid with 25 pictures. |
| **Description** | Children can prepare the material themselves by cutting out the bear pictures. Divided into groups, they discuss the activity and form a plan. |

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| **Feedback and support during the activity** | Check if all the bear pictures in a row or column are different. |
| **Questions for reflection** | What is the goal of your assignment?<br>How did you approach the task?<br>How did you know that you cannot put a bear picture in that place?<br>How did you know what to put in a certain place? What did you do when you realized you made a mistake?<br>Have you ever done anything like this before?<br>How could we make this task even more challenging? |
| **Anticipated challenges and suggestions** | Remind the children to take their time to complete the task and not to rush.<br>The environment where the activity is carried out should be calm. The grid requires them to focus, so make sure nothing or no one disrupts their thinking. |
| **Appendix** | https://en.wikisource.org/wiki/Trije_Medvedi<br>Visual materials:<br>Three Bears Clipart:<br>Download Free High-Quality Three Bears Clipart (clipart-library.com)<br>Goldilocks and the Three Bears Small World Characters (twinkl.si) |



*Appendix 1: Prepping and viewing the worksheet*



*Appendix 2: Describing what we see*



*Appendix 3: Doing the activity -1*



*Appendix 4: Doing the activity - 2*



*Appendix 5: Helping each other during the activity (peer support)*

## 5.1.20 Child's life events

| | |
|---|---|
| **Author** | **Karmen Meško, early childhood educator (BA)** |
| **Title** | **What do we need in school and why?** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Thinking** |
| **Objectives** | ■ Developing numerical concepts.<br>■ Connecting symbols and number values.<br>■ Sorting pictures and symbols. |
| **Age of children** | 5-6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Children are divided into small groups, and we provide them with cardboard bases which have number values represented by dots and cards with pictures of school supplies. The children examine the pictures on the cards while simultaneously counting the dots on the cardboard bases. When they find the corresponding number of dots that matches the school supplies depicted on the cards, they place the cards on the cardboard bases.<br><br>For children from disadvantaged backgrounds, we recommend an individual approach, a conversation with the educator: "What do you see in the picture?", "Have you ever held this item in your hands?", "When is this item used?", "What do these objects have in common?" |
| **Preparation/materials** | Round cards with illustrative images of school supplies; cardboard bases with number values. |
| **Instructions** | Together with the children, we examine the cards featuring pictures of school supplies. We name the items, describe them, and discuss their uses. The children locate familiar items in the playroom and explain their purpose and how we interact with them. Utilizing visual perception of the dots, children pronounce the number values so that they will be able to match the cards with the corresponding amount of school supplies to the dots on the cardboard.<br><br>"What do you think of when I say 'school'? Are you familiar with these utensils? Have you ever held them in your hands? When do we use them? What else can we do with them? What materials are they made of? Do we have these utensils in the kindergarten? Look for them." |
| **Description** | The educator and the children gather around the table. Round cards depicting various school supplies, such as crayons, brushes, books, and notebooks, are provided to the children. The cards feature different amounts of objects. The children first have to name and count the objects, determine their quantity, and locate the corresponding value on a large cardboard base where quantity is represented by dots. Once the children find the matching value, they place the card on top of it.<br><br>The educator encourages the children to observe, think, and establish connections between the objects.<br><br>During the activity, children engage in discussions, critical thinking, observation, and debate. Adequate didactic materials are prepared for all children, ensuring that multiple groups can work simultaneously. |

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| **Feedback and support during the activity** | During the activity, children are encouraged to count out loud. If they encounter difficulties with counting, the educator and other children in the group count together to provide support. We encourage them to observe the pictures together, engage in discussions, and participate in debates. |
| **Questions for reflection** | What was the most challenging part of this assignment? |
| **Anticipated challenges and suggestions** | When it comes to naming objects, hints can be provided to assist the child. If the child is unable to determine the value through visual perception alone, the educator encourages them to count the dots. If the child continues to struggle, the educator provides additional support by helping them with counting.<br>Similarly, if a child has difficulties recognizing objects, the educator can offer hints (e.g., "*With this object you can draw straight lines.*"). |



*Appendix 1 – Viewing cards with pictures*



*Appendix 2 – Counting items on cards*



*Appendix 3 – Counting dots on the cardboard base*



*Appendix 4 – Observation and discussion*



*Appendix 5 – Counting utensils and comparing the value with the number of dots*

# 5.2 Memory

## 5.2.1 Everybody is different

| | |
|---|---|
| **Authors** | **Sabina Plechingerová, Naděžda Husová** |
| **Title** | **Silent mail** |
| **Topic** | **Everybody is different** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Name most of what surrounds them.<br>■ Formulate questions, answer, and evaluate verbal performances.<br>■ Respond verbally.<br>■ Describe a situation (real or depicted in a picture).<br>■ Make a conscious effort, concentrate on the activity, and complete it.<br>■ Perceive and discriminate using all the senses (distinguish sounds and tones by hearing, identify shapes of objects and other specific features by sight, recognize smells and tastes, perceive through touch, etc.). |
| **Age of children** | 4 – 7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into groups. Ideally, each group should consist of 5-6 children. The teacher can choose between two methods for grouping:<br>**1.Easier Option:** The teacher can use colored envelope cards and colored pegs. She distributes the envelope cards to the team leaders, while the other children draw colored pegs. Groups are then formed based on the color assigned to each child.<br>**2.Harder Option:** The teacher assigns a task – form groups of five, ensuring that each group includes at least one child meeting specific criteria (e.g., a girl, a boy, someone with glasses, etc.). Children should seek out group members who share something in common with them (e.g., hair color, glasses, eye color, etc.).<br>For a greater challenge, additional cards can be introduced. (Children can fill out 2–3 cards at a time.) |
| **Preparation/materials** | Instruction Table, Blank Table, Picture Cards. |
| **Instructions** | We are discussing the concept of uniqueness. Can anyone remind us what it means when someone is unique? What or who can be unique?<br>Today, I have pictures of boys and girls that were created. While they may have some similarities, they also have differences. Each one of them likes different things and has different food preferences. Your task now is to gather this information about them.<br>In your group, one person will be given a card containing information about what your assigned boy or girl likes and what they enjoy eating. This person should not reveal this card to the others and should sit separately with their back turned to the rest of the group.<br>The other member of the group will be given a blank card and should fill it in with small cards based on the information provided. Like the first person, they should also sit separately with their back turned to the group. |

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| **Instructions** | The rest of the group will silently pass on this information. Let's practice: The person who completes their card first, sits down, and will then start by whispering a message, for example, "The boy doesn't like puzzles." Then, pass this message along until it reaches the last person, who must correctly identify the picture and place it in the appropriate spot on their blank card.<br><br>Work together and agree on your roles. |
| **Description** | The teacher begins by reviewing with the children what they have learned about uniqueness, collectively recalling the essential information.<br><br>Next, the children are grouped according to the provided instructions, based on their chosen variant.<br><br>Before explaining the rules of the game, the teacher has the children assign roles within their groups. They discuss and collaborate on who will act as the initiator, who will be the final recipient, and who will be the messenger. Once roles are determined, they take their designated positions.<br><br>The child sitting in the first position is given a completed card containing all the information about the boy or girl in the picture. They examine the card and select one piece of information to convey in a brief sentence (e.g., 'They have blue eyes,' 'They enjoy playing football,' 'They don't eat tomatoes'). This sentence is whispered into the ear of the person sitting behind them. In this manner, the information is relayed from one person to the next, eventually reaching the last person in the group. This last person has a card in front of them, along with separate picture cards required to complete it. Upon receiving the information, they locate the specific picture and place it in the appropriate spot on the card.<br><br>Once the card is fully filled in, the entire group gathers in a circle. Using the card initially provided to the first child, they verify the accuracy of the completed card. |
| **Feedback and support during the activity** | Do you understand the task? Can anyone explain the rules of the game? Can you identify all the objects in the picture? Are there any objects you're unsure about? If you need guidance, can you seek advice from a friend in the other group? What information are you still uncertain about? How did you assign the roles within your group? What agreements have you made? |
| **Questions for reflection** | What distinguishes your cards from each other? Can you describe the problem you encountered? How did you manage to resolve it? Is there anything you would consider doing differently next time?<br><br>What aspects of the task posed challenges for you? How did you allocate the roles within your group? Is there anyone who would like to try a different role in the group? Can you identify any similarities between yourselves and the boy/girl on the card? What are your food preferences or dislikes in comparison to theirs? |
| **Anticipated challenges and suggestions** | Remind the children not to invent their own words and to communicate in hushed voices when sharing information. Encourage the children to provide sample sentences and demonstrate how to complete the card. |



*Image – Grouping*



*Image – Instruction giving*



*Image – Role of the first*



*Image – Role of the last person*



*Image – Transmission of information*



*Image – Evaluation*



*Image – Tools 1*



*Image – Tools 2*




*Image – Ready-made boy/girl cards*

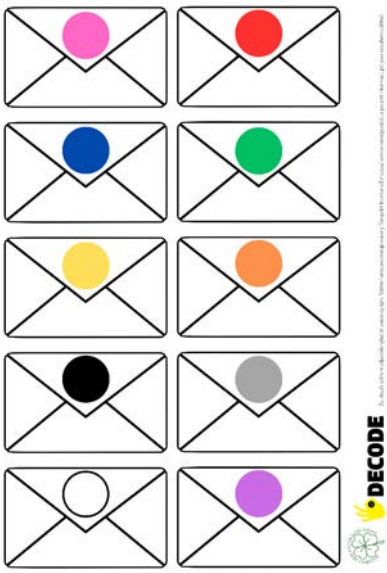


*Image – Envelopes for grouping*

## 5.2.2 What I like to play with

| | |
|---|---|
| **Authors** | **Marcela Dietlová, Naděžda Husová** |
| **Title** | **Build your own toy** |
| **Topic** | **What I like to play with** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Encourage the expression of independent and meaningful thoughts, ideas, feelings, opinions, and judgments.<br>■ Encourage verbal formulation and answering of questions.<br>■ Perform tasks by memory.<br>■ Develop visual memory through play.<br>■ Promote negotiation and agreement-making with both peers and adults when needed.<br>■ Foster the development of basic IT skills. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into groups. Ideally, each group should consist of 4–5 children. You can use colored tokens to facilitate this division. Based on the color of the token drawn, they will join the group led by their corresponding captain. |
| **Preparation/materials** | Tablet or smartphone to record the process of assembling the toy. Additionally, you'll need a disassembled toy composed of up to five parts, such as a wooden toy robot with its head, body, arms, legs, two screws, and two nuts. |
| **Instructions** | Our theme today is your favorite game or toy. What is your favorite toy or game? What material is it made of? Can you think of alternative materials it could be made from? Has anyone ever had a toy made from something old or second-hand? If so, what did it look like, and what was its name? If you were to take it apart, how many parts would it consist of, and do you have any instructions for it? Where do we typically find instructions for building, assembling, or using things? Did your toy come with instructions, or did you create them yourself? If you had to put it together from memory, how would you do it?<br><br>I've brought one of these toys that can be taken apart to show you. It's a robot named Emil. Before I reveal Emil, I'd like you to think about what materials you would use to make a robot.<br><br>Now, let's take a look at Emil. What materials do you think he's made of? What parts or components would you need to create a robot like him? How many parts does Emil consist of, and how would you connect them? Can you identify any geometric shapes on him? Does anyone else have a toy robot at home that can be taken apart?<br><br>Today, your task is to disassemble Emil as a group. Please take photographs of each part you remove. Work together, agree on where to start, and assign roles within your group. Photograph each part of the robot you disassemble; these photos will serve as your assembly instructions. Who can summarize your task? What part will you begin with? Does everyone know how to use a tablet or phone? You can ask a friend from your group or another group for help if needed. |

| | |
|---|---|
| **Instructions** | After dismantling and documenting: I see that the robot is now disassembled, and you have recorded the process in photos. As a group, review the photos, which will act as your assembly instructions, and reassemble the robot from memory. Try to remember the sequence as you examine the photographs. Collaborate as a group and decide how to divide the roles for reviewing and rebuilding. You can decide how to work together effectively. Does everyone understand the task, or does anyone need it to be explained again? |
| **Description** | The children are seated in a circle with the teacher, and they engage in a discussion about their favorite toys and how they like to play with them. The teacher poses open-ended questions to encourage the children to describe their toys, including their appearance, materials, and whether they can be disassembled and reassembled or if there are instructions for assembly.<br><br>Next, the teacher introduces the children to a disassembled robot made from scrap wood, screws, and nuts. Before revealing the robot, she prompts the children to think about what materials could be used to make it. Once the robot is revealed, the children describe and analyze its composition, considering how many parts it consists of.<br><br>Following this introduction, the children are divided into groups. The teacher provides the first part of the task: each group is responsible for disassembling the robot and documenting the process by taking photographs using a tablet or phone. The children collaborate within their groups, working together to complete this phase of the task.<br><br>Subsequently, the teacher presents the second part of the task. The groups review their progress and then work collaboratively to reassemble the robot from memory. During this phase, they assign roles and responsibilities within the group to ensure effective teamwork.<br><br>Throughout the activity, the children continue to cooperate, discuss, and reach agreements on how to approach each part of the task. |
| **Feedback and support during the activity** | Have you agreed who takes the photos and who takes the robot apart? Where do you put the photographed parts so they don't get mixed up with the others? Have you photographed each step of the process? Are you making arrangements? Why can't you reassemble the robot according to the instructions? What do you do about it? How can you solve it? |
| **Questions for reflection** | How did you find working with the group? Who was able to help someone from another group? With what? What was it like to give advice to someone? Who was the first to start dismantling? How did you get along? What was difficult for you? What would you do differently next time? Why? Were you able to build the robot from memory the way it looked when I introduced it to you? What was different? |
| **Anticipated challenges and suggestions** | Encourage children to help each other in the group. Put the dismantled parts in a specific place to avoid mixing them up. Remind all children in the group to see the photographed procedure. |



*Image – Aids*



*Image – Collaborative dismantling 1*



*Image – Collaborative dismantling 2*



*Image – Collaboration for recording the procedure*



*Image – Working with the telephone – instructions for construction*



*Image – Memorising the procedure and assembling*

## 5.2.3 The water around us

| | |
|---|---|
| **Authors** | **Sabina Plechingerová, Vlasta Maxová and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **In the footsteps of the river** |
| **Topic** | **The water around us** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Formulate questions, answer, evaluate verbal performances.<br>■ Respond verbally, describe the situation (real, according to the picture); to deliberately observe, notice, notice (new, changed, missing).<br>■ Recognize and name most of what is surrounded by it.<br>■ Follow and learn according to instructions.<br>■ Perform tasks from memory.<br>■ Develop visual memory. |
| **Age of children** | 3–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We will divide the children into groups of three or four. Children take turns drawing colored clothespins from the hat, with each child getting a specific color (for example, the child with a red magnifying glass has all the children with red clothespins in their team, and so on).<br>It is recommended to split the activity into two days. On the first day, the children will use magnifying glasses to take pictures. On the second day, they will create a map and attach the photos.<br>As a review, the groups can take their completed maps and return to the riverside location to check for accuracy together. The teacher should continuously monitor role changes and coordination among the children. |
| **Preparation/materials** | Colored magnifying glasses, printed photos, camera, crayons, thumbtacks, road map. |
| **Instructions** | **Day one:** Today, our focus is on water, and we're going to explore its surroundings. Try to recall as many objects, sounds, plants, and animals from the area around the river as you can. Each of you will have your colored magnifying glass, which you can use with a camera to capture interesting things along the way. You should decide within your group who will use the camera, who will use the magnifying glass, and who will search for subjects of interest. Do you all understand the task? Are you clear on what you need to do? Is there anything I or someone in your group can do to assist you? Do you know how to use a magnifying glass? Are you familiar with operating a camera? Is there any part of the task that you find challenging? If so, what specifically? |

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| **Instructions** | **Second day:** Our theme revolves around water. Can anyone recap what your assignment was yesterday? Do you remember the groups you were in while taking photographs by the river? Please reassemble into the same groups as yesterday. Does anyone require assistance? Are you all aware of what you need to do?<br>We have provided each group with a map that outlines the route we followed, including significant locations. Your objective is to complete the map. You have the prepared photos, and your task is to place them on the map where you observed these subjects during your outing and attach them. This will finish the map. It is essential to communicate within your group, take turns, and collaborate. Once your maps are finished, we will gather in a circle to review them collectively. Do you understand what you should do now? Don't forget to communicate and reflect on what you saw during your exploration yesterday. Do you require any assistance? Are you encountering any challenges? If so, can you resolve them on your own, or can a peer within your group help? You may also seek assistance from a peer in another group. |
| **Description** | On the first day, the children gather in a circle, where the teacher introduces them to the tasks for both days and explains the objectives of the activities. In the classroom, the children are initially divided into groups. As they make their way to the river, the children, working in their respective groups, use cameras or tablets along with colored magnifying glasses to capture what catches their attention. Simultaneously, they make an effort to remember the specific locations where each photo was taken. During this activity, the children collaborate and coordinate their efforts. They also have the flexibility to switch roles as needed.<br><br>On the following day, the same groups receive a map that has been prepared by the teacher. As a group, they gradually fill in this map. They use printed photos, placing them in the correct locations where they were originally taken using their colored magnifying glasses and cameras.<br><br>Upon completing the activity, the children convene in a circle. Here, they collectively evaluate and present what they have remembered and affixed to their maps. |
| **Feedback and support during the activity** | How do you plan to remember the exact locations where you took each photo? Consider whether the subjects you photographed will still be there tomorrow. Can you capture everything that interests you through photographs? Can you provide names for all the items you've photographed? Have you correctly identified the appropriate location for each photo on the map? Are you consistently rotating through different roles within your group? Do you have a clear understanding of all the significant landmarks on the map? Can you identify at least five of them, or maybe even more? It might be helpful to cross-check with your friends in the group to ensure the accuracy of your photo placements. |
| **Questions for reflection** | You collaborated within your group and relied on each other. Did you encounter any challenges that you had to overcome? Were there any unexpected surprises during the activity? Can you think of any improvements for next time? Were you able to effectively rotate roles when taking photos? How did you manage to ensure everyone had a chance to participate? Who in your group successfully took turns, and how could you improve the rotation process for next time? Did everyone remember and correctly place something on the map? What aspects of the activity did you find most challenging or easiest? Can you explain why you felt that way? |

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| **Anticipated challenges and suggestions** | Strive to ensure that all children have access to the same space. Encourage them to capture images of objects and subjects that remain unchanged. Reinforce the importance of cooperation within groups and taking turns in different roles. |



*Image – Magnifiers*




*Image – Prepared map*



*Image – Observation of the river*



*Image – Photography*



*Image – Use of Magnifier and Camera*



*Image – Bargaining in a group*



*Image – Sticking to the map*



*Image – Sharing in a circle*




*Image – Colored magnifiers*

## 5.2.4 The World Around Us

| | |
|---|---|
| **Authors** | **Naděžda Husová, Vlasta Maxová and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **I will pack in my backpack…** |
| **Topic** | **The World Around Us** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Deliberately focusing on an activity and maintaining attention.<br>■ Learn short texts by heart, deliberately remember and recall.<br>■ Developing memory. |
| **Age of children** | 2–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We recommend, for example, practicing yoga with children before the activity to improve concentration and blood flow to the brain (The story of a tree from a seed – video in the attachment). Children who can master yoga positions can help other children in the exercise, as demonstrated in the video with the tree pose. This way, they can assist with each position and warm-up.<br>Start with a smaller group of children – a maximum of 6 children. When changing the assignment, it can also be used to practice auditory memory. The activity can be modified so that, initially, the children place objects in the backpack. Subsequently, they add objects shown in the picture, and finally, they include imaginary objects ('like'). |
| **Preparation/materials** | Backpack, assorted items, basket. |
| **Instructions** | Where do you like to go for a walk? What does a hike or a walk mean? Try to think about what you would pack in your backpack. What do you need to remember and bring with you? What can the weather be like during the walk? And how should you dress? Do you remember if you or your parents have ever forgotten something on a walk?<br>Your task now is to gradually remember all the items that we put in the backpack, repeat them, and add another item of your choice to the list. I'll start: "When I go on a hike, I pack a mug in my backpack" (the teacher takes the mug and puts it in the backpack). (The child on the right repeats: "When I go on a hike, I pack a mug and a spoon in my backpack."‥ and puts it in his/her backpack). Do you understand how to do it? Do you need any advice? Can you do it by yourself? |
| **Description** | Children should ideally sit in a circle. In the middle of the circle, there is a basket with various items. The child who starts takes the backpack in front of them and thinks of a sentence, along with the first item to put in the backpack. The next child in line repeats the sentence, including all the previous items, and then adds the item they choose to the basket.<br>During this activity, the children cooperate and assist the one who may have trouble remembering. |
| **Feedback and support during the activity** | I see that you're eager to begin. How did you decide to handle this? It's good that you've agreed on who will start. |

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| **Questions for reflection** | What was the most challenging part for you?<br>And what came easily?<br>How many items were you able to remember?<br>Could you list them one by one? |
| **Anticipated challenges and suggestions** | It can also be used to practice auditory memory – we will change the task.<br>For example, "When I went to the forest, I heard sssss, a snake..." The teacher reminds the children to come to an agreement and emphasizes the importance of staying calm and allowing others in the group to think as well. |



*Image – Group activity in practice 1*



*Image – Group activity in practice 2*



*Image – Group activity in practice 3*

## 5.2.5 Life event

| | |
|---|---|
| **Authors** | **Vlasta Maxová, Husová Naděžda** |
| **Title** | **International Children's Day – Ladybug and her dots** |
| **Topic** | **Life event** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Express thoughts, ideas, feelings, opinions, and judgments independently and meaningfully in appropriately worded sentences.<br>■ Engage in conversations (listening to others, waiting for others to finish their thoughts, following the speaker and the content, and asking questions).<br>■ Formulate questions, provide answers, evaluate verbal performances, and respond verbally.<br>■ Engage in thinking, conduct simple reasoning, and express thoughts and reflections.<br>■ Follow and learn according to instructions and guidance.<br>■ Understand basic numerical and mathematical concepts, make elementary mathematical connections, and apply them practically as needed (such as comparing, arranging, and sorting sets of objects based on certain rules, understanding numbers up to about six, grasping number sequences within the range of the first ten, and comprehending concepts like more, less, first, last, etc.).<br>■ Comprehend spatial concepts, including right, left, below, above, in the middle, behind, under, above, near, next to, between, etc. |
| **Age of children** | 3–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We organize the children into groups. The optimal number of children in each group is four. The teacher uses flowers with colored circles to facilitate this organization. Flowers are distributed to the children, who are then assigned to groups with matching colors. |
| **Preparation/materials** | Paper flowers in 7 different colors<br>Crayons matching the colors of the paper flowers<br>Pictures of ladybugs with various colored dots<br>Pictures of ladybugs with blank dots<br>Mat with pegs for attaching the ladybug pictures<br>Envelopes |
| **Instructions** | Ladybug flies from flower to flower. At the same time, her dots become colored. In the meadow in front of you, you see seven different colored flowers, and next to each are colored crayons.<br><br>Divide into groups. Each group will receive a ladybug with different colored dots from me. Your first task is to memorize the colors of the dots on the ladybug together as a group. Take a good look at it. In the group, agree on who will remember which color. Do you know what to do? Who can repeat the first part of the task for me? I'll hide the ladybug with colored dots in the envelope now, you won't see it. You will get an empty ladybug from me. The second part of the task is to draw the colors in the dots exactly as you saw them on your pattern. |

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| **Instructions** | You will fly across the meadow like ladybugs, near the flowers you will find the colored crayons you need and dots you color correctly. It needs to be agreed upon so that everyone in your group gets involved and takes turns. Who can repeat the entire assignment for us? How do you agree?<br><br>**After the activity:** You have a ladybug in the envelope that you should have memorized. How do you know how many dots you scored correctly? |
| **Description** | Seven different colored flowers are spread out on the grass. Crayons of the same color as the flower are placed next to each flower. The children are divided into groups. Each group chooses one ladybug with colored dots from the teacher, and together they agree on who will remember which color. The teacher hides the ladybug in an envelope, and it must remain sealed during the recording.<br>The groups receive a ladybug with uncolored dots attached with pegs to a sturdy mat. Together, the group flies across the meadow and colors the dots as they memorized them in the template. Children take turns in groups during the recording, agree, and comment on the coloring of the dots.<br><br>After returning, they check and count the correctly colored dots according to the template in the envelope. |
| **Feedback and support during the activity** | How do you coordinate and agree within your group?<br>Who is responsible for recording each color, and how did you decide?<br>What strategies could you use to ensure that everyone in your group is actively involved?<br>Is there a specific color you'd like to remember from your groupmate's ladybug?<br>How can you ensure that everyone takes turns effectively? |
| **Questions for reflection** | Which colors were you able to remember correctly?<br>How did you determine the number of dots you got right?<br>Could you describe the process of how your group reached an agreement?<br>Were there specific colors that you needed to remember as a group? |
| **Anticipated challenges and suggestions** | Begin with a ladybug with fewer dots and gradually increase the complexity.<br>Reinforce the importance of cooperation within the groups. |



*Image – Acquaintance with the activity*



*Image – Agreeing in groups*



*Image – Storing in an envelope*



*Image – Drawing and alternating*



*Image – Correctness check*

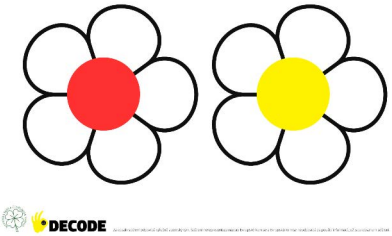


*Image – Colored flowers to sort into groups*

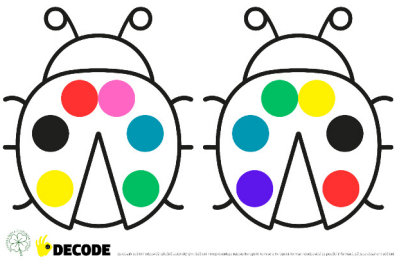


*Image – Ladybugs*

## 5.2.6 Our surroundings

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| **Author** | **Hana Zárubová** |
| **Title** | **What does the dragon see from above?** |
| **Topic** | **Our surroundings** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Orient oneself in the immediate surroundings, remember the names of various objects and their locations in the village.<br>■ Distinguish certain picture symbols and memorize them.<br>■ Name most of what surrounds the child, what they see around them, and in the picture.<br>■ Collaborate with others. |
| **Age of children** | 5–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Choose only one object or a small number of buildings. It will also be better for the child to choose an object they know best – for example, the kindergarten or a store. |
| **Preparation/materials** | iPads. |
| **Instructions** | We'll try to look at the world from above. Do you know, children, what a dragon sees from above? First, we'll take photos of the most well-known buildings in our town on iPads, and then, back at kindergarten, we'll look at them from above.<br><br>Take iPads and head to the village.<br>Stop at interesting objects and take photos of them (preferably from multiple angles).<br>Name the objects and describe how they look (from below), from the front, from the side, from the back.<br>Upon returning to kindergarten, use iPads to find the satellite map in the Google Maps app.<br>Look at the objects from the perspective of a dragon (from above).<br>Try to identify individual objects and others that surround them (trees, ponds, etc.).<br>Explain various icons on maps (e.g., H for hospital, etc.). |
| **Description** | The children will head to the village, take photos of interesting objects (school, church, shop, restaurant, etc.). The children will work in smaller groups or pairs, taking turns in photography. They will assess each other's photos.<br><br>They will discuss what these objects are used for, describe how they look, and try to remember all the objects they photographed in the village.Upon returning to kindergarten, they will review the photos once more (the teacher can print the photos for better reference).<br><br>Using iPads, they will open the Google Maps app, access the map of the area, and try to find the photographed objects from a dragon's perspective (from above). They can also name other things in the vicinity of these objects (trees, cemetery, pond, etc.).<br><br>They will discuss the difference between what they see from the ground and what they see from above. |

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| **Description** | They will try to recall various details about the objects that would help them recognize them on Google Maps. |
| **Feedback and support during the activity** | The teacher asks the children:<br>What interesting objects in the village they know.<br>Whether they know where these objects are located and if they can find their way to them?<br>Why these objects are interesting to the children.<br>What they like and dislike about them.<br>The teacher herself will always share her opinion with the children in the end but will emphasize to them that not everyone's opinion has to be the same, and that each child may see different objects differently. |
| **Questions for reflection** | The teacher asks the children how well they did in navigating the village and finding objects. She inquires if they happened to see anything unusual that caught their attention. She asks whether they remember the route to individual objects (from school to the church, etc.). 'Did you like the buildings? Which objects are interesting and why? Did you like this activity and why? Do you think you could find your house on a map with your parents?' |
| **Anticipated challenges and suggestions** | Review safety when using iPads outdoors – pushing, dropping to the ground. |

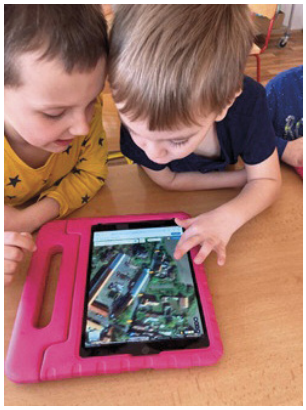

*Image – Working with a tablet*



*Image – Photographing the municipal office*



*Image – Searching for objects in the Google Maps app*



*Image – Collaborative work in the classroom*



*Image – Photographing objects*

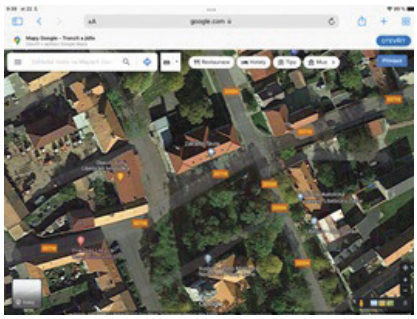

*Image – Objects from the dragon's perspective*

## 5.2.7 Gifts of nature

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|---|---|
| **Authors** | **Marcela Dietlová, Petra Staňková, Naděžda Husová** |
| **Title** | **Fruits of trees and plants – Pexeso** |
| **Topic** | **Gifts of nature** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Intentionally focus and sustain attention.<br>■ Cultivate voluntary effort, concentrating on the activity and its completion.<br>■ Concentrate on what is cognitively significant.<br>■ Recognize and differentiate certain pictorial symbols. |
| **Age of children** | 3–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Provide the child with fewer pairs of simpler pictures that they are familiar with. |
| **Preparation/materials** | A memory matching game (depending on the topic), scissors, a table, or a flat mat. |
| **Instructions** | Let's examine the pictures of various fruits on the pexeso cards together. Would someone like to try and name them? Do you recognize any of them? We're going to play a game with these pexeso cards. First, one player flips a card, and everyone takes a look. Then, another player takes their turn. If you find the same fruit pictures, you get another turn. In the end, we'll tally up how many pairs of pictures each person found."<br><br>Now, let's try it in groups. Let's see if the game goes quicker with each other's assistance. Split into pairs and come to an agreement on where each card might be. Can we even come up with a specific strategy?<br><br>How about we play with groups of three now? Will it make a difference? |
| **Description** | Pexeso cards are shuffled and spread out on the table. Children take turns flipping the cards one by one. When a child finds two identical pictures, they can collect the pexeso cards and take another turn because they successfully matched the pair. Pexeso typically consists of 64 cards, and the player with the most pairs at the end wins. Each child takes turns flipping over two cards and attempts to find matching fruit pictures. The objective of the game is to discover as many pairs as possible. This game helps children develop their memory and the ability to recognize and identify different types of fruits from trees and plants.<br><br>To encourage cooperation and communication, we can play pexeso in groups of varying sizes. This provides children with the opportunity to discuss, strategize, assign roles, and problem-solve during the game. |

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| **Feedback and support during the activity** | The teacher encourages the child to take their time and think carefully about where and which picture they saw."<br><br>I noticed you had some difficulty finding a match. What could be done differently next time? Could someone from the group assist you? How will you allocate tasks within the group? Will everyone search for everything, or will someone focus on specific parts of the playing field? I appreciate your input. It's great that everyone has the opportunity to share their thoughts. |
| **Questions for reflection** | What did you like or dislike today? What was your main challenge? What did you find easy and what was difficult for you? Which pictures from the pexeso game do you remember the most? When did you perform at your best? At what group size did you find the game most enjoyable? What was your strongest contribution within the group? How did you handle setbacks or failures? Is there something that could be done differently next time? |
| **Anticipated challenges and suggestions** | "At the outset, it is advisable to play the game with a reduced number of pairs of pexeso cards. This allows children to better remember the pairs, experience success, and remain motivated to continue playing. It is also beneficial to organize the children into smaller groups for the game, as this enhances concentration, ensures that everyone gets their turn, and minimizes waiting times. Furthermore, it is preferable to use only simpler fruits that children are familiar with and can readily name. Prior to the game, we can collectively sort through the pictures we intend to use. |



*Image – Playing a pexe*



*Image – Pexesa*

## 5.2.8 Human body

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|---|---|
| **Author** | **Veronika Fusková** |
| **Title** | **Puzzle "blind"** |
| **Topic** | **Human body** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Identify parts of the body and some organs. Understand basic terms related to health, movement, and sports.<br>■ Prioritize cognitive importance.<br>■ Demonstrate independent effort, concentrating on the activity and seeing it through to completion.<br>■ Recognize the cognitive significance of information.<br>■ Differentiate certain pictorial symbols and comprehend their meaning and function. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | For a child with SVP, we can prepare a smaller set of parts that need to be memorized. |
| **Preparation/materials** | Pictures or photos of human body parts, string, instructional picture of the entire human figure. |
| **Instructions** | Children, your task is to remember the body parts that your selected friends have concealed behind their backs and assemble the human figure puzzle. When I clap, they will reveal the hidden pictures, and you must try to recall which picture belongs to each person. Collaborate as a group, assisting one another and reaching a consensus on the sequence. |
| **Description** | The teacher selects 5 children to display 1 part of a photo/picture of the human body out of 5 (right hand, left hand, body, head, legs) hanging over their necks facing their backs. On a predetermined cue (clapping, a chosen signal, or specific words), she turns her back to the children so that the others can view the photos and pictures for a limited time. Upon the same signal, she turns back around, concealing the photos/pictures from the view of others.<br><br>The children form small groups to identify the parts of the human body according to the provided instructions, which are placed in plain sight. They attempt to accurately assemble the human figure puzzle.To adjust the difficulty level, you can vary the number of photos/pictures of human body parts or mix up the children, making it necessary for others to remember not only the photos/pictures but also who has each photo/picture on their back. |

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| **Feedback and support during the activity** | The teacher serves as the task organizer, providing pre-arranged signals and guiding the activity. At the end, she evaluates and identifies any mistakes.<br>I can see that you have accomplished your task. What strategy did you decide to use?<br>If you encounter difficulties, what alternatives could you consider?<br>What will be your next steps, and what should you prioritize? |
| **Questions for reflection** | How was your collaboration? Were you able to negotiate effectively?<br>What approach did you choose, and what led to success?<br>Did you encounter and resolve any problems? If so, how?<br>In what ways did you provide assistance to each other?<br>What part of the activity did you find most enjoyable?<br>What valuable lessons did you learn today? |
| **Anticipated challenges and suggestions** | Use Velcro to secure the photos/pictures in such a way that children cannot discern the size of the charts (pictures). Some observant children might start identifying body parts based on the chart's size rather than relying on memory. Don't forget to establish the chosen signaling method in advance. |



*Image – Children with photos on their backs 1*



*Image – Children with photos on their backs 2*



*Image – Photographs of a full-figure model*



*Image – Puzzle of the whole figure according to the model*



*Image – Children's work*

## 5.2.9 Plants

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|---|---|
| **Author** | **Vladimíra Andrtová** |
| **Title** | **Planting spring flowers** |
| **Topic** | **Plants** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Recognize and name most of what surrounds us.<br>■ Understand spatial concepts (right, left, top, bottom).<br>■ Deliberately remember and recall. |
| **Age of children** | 4–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Create a table with only four windows, place only one picture, and have the same picture ready on the table to match. |
| **Preparation/materials** | Three to five strips of colored paper, pictures of spring flowers. |
| **Instructions** | The gardener planted flowers in our flower bed, and your task is to inspect the flower bed carefully as a group. Afterward, all of you will go to the table where you've prepared an empty flower bed, and you'll plant the flowers in the same spots you saw a moment ago. Assist each other and collaborate to find solutions. If you're unsure, try to brainstorm and come up with a solution together. |
| **Description** | We discuss spring flowers with the children, showing each other pictures. Initially, the teacher names the flowers, then the teacher says the name of the flower while the child points to it. Finally, the child both points and names the flower.<br><br>On the table, a pattern grid (2×2, 2×3, 3×3) is created using strips of paper, and cards with pictures of spring flowers are placed within it. Identical grids are prepared on side tables, with the same pictures next to them. The children first examine the arrangement of pictures on the model grid, memorize their positions, and then proceed to the other table to replicate the picture placement. We typically use grids with either five or three strips, depending on the children's abilities.<br><br>Children initially engage in the activity within smaller groups or pairs. Subsequently, they can attempt it individually. |
| **Feedback and support during the activity** | How many flowers did you remember at once? Which grid did you find the most challenging (the one with four, six, or nine images)? Feel free to take another look if you'd like. Yes, you have correctly chosen the flower. Were you able to plant it in the correct spot? |
| **Questions for reflection** | What flowers did we plant in the flower beds? What was the easiest and hardest part for you? Did anything bother you during the activity? Who did you work well with? Did anything surprise you? Did you find it better to plant flowers in a larger group, in pairs, or individually? |
| **Anticipated challenges and suggestions** | Next time, I would start this task with only one image and gradually add more. For younger children, it is better to begin with only two pictures. Older children may be able to select from multiple pictures to recreate the sample grid. |



*Image – Easy variant– Grid*

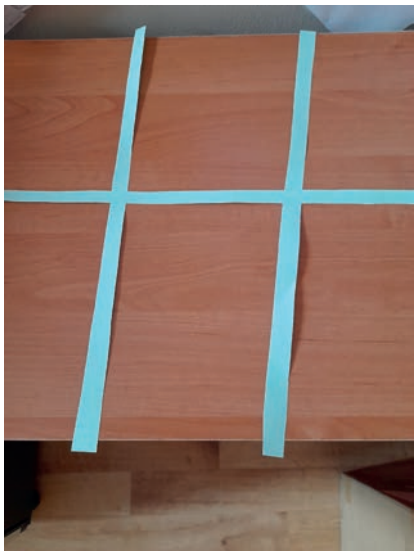

*Image – Moderate variant – Grid*



*Image – Heavy variant – Grid*

## 5.2.10 Life anniversary of a child

| | |
|---|---|
| **Author** | **Petra Staňková** |
| **Title** | **Birthday party** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ To intentionally focus and sustain attention.<br>■ To collaborate effectively with others.<br>■ To establish connections with adults. |
| **Age of children** | 4–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We work individually with each child to reinforce the information, ensuring they have both understood and remembered it. |
| **Preparation/materials** | No materials are required. |
| **Instructions** | Imagine, children, that we are planning a birthday party together, and we will play the game 'We must prepare for a birthday party...' Try to think about what we need for such a birthday party. |
| **Description** | Children sit in a circle while an adult explains the game to them. An adult will start. He or she says the sentence to the children: "For the birthday party, I have to prepare..." and makes sure that all the children understand its content. Then the adult says this sentence and adds the first object. For example: "I have to make a cake for my birthday party." Next, the adult asks the first child to repeat the sentence and add another object to it. For example: "I have to prepare a cake and candles for a birthday party." In this way, the children take turns in a circle and collectively create a list for the birthday party until they are unable to continue the list. Those who get stuck and don't know how to continue, are out of the game. Children play the game in smaller groups. |
| **Feedback and support during the activity** | The teacher assists the children in repeating the words that the children come up with during the game. This provides children with the opportunity to try to remember as many things as possible. |
| **Questions for reflection** | What did you like/dislike today? What was your biggest challenge? What came easily to you, and what was difficult? Who do you think remembered the most words? What did you learn today? Did anything surprise you? |
| **Anticipated challenges and suggestions** | For this activity, it is better to divide the children into smaller groups if there are more of them. This helps children concentrate better, ensures that everyone gets their turn, and reduces waiting times. |



*Image – Board game*



*Image – Game*



*Image – Birthday party game*

## 5.2.11 Communication between us

| | |
|---|---|
| **Authors** | **Zuzana Sádovská, Yuliia Barzhak** |
| **Title** | **We are going to the market** |
| **Topic** | **Communication between us** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Connecting information to be remembered with sensory sensations or concepts.<br>■ Demonstrating how to add and remove 2–3 objects from a group. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Children are encouraged and offered extra time and explanation. |
| **Preparation/materials** | Shopping lists, backpacks, plastic money, red flag. |
| **Instructions** | Come on, kids! Let's go shopping at the market. Each of you take a basket and a recipe, and team up with a friend to help each other remember the items on the recipe. Then, head over to the vendor's stall to gather the items listed on your recipe. Remember to practice polite behavior, including greetings, being respectful, and saying 'please' to the sellers, among other things. Afterward, check together to make sure you've purchased everything you needed, and don't forget to pay. |
| **Description** | Baskets filled with various fruits and vegetables are placed in different areas of the kindergarten premises, such as the classroom and playground. The teacher has prepared 'shopping lists' for the children, which are in a pile.<br><br>The teacher distributes picture shopping lists to the children, and each child must find a partner to work with. The task for each pair is to memorize the shopping list together. The teacher engages the children in a discussion about their experiences shopping with their parents, what items they purchased, and what they must not forget. It's important to emphasize to the children that there will be many strangers at the market, so they should look out for each other and stay together.<br><br>The activity is conducted in pairs. Each pair receives a card with a picture shopping list (see appendix 1) and ten plastic coins. The children's goal is to memorize the shopping list. Upon arriving at the market or store, the children take turns buying items, and each pair pretends to pay for their purchases (if the activity is carried out within the kindergarten premises) or the teacher pays for the children's purchases at the market or store. Once finished, the pairs store the purchased goods in their backpacks.<br><br>Upon returning to the kindergarten, the children review each pair's purchases against the classroom shopping list and count the money remaining from their purchases. |

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| **Feedback and support during the activity** | It's okay if you can't remember; take your time. Was it a fruit or a vegetable?<br>I notice you were able to assist each other.<br>Do both of you recall the entire list? How do you handle it when someone can't remember? |
| **Questions for reflection** | Do you also accompany your parents when they go shopping?<br>Have you purchased everything on your list?<br>Did you stick to buying only the items that were on your list?<br>In your opinion, is it preferable to shop alone or with a partner?<br>What was the most challenging part of the activity?<br>Did everyone have sufficient money?<br>What is something important to remember when going shopping? Did you encounter any issues? Were you able to offer advice to each other? |
| **Anticipated challenges and suggestions** | The activity can also be carried out in the outdoor areas of the kindergarten, where a kindergarten market can be set up.<br>The children don't have lists with them while shopping, but the teacher carries them in case a child needs assistance or asks for advice. |

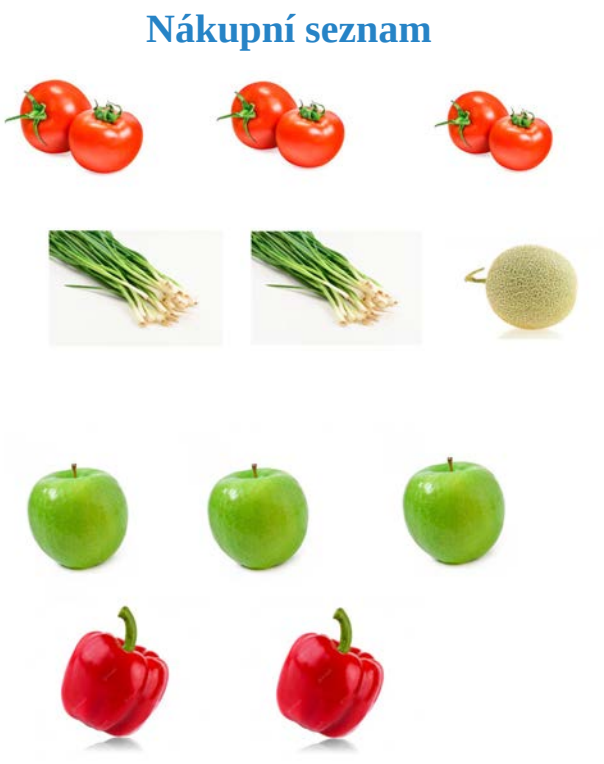


*Image – Shopping list*



*Image – Photos in works*

## 5.2.12 Four Seasons

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|---|---|
| **Authors** | **Zuzana Sádovská, Veronika Ojo** |
| **Title** | **Lost friends** |
| **Topic** | **Four Seasons** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Observing changes in nature and the perception of our surroundings.<br>■ Understanding the characteristics of seasons.<br>■ Developing visual differentiation skills. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We aim to actively engage children, ensuring their comprehension of the task and closely monitoring their progress as they complete the activity. |
| **Preparation/materials** | Four wrapping papers featuring illustrations of seasons, pictures of various objects found on the four seasonal papers, coloring pages, and depictions of objects and phenomena related to the four seasons on A4-sized papers. |
| **Instructions** | Let's exercise our memory. Your objective is to recall as much as you can from the image in front of you. Select the monochrome pictures from the stack that you observed in the larger image and color them using the same colors as in the original picture. Collaborate within your group, and keep track of which pictures belong.<br><br>Arrange the chosen images in a row, forming a 'bridge.' A friend will then help you recall the images. You can metaphorically 'cross the bridge' to the other side at the location of each picture. Make sure everyone takes turns. Each person recalls two images. |
| **Description** | The teacher and the children engage in a discussion about nature and the seasonal changes, focusing on rain, wind, and clouds. Together, they make simple, short-term observations of weather changes. The teacher organizes the children into four groups, ensuring a mix of abilities and ages in each group. This initial grouping is for the first task, and for the subsequent two activities, the children will not be in groups.<br><br>Materials and aids for each activity are prepared in advance in the classroom.<br><br>**Activity 1:** The children have large sheets of paper with images representing individual seasons spread out in the classroom. Their task is to study these pictures for two minutes and try to remember as many objects as possible. The teacher then collects and conceals the papers, making them inaccessible to the children. Now that the children have had a chance to examine the pictures closely, their objective is to select from a pile of papers next to them only those images they saw in the original picture and recall. Once they identify them, they color the chosen pictures with the same colors they were originally. Afterward, the children verify their solutions within their group and make corrections if necessary. |

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| **Description** | **Activity 2:** Next, the children in each group create two parallel columns, forming 'bridges' on the floor using the selected pictures. The children's task is to 'jump over the bridge' at the location corresponding to an object named by one child from the group (e.g., 'Tree covered with snow,' 'swimsuit,' 'rain,' 'sun,' 'winter boots'). The other children in the group take turns jumping over the bridge. After two pictures, the roles of the 'summoners' are switched. |
| **Feedback and support during the activity** | What color was the tractor?<br>Do you recognize the season depicted in your painting? How did you come to that conclusion?<br>I notice you're checking for accuracy; could you explain your process?<br>What are your responsibilities within the group?<br>Can you identify a location where you can 'jump over the bridge'?<br>Are you capable of searching for more detailed images? |
| **Questions for reflection** | What was it like to remember and then jump over the bridge?<br>Would you like to play a game like this again?<br>Was it challenging to recall everything mentioned in the story?<br>Were there too many items depicted in the pictures? How many pictures did you remember? Did you miss one? Were you able to select the correct colors as well?<br>What was the most challenging part?<br>Is there anything you would do differently now?<br>How did you assist each other within the group? |
| **Anticipated challenges and suggestions** | Space the 4 seasons as far apart as possible to prevent the children from swapping them in groups.<br><br>The images on the A4 papers are identical to the images.<br><br>For the bridge activity, it's important to laminate the papers. Additionally, it's advisable to have the children jump with bare feet to prevent slipping on the slippery surface of the laminated paper, rather than wearing socks or flip-flops. |



*Image – Bridge game pattern*

## 5.2.13 Sport

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|---|---|
| **Author** | **Veronika Ojo** |
| **Title** | **Sharp-sighted** |
| **Topic** | **Sport** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Spatial orientation.<br>■ Memory and attention.<br>■ Communication in pairs. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Ensure that children are given enough time to memorize the pictures during the activity. Alternatively, at times during the activity, we can display all the pictures that are still in play to help refresh their memory. |
| **Preparation/materials** | Pexeso pictures of sports, ball, jump rope, and flying saucer. |
| **Instructions** | Let's play a game of Pexeso. Try to remember as many pictures as possible that your friends show you, and then you will search for a matching pair among them. Draw one picture from the shared pile and discuss with a friend which child might have its matching pair. Then call a friend, and they will show you if you have found the correct match. |
| **Description** | **Pexeso Activity**<br>Children hold various sports pictures (winter and summer) above their heads, ensuring that everyone can see them. A pair of children standing across from them examines the pictures and tries to memorize them. After 1 minute, the children turn the pictures in the opposite direction to prevent the children across from them from seeing the pictures. Then, the pair selects one picture from the pile beside them (the pile contains pairs of pictures that the children have previously viewed) and decides which friend might have the matching pair. Once they agree, they call out their friend's name and the sport. The children take turns for each round, and the other children will briefly display the pictures to the new pair. |
| **Feedback and support during the activity** | Have you memorized all the pictures?<br>Can we shuffle the images?<br>What sports can you identify in the pictures? Take a close look at all of your friends' pictures. |
| **Questions for reflection** | Which part of the game did you enjoy the most? Why?<br>What was the most challenging part for you?<br>Is there anything you would do differently next time?<br>What aspects were easy for you, and what proved to be difficult?<br>Were you able to collaborate effectively as a pair?<br>Can you recall the names of the sports you had trouble remembering?<br>Did you encounter any sports that you were unfamiliar with? |
| **Anticipated challenges and suggestions** | Prepare images that are large enough to be easily visible. |



*Image – Repeating parrot*



*Image – Pexesa*

## 5.2.14 Animals

| | |
|---|---|
| **Author** | **Veronika Ojo** |
| **Title** | **"Mommy, Daddy, let's play."** |
| **Topic** | **Animals** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Decides whether a given object has/doesn't have a specific characteristic.<br>■ Determines the truth (yes/no, applies/doesn't apply).<br>■ Selects all objects from a group with a particular characteristic – sorts objects within the group based on the specified characteristic. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | It is recommended to continually verify that the child understands the instructions while completing the tasks.<br>Pair work is also a possible alternative. |
| **Preparation/materials** | Memory game with animal theme in odd numbers, pictures of various environments, pictures of animals living in different environments, bingo card, bingo animal list, plastic box, colored water in black color, plastic cup, A4 paper with 7 black and white animals and 1 colored animal, water mixed with soil, pinch, brush, comb, cup, spoon, LEGO figurine, 5 animal figurines. |
| **Instructions** | **1.Activity – Animal Memory:** Let's play memory. Your task is to find all the pairs of animals. In the end, you will have one animal picture left without a match. Remember this animal. You will need it at the end of the game.<br>**2.Activity – Where Do They Belong?:** Your task is to sort the animals so that they are all placed where they live (water, land, air). When you have sorted all the animals, you will have one animal left that couldn't find its home. Remember this animal again.<br>**3.Activity – Bingo!:** An assistant will read various animals to you (green lion, orange dog, red mouse, blue giraffe, white bear, ...), and your task is to mark on the cards only the animals that were read to you. You must be very careful, listen attentively, and help each other check. The animal you need to remember is the one you didn't mark on your card.<br>**4.Activity – Detective:** On the table, there are plastic containers filled with ordinary water colored with food coloring (black). Underneath these containers, there are hidden pictures of animals. Seven black and white and one colored. Your task is to find the colored animal and remember what it was. You will find this colored animal by placing a plastic cup on the bottom of the water box. The cup will reveal the shape of the animal.<br>**5.Activity – Archaeologist:** In a smaller pool or a larger plastic box, there are many objects hidden, but only 5 animal figurines. You will have to dig out at least one animal from the swamp and remember which one it was. Then you will return it so that your friend can find it. What will make it challenging to search is that the water is mixed with soil, so it's like a real swamp, and you can hardly see the objects with your eyes. You have to find them by touch. |

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| **Instructions** | After completing all the tasks, at the final station, you will select from many animal pictures exactly those that were left to you in the tasks, and you should have remembered them correctly. This way, we will verify that you have mastered the tasks and remembered the right animals. |
| **Description** | The teacher will create 5 different activities in the space (playground, classroom). The children's task will be to complete all the tasks and, after completing them, select animal pictures on the final board that were used in the activities. The children will be encouraged to choose the answers on the final board for the previous activities. The activities are always carried out in pairs, either with a parent or another child from the class. The teacher will explain the rules of each game to all children/parents before the competition starts. After completing the activity, the items must be returned to their original state so that other pairs cannot guess the answer. Children complete the activities in a different order, and every time they complete an activity, they receive a colored stamp, with the color of the stamp corresponding to the individual stations (the stamp colors depend on what is available at the station). The teacher will remind the children in advance not to consume the water used in the activities and will also emphasize fair play.<br><br>As a reward for completing the activities, the children will receive juice or an apple (the specific reward will depend on the rules of the individual organizers and what is appropriate and suitable for the children in their kindergarten). |
| **Feedback and support during the activity** | Where does the eagle live? Are you sure it's on the ground? Did you collect one animal in the memory game? Is the animal you checked in bingo definitely in the corner and green? Are you sure the lion under the lid is colorful? What other objects were in the swamp? Yes, you've chosen exactly the right 5 animal pictures from the games. I can see that you're helping each other and communicating. How did you come up with this solution? |
| **Questions for reflection** | Which game was the most challenging? Which game would you like to play again? Was it easy for you to find pairs in the memory game? What was it like to categorize animals based on where they live? Have you ever played bingo before? Did you enjoy our animal bingo? Why? Why did you like the archaeology game in the swamp? How was your cooperation? Were you able to communicate well to complete the tasks? When did you have to help each other the most? |
| **Anticipated challenges and suggestions** | At each station, activities are prepared at least 3 times so that multiple pairs can compete simultaneously. The teacher regularly checks if the activities are restored to their original state. |



*Image – Animals*



*Image – Black and white and colored animals*



*Image – Bingo!*

## 5.2.15 Child's life events

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|---|---|
| **Author** | **Veronika Ojo** |
| **Title** | **My first pet** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Communicate using complete sentences.<br>■ Think and behave empathetically towards others.<br>■ Respect the rules of the game. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The teacher selects an animal for a child with SEN (special educational needs) that will not demotivate them or overwhelm their perception with its demanding care. We recommend choosing an animal for the child that is just challenging enough in difficulty to expand their knowledge and skills. |
| **Preparation/materials** | A4 papers with instructions on how to take care of a pet, animal figurines, plastic sticks (30 pieces), plastic cups (50 pieces), green, yellow, red, and blue pebbles/balls, pictures of toys/items for animals (comb for grooming a horse, ball for a dog, hamster wheel, beads for fish, ...), bags/baskets. |
| **Instructions** | Today, through a game, you will try if you can take care of your pet. We will divide into groups and set out on our journey. Choose one of the offered animals that you would like to take care of and give it a name. Now, children, sit down and carefully examine the illustrated instructions that I have given you. Find out how much and what kind of food your pet needs, what tools you need to provide, and other things mentioned in the instructions. Once you have memorized all of this, bring me your paper and keep your pet with you. I will assign a name to your pet based on the instructions. Now, take one basket/bag per group and you can go collect all the things your pet needs to be healthy and happy. Don't forget to take your pets for a walk as long as your pets can handle. All pet caregivers collaborate and coordinate their tasks. |
| **Description** | The teacher allows the children to choose their own animal (animal figurines). Based on their choice, she provides them with an illustrated guide on how to take care of their animal. The task for the children is to memorize how many pellets their animal needs, how much water, what and how many toys, and how long a walk their animal must take. In the kindergarten area (in the yard, in the classroom), there are 4 stations. At one of them, there are 4 bowls with pebbles of 4 colors. At the second station, there are either pictures or actual objects that serve as toys or objects for the animals. At the third station, there are cups of various colors. At the fourth station, 3 rows of plastic sticks are placed next to each other – each row has 10 sticks. The rows are at least 30 cm apart. The children are warned in advance that they must be careful not to bump into another friend, as they could injure both themselves and their animals. The teacher observes the children during the activities. After completing all the activities, the children return to the station where they picked up their pets and baskets. The teacher, upon the children's arrival, checks whether they have the correct number of items, food, and drinks according to the papers that the children labeled with their names. After a joint check of the contents of all the baskets, the teacher, along with all the children, moves to the station where the children were supposed to walk with their animals. |

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| **Description** | There, together with the children, she checks whether they have taken the correct number of steps (the child goes through the track again and counts the number of steps out loud). If a child stops at their animal, they have completed the task correctly. The teacher encourages cooperation among the children during the activity. She encourages communication and collaboration during the task-solving process. |
| **Feedback and support during the activity** | Did you forget anything you need to know about taking care of your pet? Did you discuss it in your group? I can see that all of you are actively participating in the tasks. If you need help, try asking another group how they managed the task.<br><br>Do you like the animal you chose? What name did you give to your pet? You did a great job remembering what your pet needs! Congratulations! |
| **Questions for reflection** | What other animal would you choose if you could? Was it difficult to remember what your pet needs? Why? What else could you give your pet as a toy? Would you like to take care of your pet at home? Why? How did your cooperation go? Was it difficult to communicate and agree? Did you check each other's task solutions? |
| **Anticipated challenges and suggestions** | Set up the stations at a considerable distance from each other to avoid crowding of children at the stations. At the stations with toys, it is recommended to use as many real objects as possible and as few pictures as possible. Of course, this depends on what items the kindergarten has available. We aim to emotionally motivate children to understand the importance of taking care of their pets, providing them with the right amount of food and water, and objects to avoid any harm. Write the names of their pets on paper for the children. To vary the last station, after checking the placement of domestic animals, we can compare which animals need the same walks and which need significantly different distances for a walk... |



*Image – Milka takes care of the cat*



*Image – A cat*



*Image – A dog*

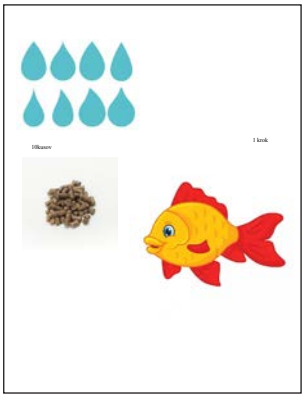

*Image – A fish*



*Image – A hamster*

## 5.2.16 Safety in road traffic

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|---|---|
| **Author** | **Julijana Kološa** |
| **Title** | **What does this traffic sign mean?** |
| **Topic** | **Safety in road traffic** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Training visual working memory through play.<br>■ Training procedural memory (when engaging in traffic).<br>■ Training semantic memory (understanding the meaning of traffic signs). |
| **Age of children** | 4–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We ensure that children have enough opportunities for active learning. We ask them a variety of questions tailored to their backgrounds to get them thinking. |
| **Preparation/materials** | Duplicated traffic sign cards, reflectors, traffic surface (e.g. play mat on the topic of traffic). |
| **Instructions** | On an active walk we observe the surroundings, look for road signs and discuss them. In the playroom we continue the conversation about road safety. What does road safety mean to you? Do you know any other kind of traffic?<br><br>Show the traffic sign cards and talk about what they mean. Explain the meaning of the signs to those who do not remember or know them.<br><br>Divide the children into pairs to play a memory game. They turn over the cards with the road signs and take turns looking for pairs. When a child finds two cards with the same sign, they try to name them and explain the meaning of the road sign. The meaning can also be shown in pantomime.<br><br>The children continue the game in pairs on a traffic area (a play mat with roads drawn on it) where they act out traffic with toys. They use small figures of traffic signs and means of transport (e.g. toy cars).<br><br>During the game, encourage the children to talk, negotiate and explain to each other what decisions they have made in choosing a traffic sign and what its meaning is. |
| **Description** | The children discover cards and look for pairs of traffic signs while developing their language and thinking and reinforcing traffic concepts through conversation.During the activity, the children work together, talk, listen to each other and help each other explain. |
| **Feedback and support during the activity** | I can see that you are observing well and talking to each other. We encourage children to talk and give them individual support if they need it. If children do not understand the instructions, we encourage them to participate and explain the meaning of the traffic signs to their peers. |
| **Questions for reflection** | How did they agree on who should start?<br>Have you ever seen this street sign before? And where?<br>What should we do when we see this road sign on the street? And why?<br>What colour is it? What shape does it have?<br>Why do you think the signs have different shapes? |

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| **Anticipated challenges and suggestions** | When actively walking on the side of the road, be aware of the safety of others (holding hands, reflectors, walking on the inside of the road). Stop safely during the observation so that the children can talk in pairs about the road sign, its features and its meaning. |
| **Appendix** | Retreived 29. 3. 2023 from: https://i.pinimg.com/564x/ca/f9/12/caf912b42b31fcf6c74475a3d8692f36.jpg |



*Appendix 1 – Active observation walk*



*Appendix 2 – Learning the meaning of road signs*



*Appendix 3 – Reinforcing the meaning of road signs*



*Appendix 4 – Memory game*



*Appendix 5 – Playing the game on the TRAFFIC board*



*Appendix 6 – Traffic signs*

## 5.2.17 Materials and their properties

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|---|---|
| **Authors** | **Sumedija Agić, Špela Dovjak** |
| **Title** | **Sensory path** |
| **Topic** | **Materials and their properties** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Sensing and discerning with the senses (tactile perception).<br>■ Developing trust and skills for working with others as well as communicative skills.<br>■ Building memory and focus as well as developing attention and constructing a sensory path from memory. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We form groups with 4 or 6 children in each group, as they will work in pairs within their groups. The groups should be smaller so that the children have the opportunity to switch roles during the activity. We encourage cooperation, agreement, and mutual trust among the children. If a child feels uncomfortable with having their eyes covered, we adjust the activity by excluding the blindfold. A friend accompanies a peer's walk on the sensory path by holding their hand, guiding them, and providing encouragement. |
| **Preparation/materials** | Materials found at home or in the playroom. We can use wool, walnuts, chestnuts, corn, rice, Lego blocks, felt, Styrofoam, cotton, fabric, and more. |
| **Instructions** | Our topic is materials and their properties. Do you remember which materials we have learned about so far? Can you list them? Which of these materials do you also see in the playroom? Which materials are natural? Do you recognize the materials we have prepared for you today? How would you describe these materials? How can we sort them according to shape, color, texture, size, and other characteristics? Do you think you could recognize the materials blindfolded?<br><br>We have prepared various materials and cardboard boxes for you. Your task is to make a sensory path using these materials. With the help of a friend who will serve as a guide, you will walk the path barefoot and blindfolded. After walking the path, your friend will rearrange the sequence of materials on the sensory path. Your task is to remember the path you walked and then restore the materials to the original sequence. Your friends will help you if needed. Did you understand your task? Can you repeat the instructions? Do you need further clarification? Is anyone uncomfortable wearing a blindfold? |
| **Description** | The teachers prepare all the necessary materials for the activity, including boxes and various sensory materials. The children start by filling the boxes with different materials. They feel and smell the materials, and compare them based on their color and shape. Next, they create a sensory path using the materials and divide into pairs. In each pair, they decide who will walk the sensory path blindfolded first and who will guide them. The guiding partner then changes the sequence of the sensory path while the blindfolded partner waits. Next, they take their blindfolded friend by the hand, direct them while walking, and talk to them. After completing the path, the child with the blindfold waits for his friend to change the order of the materials again. Once the path is rearranged, the blindfold partner removes the blindfold and tries to recreate the correct sequence of the sensory path they just walked. The pairs then switch roles to give each partner a chance to experience the sensory path. |

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| **Description** | This activity promotes cooperation, communication, trust, and encouragement among the children. It is important for them to work together, independently prepare, plan and execute the activity. |
| **Feedback and support during the activity** | I see that you followed the instructions. Did you trust the friend who guided you? Did you recognize all the materials?<br><br>It may happen that children will not recognize all the materials just by walking. In this case, we recommend that they choose materials that differ as much as possible in shape and texture. During the activity, children are encouraged to talk, ask questions, describe the sensations evoked by each material and try to remember the sequence of materials. To enhance the sense of security and foster trust, children hold hands while walking along the sensory path. |
| **Questions for reflection** | Did you enjoy the assignment? Was it too challenging? How did you collaborate? How did you choose you pairs? How did you feel wearing the blindfold? What was the most challenging part? How many materials did you remember? Which material was the easiest to recognize and why? Were all the materials pleasant to the touch? Which one did you recognize immediately? Do you think you completed the task successfully? Would you make any changes? Why? What other materials in the playroom could be used to create a sensory path? |
| **Anticipated challenges and suggestions** | We recommend encouraging the children to name the material they are treading on during the activity and to describe the sensations tactile experiences they encounter. We advise them to tread slowly and with both feet into each box to prolong the sensation and enhance their memory. Initially, it may be helpful to offer fewer materials, but if the children are successful, additional materials can be introduced or duplicated. We should praise the children multiple times throughout the activity. |



*Appendix 1 – Preparing materials*



*Appendix 2 – Giving instructions*



*Appendix 3 – Walking the sensory path 1*



*Appendix 4 – Walking the sensory path 2*



*Appendix 5 – Rearranging the sensory path*



*Appendix 6 – Successfully completed task*

## 5.2.18 Healthy diet

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|---|---|
| **Author** | **Maja Geršak Banović** |
| **Title** | **Sequencing** |
| **Topic** | **Healthy diet** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Reinforcing visual memory.<br>■ Developing focus.<br>■ Developing attention to visuals.<br>■ Developing visual associations. |
| **Age of children** | 3-5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We should adjust the game based on the child's age by selecting an appropriate number of food images for sequencing. For children who do not understand the language, we can visually show and repeatedly name the food items to aid vocabulary acquisition. We can also use a multilingual dictionary and name food items in various languages. The game is primarily visual, so it does not require linguistic understanding. |
| **Preparation/materials** | Prepared cards with food sequences, cards with different food types, a chair, and a table. |
| **Instructions** | As part of the topic *Healthy food,* we will play the memory game. Together, we will first look at the types of food displayed in the sequence. Do you recognize the food items? Is the number of food items the same in all sequences? Does any food item repeat in the sequences? Is all the food in its basic form, or are there any prepared meals depicted?<br><br>At the beginning, you will choose a shorter sequence and place cards with individual foods in the same sequence. You will be able to view the sequence throughout the game.<br><br>Once you become familiar with the game, you will first look at the sequence, then flip it over and attempt to recreate the same sequence from memory.<br><br>The game will become more challenging as you select longer sequences. |
| **Description** | We begin by review the sequences with the children and checking if they recognize the food and can follow the instructions. Then, the children are divided into groups by drawing lots or using a counting-out rhyme, and the rules of the game are explained to them. Initially, shorter sequences are offered to them, and once they have mastered the game, they can choose longer sequences.<br><br>The game can also be adapted to auditory memory, where one child in the pair "reads" (i.e., names) the food items in the sequence, and the other child has to stack the cards in the same order. |
| **Feedback and support during the activity** | Did you understand the instructions? Do you know what your task is? Do you find the game challenging? How did you sequence the food items from memory? How long was your longest correctly placed sequence? |

| | |
|---|---|
| **Questions for reflection** | Can we help ourselves by describing the food, such as its color? Would it be easier if a friend helped you? How did you remember the sequence? How did you help yourself? |
| **Anticipated challenges and suggestions** | The activity can also be carried out outdoors, such as on the playground, or in the gym. |



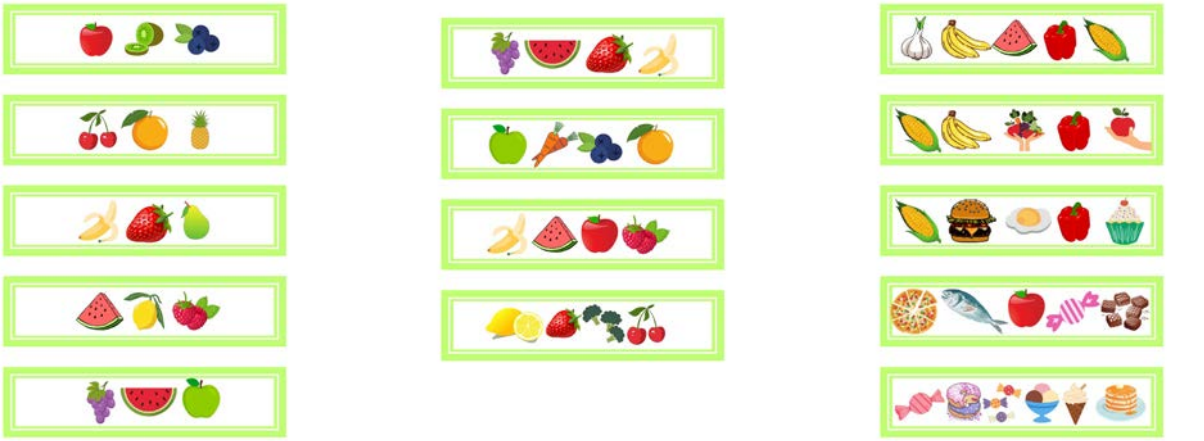
*Appendix 1 – Sequences and cards*



*Appendix 2 – Demonstration*



*Appendix 3 – Children at play*



*Appendix 4 – Sequences and cards no. 1, no. 2, no. 3*

## 5.2.19 Traditions and folk tales

| | |
|---|---|
| **Authors** | **Špela Petrovič Štempihar, Alekseja Glinšek** |
| **Title** | **How does the story go?** |
| **Topic** | **Traditions and folk tales** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Developing visual memory.<br>■ Developing episodic memory (sorting pictures into a story sequence).<br>■ Developing semantic memory (seeking words and their meaning). |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children should divide the tasks among themselves and reach an agreement on who will lead the activity, who will prepare the materials, and who will arrange the pictures on the table. |
| **Preparation/materials** | We prepare cards with pictures of animals, people, and objects from the fairy tale: bears, a girl, chairs, tables, beds, spoons, bowls, a house, a forest, a path, and trees. It is recommended to divide the children into pairs and to conduct the activity in a quiet space. |
| **Instructions** | Our topic is *folk tales.* Do you still remember what a fairy tale is? Do you recall the meaning of the term "folk"? We prepare two identical sets of visual materials based on the folk tale *The Three Bears.* We explain that today we will be training our memory. But what is memory anyway? Is it something we can touch, see, hear, or imagine? How would you explain to your friend what memory is? What do you remember? For example, what did you do yesterday? What is your fondest memory? And the saddest? Do animals have memories, too? Why do you think so? Do you recall anything from when you were a baby? Can we store or record our memories somewhere? Close your eyes, think, and try to remember your earliest memory. What is the first thing that comes to mind?<br><br>The children are divided into pairs or small groups. Each pair or group is given cards with pictures of animals, people and objects that appear in the fairy tale. The children's task is to arrange the cards in the order they appeared in the story. |
| **Description** | The teacher introduces to the children today's topic, i.e., developing and building memory. The teacher provides clear instructions for carrying out the activity.<br><br>The children engage in group discussions about the activity. They share their thoughts, opinions, suggestions, and past experiences. |
| **Feedback and support during the activity** | What happened first? What happened next?<br>What do you remember? |
| **Questions for reflection** | How did you approach this task?<br>Did you find anything particularly difficult about this game?<br>What did you do as a group/pair if you disagreed? |
| **Anticipated challenges and suggestions** | We recommend providing a calm environment that allows children to focus on the task. |

| Appendix | https://en.wikisource.org/wiki/Trije_Medvedi<br><br>Three Bears Clipart:<br>Download Free High-Quality Three Bears Clipart (clipart-library.com)<br>Goldilocks and the Three Bears Small World Characters (twinkl.si) |
|---|---|



*Appendix 1: Prepping and viewing pictures*



*Appendix 2: Giving instructions*



*Appendix 3: Laying out selected pictures*



*Appendix 4: Doing the activity 1*



*Appendix 5: Doing the activity 2*

## 5.2.20 Child's life events

| | |
|---|---|
| **Author** | **Karmen Meško** |
| **Title** | **What do we need in summer and why?** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Memory** |
| **Objectives** | ■ Developing visual memory.<br>■ Developing semantic memory (linking words and concepts).<br>■ Developing episodic memory (associating objects with events). |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children are divided into small groups, and they are provided with materials to learn about objects that are typical of summer. The children are encouraged to observe the materials and try to remember the objects displayed. The teacher initiates a discussion by asking questions such as:<br>1. "What do you see?"<br>2. "Have you ever held this item in your hands?"<br>3. "What is this item used for?"<br>4. "In which season can we use it?"<br>5. "What do these objects have in common?" |
| **Preparation/materials** | Children's bathing suit, flipflops, sand, shovel and watering can, sunglasses, swimming goggles, hat, sunscreen, hourglass, towel. |
| **Instructions** | Our topic is *Children's life events*. Take a careful look at the objects and try to remember them. We will discover when we use these items and what events they remind you of?<br>Have you ever worn any of these items? Have you ever played with any of them? Why do we wear sunglasses? What is the difference between sunglasses and swimming goggles? When should we apply sunscreen? What items do we have in the kindergarten? What can we do with a shovel? Are flipflops suitable for kindergarten? Why do you think so? |
| **Description** | The teacher and the children gather in a circle or at a table to examine the different objects together. Various questions are to stimulate the children's thinking and to make connections between the objects. Two volunteers are chosen to stand slightly away from the group, while the remaining children remove two objects from the table. The volunteers are called back, and then they guess which two objects are missing. Once they make their guess, the game continues with another pair of children taking turns to step away from the group. The game continues as long as the children find the game enjoyable.<br>The game can be played in small groups or even individually (independently).<br>During the activity, children engage in discussions, critical thinking, observation, and debate. |

| | |
|---|---|
| **Feedback and support during the activity** | Children are encourage to carefully observe the objects and try to remember them. The educator suggests that they also engage in group discussions, where they can name the objects and explore their uses in kindergarten, etc.<br>If the children are unable to recall all the objects, we provide them hints such as mentioning the number of objects or describing their colors. |
| **Questions for reflection** | What other items do we typically need in summer? What is planted on the playground so that we are not too hot during summer? If we didn't have trees on the playground, how else could we create shade? What was the most challenging part of this assignment? |
| **Anticipated challenges and suggestions** | When trying to recall and name objects from memory, the teacher provides hints to the children (e.g., the teacher mentions that we use this object while swimming in the sea or pool, or that we use that object when playing in a sandbox, or that we need another object in the summer to protect our eyes, etc.). If a child is still unable to identify an object, we offer it to them to feel and touch, while covering their eyes. |



*Appendix 1 – Active object observation*



*Appendix 2 – Finding hidden objects 1*



*Appendix 3 – Finding hidden objects 2*



*Appendix 4 – Discussion on the common characteristics of objects*



*Appendix 5 – Counting objects*

# 5.3 Attention

## 5.3.1 Everybody is different

| | |
|---|---|
| **Authors** | **Věra Isáková, Naděžda Husová** |
| **Title** | **Uniqueness in imprint** |
| **Topic** | **Everybody is different** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ To perceive and differentiate using all the senses – to consciously observe, to make thoughtful observations.<br>■ To engage in conversations.<br>■ To narrate a situation.<br>■ To collaborate with others; to recognize that everyone contributes a role within a group.<br>■ To possess an awareness of the broader social, material, natural, cultural, and technological environment, along with its occurrences within the scope of practical experiences and tangible examples present in the child's surroundings. |
| **Age of children** | 4–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | On the first day, we divide the children into groups. We will categorize them based on their hypothesis regarding whether each person has the same fingerprint (please refer to the activity description) or not.<br>On the second day, we divide the children based on the color of the balls they draw. These colored balls will be used to sort them into groups. |
| **Preparation/materials** | Magnifiers, microscopes, magnifying slides, ink, stamp pads, paper, pencils, photocopier, scissors, scorecard. |
| **Instructions** | **Day 1:** We discuss the uniqueness of individuals, of humans. You are probably aware that each person is distinct. What does it mean for someone to be unique in some way? What sets you apart? What are you skilled at? What can you do that no one else can? Take a look at your hands—what makes them special? Observe the lines on your hands and fingers; these are known as papillary lines. Do you believe we all have identical fingerprints? How would we determine if we have different fingerprints or not? Who believes we have identical fingerprints? Who believes they are different?<br>Your task today is to confirm or refute your hypothesis regarding whether we all have identical fingerprints. You will work in research teams based on your hypotheses. On your workbench, you will find all the necessary tools to take a thumbprint and analyze it. Each team will receive a toolkit. You can seek help or advice from a friend in another team. If no one else can assist you, you will find a tablet with video instructions on the last table. It's crucial to establish roles and procedures within the group. Do you know how to proceed? You have a card in front of you. Where should you record your assumption, and where should you document the results? How will you determine if the prints are the same or different? What resources can you utilize? Who can recap today's task? |

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| **Instructions** | **Day 2:** You discovered that each of us has a unique fingerprint. I have provided an enlarged image of your thumbprint for each member of your team. Each of you has signed and photographed your thumbprint. There is one additional mysterious print. It is neither signed nor photographed, but it belongs to one of you. Your task is to identify the thumbprint that matches the unsigned one. As a team, decide who will inspect, gather supplies, assess, and work together. What tools will you require? Who can reiterate the assignment for today? If you are unsure about what to do, who can you turn to for assistance? |
| **Description** | **Day 1:** The children gather in a circle, and the teacher employs open-ended questions to gradually engage the children in a discussion about uniqueness and to uncover what distinguishes individuals as special. The children explore and discover what makes each of them unique. The teacher prompts them to consider whether we all possess the same hands, fingers, and palms, as well as how we use these body parts. She encourages the children to examine their fingers and palms more closely and questions whether we all share identical fingerprints. The teacher then appoints team captains and divides the children into groups based on their guesses. Each team selects the provided tools, agrees on roles, and divides responsibilities. A scorecard is placed on each table for the teams to document their assumptions and results.<br><br>Following the activity, the teacher enlarges the cards featuring the children's fingerprints on the copier to 200% and prints them, including the child's name and photo on each card. An additional card is printed without a signature and photo. This card is duplicated as many times as there are research teams, in preparation for the following day.<br><br>**Day 2:** The teacher distributes the enlarged print cards to the children and forms groups using colored balls. In each research team, she places one print without a name or photo. The children collaborate within their respective groups, reaching a consensus and investigating whether the mystery print belongs to their group or another group. |
| **Feedback and support during the activity** | I see that you've assigned roles within the team. Who will be responsible for handling the fingerprints? Did you obtain an accurate fingerprint? What steps could you take to enhance the clarity of the print? How should you properly set up the microscope? Is there anyone who can assist you with this? In what ways can a magnifying glass be of help? When it comes to examination, which tool is more suitable: a magnifying glass or a microscope? Have you examined all of the thumbprints? What conclusions did you arrive at? Did anyone in your group have their initial assumption confirmed? If so, what was it? Did anyone discover a matching fingerprint among their group members? |

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| **Questions for reflection** | Did you have good teamwork within the group? How did you obtain the thumbprint using the ink? What changes or improvements would you consider for next time? What was your initial assumption, and what conclusion did you reach? Were there any moments when you were unsure about what to do? Do you believe that even identical (i.e., same) twins possess different fingerprints? What is the specific field that deals with fingerprints called? What alternative techniques can be employed for fingerprint collection? Whose fingerprint posed the mystery, and how was it resolved? How did your group collaborate? What were your findings? Describe the process you used to compare the prints and the tools you employed. Is it true that we all share the same thumbprint? Lastly, what aspect of this activity did you find most intriguing? |
| **Anticipated challenges and suggestions** | Remind the children that each member of the team has a role to fulfill. Foster a spirit of cooperation among them. Reinforce the importance of adhering to proper procedures and maintaining cleanliness when handling ink. Double-check that the correct procedure is being followed. Keep a close eye on children facing difficulties and ensure their active participation within the team.<br><br>Multiple versions of the report card are attached, as decided by the teacher. |



*Image – Circle, examination of papillary lines*



*Image – Assumption notation*



*Image – Examination of the actual impressions under the microscope*



*Image – Making a thumbprint*



*Image – Thumbprint comparison*



*Image – Thumbprint comparison*



*Image – Examining a thumbprint under a magnifying glass*



*Image – Examining the thumbprint with a magnifying glass*



*Image – Comparison of thumbprint with microscope*



*Image – Record of the result*




*Image – Magnified thumbprints 1*




*Image – Magnified thumbprints 2*



*Image – Finding the thumbprint in a group 1*



*Image – Searching for a thumbprint in a group*



*Image – Searching for a print in another group*



*Image – Finding a fingerprint 1*



*Image – Finding a fingerprint 2*

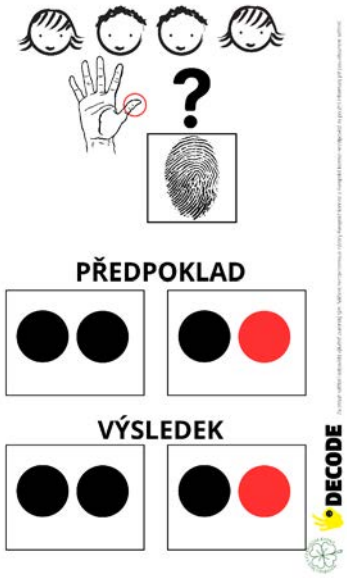


*Image – Evaluation card (several variants)*

## 5.3.2 What I like to play with

| | |
|---|---|
| **Authors** | **Vlasta Maxová, Naděžda Husová** |
| **Title** | **The way out of the labyrinth** |
| **Topic** | **What I like to play with** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Engage in conversations, actively listening to others, waiting for them to finish speaking, and following the speaker's content while asking questions for clarification.<br>■ Convey thoughts and arguments effectively through both words and gestures, demonstrating improvisational skills.<br>■ Formulate inquiries, provide responses, evaluate verbal performances, and engage in verbal interactions.<br>■ Intentionally observe surroundings, making detailed observations, noting anything new, changed, or missing.<br>■ Deliberately focus on an activity, sustaining attention and engaging in reflective thinking.<br>■ Lead simple reflections and articulate thoughts and reflections clearly.<br>■ Concentrate on cognitive aspects of tasks and prioritize cognitive importance.<br>■ Follow directions and instructions effectively.<br>■ Comprehend basic numerical and mathematical concepts, as well as elementary mathematical relationships, and apply them practically as needed. This includes comparing, organizing, and sorting sets of objects based on specific rules.<br>■ Show empathy and sensitivity towards the wants and needs of other children, especially those who may be weaker or have disabilities.<br>■ Demonstrate consideration and sympathy, offering assistance when required. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We divide the children into teams. The maximum number of children in a team should not exceed four. The teacher will prepare colored sticks for sorting, consisting of one stick of each color and three sticks that are half-colored. Each child takes one of the half-colored sticks from the teacher's hand, making sure that the colored ends are not visible. The children are then organized into teams based on matching stick colors. |
| **Preparation/materials** | 40 pieces of cardboard strips of equal size (approximately 11 × 25 cm), paint, paper, crayons, colored wooden sticks for grouping (solid color and half-colored), wooden sticks for the activity. |
| **Instructions** | Our topic is games. What games are you familiar with? Which ones are made at home or in the nursery? How can you create a game yourself? How do you come up with rules for such a game? When you create a game yourself, what materials do you need? |

| | |
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| **Instructions** | What should you consider before you start making it? Can anyone share if they've ever made a game or toy at home and how they went about it?<br><br>We also talked about mazes. What are mazes? What types do you remember? How can you design a maze to turn it into a game? You have cardboard strips in front of you. Your task is to paint them so that each color is repeated on at least three pieces of cardboard. Work in groups. Collaborate and agree on the steps to follow.<br><br>I see that you have your tools ready and painted. Is each color really repeated at least three times? Who will double-check and count? Is there anything you can do to assist your friend? Is one color missing? How will you fix it?<br><br>Imagine that the colored cards represent paths in a maze, and now you need to construct the maze. Who would like to help me build it?<br><br>For the group constructing the paths: I will demonstrate the process of building paths in the maze, and you'll try to replicate it. Your task is to create paths within square grids. The colors of the paths (cardboard strips) must alternate so that the same color is not adjacent to each other. Can you attempt to construct the maze yourselves now? What is your task? Who will repeat the instructions and the condition for constructing the paths in the labyrinth? Are the colored paths laid out so that the colors alternate? Where are two of the same colors placed next to each other? How will you address this?<br><br>The maze has been built. All groups have the same task: they need to navigate from the house to the tree. Use crayons to represent one short path and one long path. One path (colored stripe) will correspond to the same colored dot on the paper. The dots (paths) will be arranged in a row from left to right. Take turns within your teams and divide the roles of who will call out the colors, who will walk, and who will record. The path (colored strip of cardboard) must remain in the same place at all times. If you walk along it, step beside the stripes. Who can recap how to record the paths in the maze? You can also ask a friend who is more experienced with mazes for assistance.<br><br>Once all the teams have taken their turns, come together in a circle to compare and verify the paths.<br><br>The team that has successfully completed the activity in the open space can move to the table and try a scaled-down version. The recording principle remains the same. Work in the same groups. |
| **Description** | The children are seated in a circle, and the teacher introduces the topic, engaging the children in a discussion about a game they can create themselves using open-ended questions. The teacher also brings up and revisits the topic of labyrinths that they have previously discussed. Cut cardboard strips are placed in front of the children to be painted with colorful paint. The children form teams and follow painting instructions. They collaborate not only within their own teams but also with others.<br><br>To construct a labyrinth, the teacher asks for volunteers to assist. She selects a group of five children and explains the labyrinth's path system. The paths (cardboard strips) must be arranged on the ground in square patterns so that the colors of the paths alternate and are not adjacent to each other. Initially, the teacher guides the group in building the labyrinth, and then they work independently to reconstruct it. |

| | |
|---|---|
| **Description** | The teacher assigns the task. The children record the paths (colored stripes) on paper using crayons that match the colors of the paths. Each path (colored strip of cardboard) corresponds to an identically colored dot in the record. The children collaborate within their teams to assign roles. Each team is responsible for recording one short and one long path. Meanwhile, the other children and their teams engage in spontaneous or other prepared activities. After all the teams have had their turns, they gather in a circle to compare and evaluate their labyrinth journeys.<br><br>The team that has successfully completed the activity in the open space can transition to a smaller table-sized version of the labyrinth. The recording principles remain the same, and the children continue to work within their established teams. |
| **Feedback and support during the activity** | Are the colored paths arranged so that the colors alternate? Do you notice any instances where two identical colors are placed next to each other? How would you go about resolving this? Is everyone in your team assigned a specific role? What is their role? What could assist you in solving this issue? How does effective teamwork and collaboration look like to you? How can you distinguish between short and long paths? If you accidentally place a path incorrectly, what potential issues might arise, and how would you rectify them? |
| **Questions for reflection** | How did you construct the labyrinth? What aspects of building it were challenging, and which ones were straightforward for you? How did you determine which path was shorter and which one was longer, and how did you verify this information? In your teams, what aspects did you collaborate on? What aspects of your teamwork did you feel particularly positive about? Why did you choose to collaborate with another team, and how did their input assist you in finding a solution? |
| **Anticipated challenges and suggestions** | A larger number of children in a group can make it more challenging for them to navigate the labyrinth space and cooperate effectively. It's important to remind children to collaborate when recording the labyrinth paths. If two teams are recording paths simultaneously, proper organization is necessary to prevent interference between them.<br><br>Once the activity has been successfully completed in the larger space, the teacher can raise the level of complexity by introducing colored wood on the table, creating a 3D representation in a smaller format. In this version, teams record the paths using the same principle as before. Finally, the teacher can provide individual worksheets, where each child can record as many paths as they can find. |



*Image – Production of cardboard strips*



*Image – Preparation of the paths in the labyrinth*



*Image – Recording the labyrinth paths*



*Image – Labyrinth made of wood and recording*



*Image – Worksheet and record*

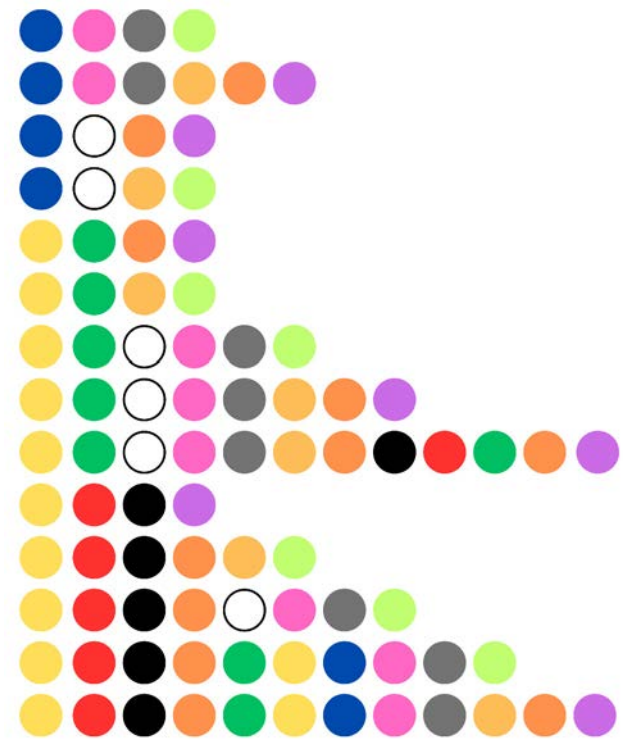

*Image – Sample labyrinth paths from the worksheet (resulting paths for checking)*

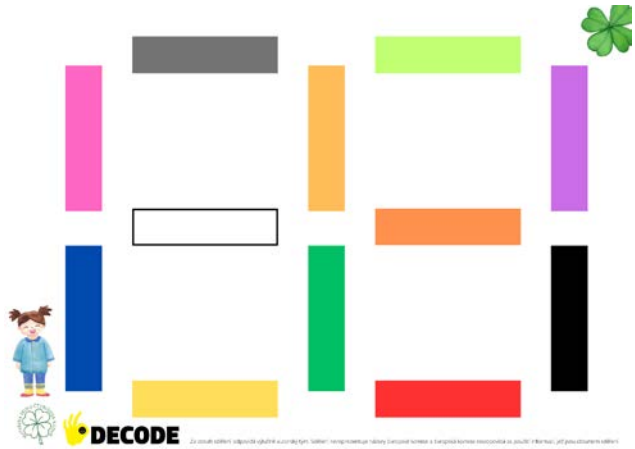


*Image – Worksheet – Labyrinth paths*

## 5.3.3 The water around us

| | |
|---|---|
| **Authors** | **Sabina Plechingerová, Erika Zelenková and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **Conduit** |
| **Topic** | **The water around us** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Consciously utilize all their senses.<br>■ Actively observe and pay attention.<br>■ Develop spatial awareness.<br>■ Tackle problems, tasks, and situations with creative thinking and present ideas.<br>■ Share tasks and responsibilities with fellow children. |
| **Age of children** | 3 – 6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We divide the children into groups. An ideal group size is 8-10 children. The teacher distributes cards to the group leaders with different parts on them. The remaining matching cards are placed in a container for the children to draw from. Then, the children are grouped based on the cards they draw. |
| **Preparation/materials** | Real water pipe parts (nut, threaded pipe, valve, cap), visual aids, and pipe cards. |
| **Instructions** | Our theme is water. What have we already learned about water? What do you see in the pictures in front of you? Where can you find these items? Can you think of what they might have in common? How does water get into the bathtub or washing machine? What do you think of when you think of the phrase 'water pipes'? Who has ever seen them? Can any of you screw these parts (the tube and valve, cap) together so that they hold together? What do you have to use? What components might be suitable for your task? What kind of part is this? Which side do you have to screw to tighten the thread, and which side to loosen? How can you disassemble them? In groups, try to connect real pipes. What do you think will happen if we pour water into the pipe with the valve closed? Can we try it? If you need help, please let me know.<br><br>Now, everyone will receive one pipe card from me. Your task is to connect the water pipes in your groups so that they lead from the water tank to the household. However, each of you will receive only one part (card). You need to think carefully about where to place it. What you use to create a water tank and a house is up to you. During construction, communicate only through gestures. Collaborate on constructions and connecting pipes. Remember that the water must not leak anywhere, and you must use all the parts. Do you know what to do? Do you need help with anything? Do you understand how to build the houses and the tank? How will you ensure that you use all the pipe components? |
| **Description** | The children sit in a circle as the teacher introduces them to the topic and shows demonstration pictures of objects that require water for use. Together, using open-ended questions, they delve into the topic of pipelines, discussing how they work.<br><br>The children are then divided into groups. Each group is provided with real components of water pipes, such as nuts, pipes with screws, and valves. In their respective groups, they explore and manipulate these components. |

| | |
|---|---|
| **Description** | Next, the teacher assigns a task and hands each group only one card featuring a part of the pipe. The children collaborate within their groups to build houses, water tanks, and connect them using the provided pipe cards to create a functional pipeline, ensuring that water does not leak anywhere else. In their groups, they decide on the materials they will use for construction, select the starting point for the pipeline, determine the structure of the water tank, and establish the placement of the entire construction. |
| **Feedback and support during the activity** | Are you observing what your friend with the pipe and valve is doing? Can any of you test if the parts really fit together securely? What happens when you turn to the right or left?<br><br>Are you paying attention to where you position your card with the part to ensure there are no water leaks? Do you think you have enough parts for your project? Have all of you placed your cards within the group's construction yet? If you've run out of parts but haven't completed a connected house and tank, what other options can you explore? I commend you for coordinating your efforts through non-verbal communication. |
| **Questions for reflection** | How did you find working with real pipes? What was more challenging for you, screwing in or unscrewing? Did anyone or anything assist you in the process? How did you collaborate as a group? Were there any difficulties you encountered? Did you face any problem-solving situations, and if so, how did you resolve them? Is there anything you would approach differently if you were to do this again? Now, if you were to imagine running water through the pipes, do you think there might be any leaks? Have you ensured that all ends have caps? |
| **Anticipated challenges and suggestions** | Remind the children about the importance of mutual cooperation and the use of spitting for negotiation. Emphasize that their task is to connect the tank to the household, ensuring that water doesn't leak anywhere else.<br><br>An alternative approach when distributing cards with pipe components could be that the teacher continually provides cards to the children, with the condition that they must use all the cards. In this scenario, the teacher should ensure they have an adequate supply of cards prepared. |



*Image – Getting to know the topic – Water in the household*




*Image – Water in the household*

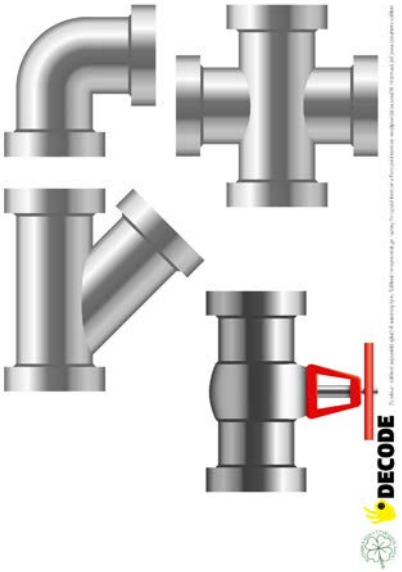


*Image – Piping*

## 5.3.4 The World Around Us

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| **Authors** | **Naděžda Husová, Erika Zelenková and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **Wood chips** |
| **Topic** | **The World Around Us** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Consciously focusing on an activity and sustaining attention.<br>■ Purposefully engaging all senses, actively observing, gaining insight, and noticing (new elements, changes, omissions).<br>■ Comprehending spatial concepts (right, left, below, above, in the middle, behind, under, above, near, next to, between, etc.). |
| **Age of children** | 2–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The activity can be done individually or in small groups. In the case of groups, you can consider the following modifications:<br>1. Observation (a child with difficulties observes their guide)<br>2. Role switching (a child with difficulties takes turns with their guide)<br>3. Independent work (a child with difficulties attempts the activity independently)<br>Select a quiet place where children can concentrate better. |
| **Preparation/materials** | Wooden colored matches, template cards. |
| **Instructions** | Let's explore what can be made from wood. How is wood processed? Have you ever heard of a splinter? Can you guess how it's made? Does anyone have any ideas about what we could create using these colored chips?<br>Your task now is to arrange the colored chips according to the provided template cards so that the picture matches the one on the card. Do you understand the instructions? Do you need any guidance? Can you handle this task on your own? |
| **Description** | From the beginning of the topic, children have access to activity cards that provide an overview of all the available activities. Each activity is represented by pictograms, and these pictograms are also displayed at specific stations. Children can choose activities based on their interests and needs.<br>In a group, children can collaborate to identify errors in the arrangement of colored chips according to the templates and work together to correct them. |
| **Feedback and support during the activity** | Can you please explain what you are planning to do next? I notice that you have already successfully completed this easy card. Are you willing to try more challenging ones? |
| **Questions for reflection** | What was the most challenging part for you? What did you find easy? What did you learn today? Did you encounter any problems? |
| **Anticipated challenges and suggestions** | Reminding them that they can overcome various challenges. Alternatively, a more challenging version can be used, where one child constructs a figure, and the rest of the group replicates it based on their model. |

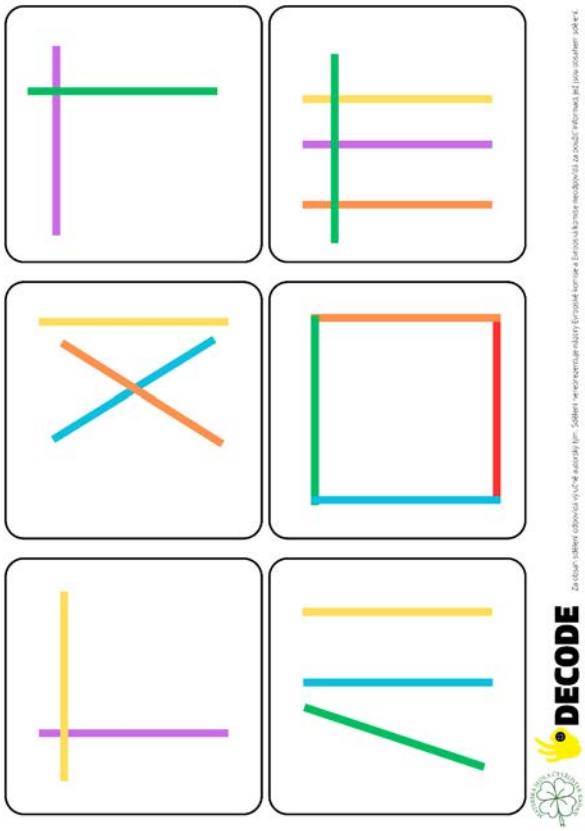


*Image – Wood shavings – template*



*Image – Photo in practice 1*



*Image – Photo in practice 2*



*Image – Photo in practice in a group*



*Image – Photo in practice 3*

## 5.3.5 Life event

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| **Authors** | **Tereza Strolená, Naděžda Husová** |
| **Title** | **International Children's Day – The bee and her work** |
| **Topic** | **Life event** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Develop auditory attention and concentration.<br>■ Comprehend fundamental numerical and mathematical concepts, basic mathematical relationships, and apply them in practical contexts as needed, including comparing, organizing, and sorting sets of objects based on specific criteria.<br>■ Additionally, understand spatial concepts such as right, left, below, above, in the middle, behind, under, above, near, next to, between, and more.<br>■ Collaborate effectively with others. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The preferred group size is 4–6 children. The teacher can employ yellow plastic packaging from Kinder Eggs (in the shape of bees) for this purpose. These containers should be pre-filled with various materials such as water, rice, and stones. Children randomly choose eggs and are then grouped according to the eggs they select.<br>The teacher should ensure that a child with difficulties has the opportunity to ask questions and receive support from their peers. |
| **Preparation/materials** | Wooden hexagons, each depicting half of a geometric shape (in an easier version, each side of the hexagon is colored, allowing them to connect to each other seamlessly). Alternatively, cardboard hexagons can be used. |
| **Instructions** | Let's talk about the work of bees. What exactly is bee work? Can you describe it? What shapes do you find in bee work? One of the shapes we see is a hexagon. How many sides does a hexagon have? Count them. You have honeycombs in front of you. What is a honeycomb? Raise your hand if you've seen one before. Can you describe it? |
| **Description** | The teacher initiates a discussion with the children about bees, beehives, and the work that bees do. Using open-ended questions, the teacher guides the conversation towards the topic of honeycombs and the work of bees.<br>Now, our bee needs some assistance in constructing its work. The teacher provides an explanation of the task to the children and encourages them to form groups. Within these groups, the children collaborate to devise solutions, exchange honeycombs, and experiment with various approaches. The teacher suggests that the groups commence with an easier version and gradually progress to more challenging ones. |
| **Feedback and support during the activity** | What is your task? Examine the halves of the geometric shapes. What kind of shape do they form? Which parts of the geometric shape should be matched together? Take another look. Collaboratively decide on the most effective and efficient way to assemble them, aiming for accuracy and speed. |

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| **Questions for reflection** | What was the most challenging part of the task? How did your group reach a consensus? Did you discover any strategies that could simplify the construction process? How many honeycombs were you able to connect? Can you describe the steps you took? If you were to tackle this task again, what changes or improvements would you consider making? |
| **Anticipated challenges and suggestions** | Attempt to engage all children and motivate them by posing questions that encourage the active participation of children, including those facing difficulties. |

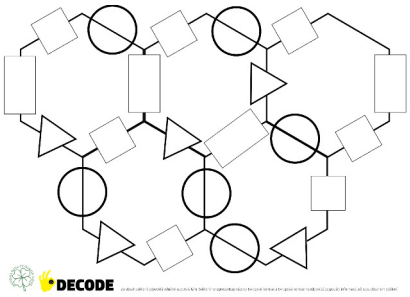


*Image – Honeycombs*



*Image – Children's cooperation (geometric shapes)*



*Image – Children's cooperation (colors)*

## 5.3.6 Our surroundings

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| **Author** | **Hana Zárubová** |
| **Title** | **Orientation game – Ecosystems** |
| **Topic** | **Our surroundings** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Develop spatial awareness and navigation skills.<br>■ Acquire knowledge about the natural world and its significance.<br>■ Solve problems and complete tasks related to the environment.<br>■ Actively engage with the environment, ask questions, and acquire new knowledge.<br>■ Experience a sense of accomplishment and mastery.<br>■ Recognize the importance of forests for both individuals and society.<br>■ Identify various trees, plants, and animals in different ecosystems.<br>■ Cultivate sensitivity towards both living and non-living elements of nature. |
| **Age of children** | 3–7 years (younger children working with older children) |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Larger, more detailed pictures; fewer pictures; simple and concise puzzles; and various small hints. |
| **Preparation/materials** | A cartoon map of the village, photos of familiar places from children's walks (e.g., a bench by the road, a large willow tree by the pond, etc.), small picture tokens with ecosystem signs, picture cards of animals, fish, and aquatic creatures, a basket, cones from coniferous trees, small magnifying glasses, pictures of animals found in meadows, ecology puzzles (colorful images of containers, pictures of types of waste). All photos, tokens, and pictures are laminated. |
| **Instructions** | **1. Ground floor** – ground floor Children will be provided with a map and a photo of the first station along with their task. This is followed by a brief explanation of concepts like ecosystems and nature.<br><br>Here, we have a map of our village – Liběšice, which will be our guide throughout the journey. Our first task is to locate the initial habitat based on the provided photo.<br><br>**2. Pond Ecosystem** – Locate the habitat as per the photo, utilize the map for orientation – Willow tree by the pond.<br><br>Task: List some water bodies you know, and identify various aquatic animals (using pictures).<br><br>**3. Forest Ecosystem** – Search for the habitat using the photo, use the map for orientation – Forest nursery.<br><br>Task: Gather pine cones in a basket and complete a small obstacle course with them (to understand forest behavior). Create a small sun using natural materials.<br><br>**4. Meadow Ecosystem** – Task: Children can use picture cues to name some meadow animals and plants. Use magnifying glasses to observe hidden elements in the grass. |

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| **Instructions** | **5. Waste** – Find the habitat depicted in the photo, refer to the map for orientation.<br><br>Task: Assemble a puzzle of garbage cans by color. Determine which bin to use for different types of waste. Match pictures to the corresponding bins.<br><br>**Conclusion – Reward:** At the end of the activity, children were awarded bracelets featuring a wooden flower. |
| **Description** | At the outset of the game, each child is provided with a map and a photo of the initial habitat, accompanied by a specific task. Prior to starting, a brief definition of what constitutes an ecosystem is shared with the children.<br><br>At every site, there are straightforward tasks related to the respective ecosystems (pond, forest, meadow, ecology). Upon successfully completing each task, they will discover a photo representing the next habitat or ecosystem. Each child progresses through the game at their own pace.<br><br>The concluding photo leads the children to a location where they are each presented with a bracelet adorned with a wooden flower.<br><br>To sustain the children's engagement in the game, each station offers slightly different ways to accomplish tasks. Some tasks are presented as puzzles, while others involve examining pictures, solving puzzles, or matching images. Additionally, there are obstacle courses constructed from natural materials to maintain the children's interest and engagement, utilizing a variety of activities. At every station, each child selects one token from that station to affix to their map. The children work in small groups at the stations, and the emphasis is on collaboration rather than competition. The primary goal of the game is for every child to experience a sense of accomplishment.<br><br>On the return journey to kindergarten, there will be a group discussion to reflect on the children's experiences during their outdoor adventure. |
| **Feedback and support during the activity** | The teacher shares intriguing facts about animals with the children during their transitions to the individual stations. This helps maintain the children's focus and engagement at each station, ensuring a smoother journey. It also provides an opportunity for the children to apply what they've learned. The children were enthusiastic and eagerly anticipated more games in the future. |
| **Questions for reflection** | What did you enjoy the most today? What did you excel at or struggle with? What do you remember from today's activities? What proved to be the most challenging aspect for you? What felt the easiest to accomplish? Is there anything specific you'd like to include in our next game? |
| **Anticipated challenges and suggestions** | Children complete the tasks in small groups, allowing for better concentration, equal participation, reduced waiting times, and less need for shouting. The teacher ensures that each child has the opportunity to engage in activities that match their individual abilities. |



*Image – A collection of natural objects*



*Image – Introduction to Ecosystems*



*Image – Common Discussion*



*Image – Waste sorting activities*



*Image – Ecological Rewards*



*Image – Activity Map and Tokens*

## 5.3.7 Gifts of nature

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| **Author** | **Petra Staňková** |
| **Title** | **The greatest wealth** |
| **Topic** | **Gifts of nature** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Understand what is heard and be able to reproduce events.<br>■ Collaborate with others.<br>■ Intentionally concentrate and maintain attention.<br>■ Distinguish activities that can support the health of the environment and those that can harm it.<br>■ Help take care of the surrounding environment. |
| **Age of children** | 3–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Either shorten the fairytale or divide it into several shorter segments. Try reading it gradually. |
| **Preparation/materials** | Fairy tale "The Greatest Treasure"<br>Graphomotor sheet "Can you jump like a squirrel?" |
| **Instructions** | We will sit comfortably, and we will read the fairy tale 'The Greatest Treasure.' Pay close attention because I will be asking you many questions during the story, and afterward, we will retell it in our own words together."<br><br>Talking with the children about the forest: "Discuss in groups and try to answer these questions: What types of trees do we have? What trees can we see in the forest? What animals can we see in the forest? What else can we find in the forest?"<br><br>Graphomotor sheet "Can you jump like a squirrel?": "Do you know what our task will be? Can you figure it out? Why is there a squirrel and arcs in the picture? Can you imitate the movement written like this? What should we not forget when we start writing? Do you know how to sit correctly to avoid back pain? Why is it important to hold the pencil well? |
| **Description** | The teacher reads the fairy tale "The Greatest Treasure" to the children. During the reading, she asks them supplementary questions that arise from the text. She inquires about the possible development of the story, what the characters might say, whether situations could be resolved differently, the characteristics of the characters, and more. She encourages children to cooperate and creates space for it.<br><br>Afterward, the children retell the fairy tale in their own words. They discuss and collectively fill in the storyline. They recall which animals were in the fairy tale and how Buck behaved. "What characteristics did he have? Are they good or bad characteristics? Did the animals behave nicely in the end?"<br><br>Then, the teacher discusses the graphomotor sheet with the children and finds answers to essential questions. The children then sit at their desks and complete the sheet "Can you jump like a squirrel?" In reflection, they try to describe what they have accomplished. |

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| **Feedback and support during the activity** | The teacher encourages the children to listen carefully to the fairytale, and during the activity, she will ask the children about different parts of the story. She promotes cooperation when retelling the story. “Can’t you remember? Try asking someone for help. Could we figure it out together?“ |
| **Questions for reflection** | Then, the children sit on the carpet and evaluate their impressions from the activity.<br><br>What did you like/dislike the most today?<br>What did you practice?What is the difference between reading a fairy tale and acting it out?<br>What was the most challenging part of retelling the story?<br>How was the cooperation in the groups?<br>Were you able to agree on the tasks?<br>What do you remember from the story?<br>Did you learn any lessons from it?<br>What was the biggest problem for you?<br>What types of trees do we have?<br>What trees can we see in the forest?<br>What animals can we see in the forest?<br>What else can we find in the forest?<br>How did you do today when filling out the worksheet with the squirrel? |
| **Anticipated challenges and suggestions** | The fairy tale must not be too long so that the children don’t lose their attention. |



*Image – Reading a fairy tale*



*Image – Filling out the workbook*




*Image – Can you jump like a squirrel?*

## 5.3.8 Human body

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| **Author** | **Veronika Fusková** |
| **Title** | **Who seeks, shall find!** |
| **Topic** | **Human body** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Develop hand-eye coordination and refine fine motor skills.<br>■ Identify parts of the body and some organs, and understand basic terms related to health, movement, and sports.<br>■ Articulate words correctly and control breathing, speech pace, and intonation.<br>■ Consciously engage all senses and actively observe, noting anything new, altered, or missing.<br>■ Prioritize cognitive importance. Intentionally focus and maintain attention.<br>■ Exert independent effort, concentrate on the activity, and see it through to completion. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Recommendations: Children may have pictures of human body parts with them. They do not need to handle the bottle.<br>Another alternative is to pour rice into a bowl and have children use their hands to search for pictures mixed within the rice. |
| **Preparation/materials** | Laminated pictures of human body parts, a PET bottle with a wider cap, and rice. |
| **Instructions** | Children, your task is to search for the pictures hidden inside the bottle filled with rice. You can manipulate and rotate the rice in the bottle, but please do not open it. Once you've located the pictures, describe them to your group mates. They will then find a matching picture in their own pile based on your description. Finally, announce the names of the pictures to ensure that you all have the same one. Afterward, we will discuss the pictures we've found.<br>1. Discuss a part of the human body (e.g., the eye – describe its appearance, function, etc.).<br>2. Identify the picture, analyze it – which letter does the word start with, which letter does it end with, and how many syllables does it have? |
| **Description** | The children are divided into pairs or small groups. Their task is to search for pictures hidden in the rice-filled bottle by gently shaking it. One child peers into the bottle and describes the picture they see, while the other searches for a matching picture in their pile. Finally, they name the pictures. To encourage verbal communication, children can sit back to back, relying solely on verbal instructions.<br>Afterward, they engage with the pictures in various ways, depending on the group's current mood and needs. Activities may include discussing the body parts depicted in the pictures, using tweezers to extract pictures from the rice, transferring them into bowls, playing memory games, and more. |

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| **Feedback and support during the activity** | I see that you two are having some difficulty. Let's try a different approach. For instance, try describing what a body part is used for.<br><br>How will you determine if you understand each other? What's your plan for manipulating the bottle? Is the current method working well for you? Can your friend hear and comprehend your descriptions clearly? |
| **Questions for reflection** | How did you feel during the activity? What did you like or dislike?<br>What aspects of the activity were challenging for you?<br>Were the pictures easy to spot, and how did you arrive at the solutions? How did you handle the bottle?<br>What was the experience like when you had to rely solely on your friend's verbal instructions to complete the task?<br>Is there anything you would have done differently?<br>What new knowledge or insights did you gain today? |
| **Anticipated challenges and suggestions** | In the future, I would consider using transparent (clear) beads as they provide better visibility and make it easier to manipulate the images. The images should not be too large, preferably no larger than 2 x 2 cm, as they become more challenging to blend in with the rice. Alternatively, you can opt for a simpler version by pouring the rice along with the pictures into a bowl and mixing them.<br><br>This activity can serve as direct motivation for a subsequent learning activity or theme. |



*Image – Bottle filled with rice and images of human body parts 1*



*Image – Bottle filled with rice and images of human body parts – showcasing some pictures*

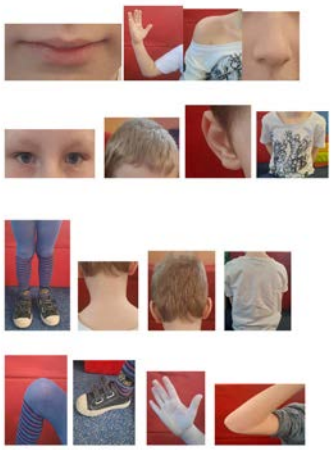

*Image – Cards featuring human body parts*



*Image – Searching for and identifying pictures 2*



*Image – Searching for and identifying pictures 3*

## 5.3.9 Plants

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| **Author** | **Vladimíra Andrtová** |
| **Title** | **Flowers in vase** |
| **Topic** | **Plants** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Listen carefully to the rules of the game.<br>■ Complete the game and maintain focus.<br>■ Demonstrate spatial orientation skills.<br>■ Remember the names of flowers. |
| **Age of children** | 4–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We recommend providing children with a picture of the plants. Play the game with a smaller group of children, involving only two plants. |
| **Preparation/materials** | Pictures of three spring flowers, with a quantity corresponding to the number of children. |
| **Instructions** | Can you think of a spring flower? Do you know where it grows? What color is it? Can it have a different color? Could we use the flower for something? What is the name of this flower? Can you name and describe the flower you are holding in your hand right now?<br><br>Children, we will pretend to be flowers in a vase and play a game of swapping places. Stand next to a flower each and listen carefully when you hear its name. Your task will be to switch places with a friend from the same vase. Exchange snowdrops, exchange primroses, exchange violets. Keep an eye on each other and help if needed. |
| **Description** | We will prepare three types of flowers, selecting the number of pieces based on the number of children. We will introduce and name the flowers together with the children. Arrange the flowers in a circle one by one. Children will stand next to individual flowers, and the teacher will provide instructions. Swap places with the primrose, swap places with the snowdrop, swap places with the violet. Children need to maintain their attention to respond correctly, and this activity also helps them practice spatial orientation. To increase the challenge, we can introduce more types of flowers for each child, requiring them to monitor additional conditions for changing their location.<br><br>Alternatively, we can try having children move in pairs or smaller groups. During this adapted game, children will need to communicate and cooperate extensively. |
| **Feedback and support during the activity** | What type of flower do you have? Does anyone else have a flower like yours? With whom will you exchange flowers? I can see you're doing a great job with this task. You could also assist friends who may need help. Can you also guide another friend in exchanging their flower? |

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| **Questions for reflection** | What types of flowers did we use in our game? How did you enjoy the game? What was the most enjoyable part of it? Do you know any other spring flowers? What colors were the primrose, snowdrop, and violet? Could you respond to the signal? What was challenging about it? Were you able to assist each other? How did you do it? How was it managing multiple types of flowers? At what number of children was the game the most enjoyable? Did communication work well when in pairs? What changes would you consider for next time? |
| **Anticipated challenges and suggestions** | We need to identify the flowers with the children. Ensure that the children do not bump into each other during the game. Reiterate the game rules periodically throughout the activity. |



*Image – Flowers in a vase*

## 5.3.10 Life anniversary of a child

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|---|---|
| **Author** | **Hana Zárubová** |
| **Title** | **A fairy tale in a community circle** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Follow the plot and comprehend the story's idea.<br>■ Understand spoken content and be capable of recounting the story's plot.<br>■ Consciously remember the details within the picture.<br>■ Apply observation skills effectively. |
| **Age of children** | 4–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The teacher prepares sequential pictures from the Little Red Riding Hood fairy tale, which the children can use when retelling the story to follow the plotline of the fairy tale.<br><br>Encourage them to identify what is missing from each picture. It's a good idea to have cards with fewer food items as well. |
| **Preparation/materials** | Paper basket, pictures of food. |
| **Instructions** | "Let's read the story of Little Red Riding Hood together."<br>Familiarization with the fairy tale Little Red Riding Hood (reading the fairy tale – listening).<br>A retelling of a fairy tale.<br>What did Mother Little Red Riding Hood put in the basket?<br>Look for what's missing in the basket. |
| **Description** | The teacher reads the fairy tale "Little Red Riding Hood" to the children (motivation).<br><br>Children in groups have to identify which food item is missing from the basket (the number of foods in the picture varies, depending on the age of the child).<br>The children are divided into smaller groups, and each group has a different basket, which the children then take turns. |
| **Feedback and support during the activity** | After reading the fairy tale, the teacher asks the children questions to find out how attentive they were and how well they remember the plot. He or she may even try to confuse them on purpose with deceptive questions.<br><br>When naming foods, children can be asked questions such as: How do they smell? How do they taste?<br>Other questions related to the fairy tale may include:<br>Which characters appear in the fairy tale?<br>To whom did Little Red Riding Hood carry a bottle of wine and a cake in a basket?<br>Was Little Red Riding Hood called "Red" because she was often shy?<br>Which animal ate grandma?<br>Did Harry Potter free Grandma?<br>What animal did the hunter save?'<br><br>Please note that some of the questions appear to be related to different stories or unrelated to "Little Red Riding Hood," so you may want to review the context and content for consistency. |

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| **Questions for reflection** | Did you find it difficult to concentrate on the story?<br>Did you manage to follow the plot of the fairy tale?<br>What did you do when you were unsure or stuck?<br>How did you collaborate within your group?<br>Did you encounter any challenges or problems?<br>What aspect of today's activity interested you the most?<br>Is there anything you would like to do differently next time? |
| **Anticipated challenges and suggestions** | The teacher reads the fairy tale to the children clearly and distinctly (she can adjust the number of foods in the basket based on the children's age).<br><br>If the children have difficulty identifying which food item is missing from the basket, the teacher or other children can provide hints through riddles.<br>For example, it's sweet, delicious, but not healthy (candy).<br><br>To make the activity more challenging, you can remove multiple types of food from the basket.<br><br>Finally, gather the children in a circle to evaluate what they liked/disliked and where they succeeded/encountered challenges during the activity. |




*Image – Basket – Full basket (9 items of food)*




*Image –Basket 2 – Banana is missing*




*Image – Basket 4 – Cake is missing*




*Image – Basket 5 – Missing pears*



*Image – Basket 6 – Candies are missing*




*Image – Basket 7 – Cucumber is missing*



*Image – Thinking together*



*Image – Discussion*



*Image – I already know!*

## 5.3.11 Communication between us

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|---|---|
| **Author** | **Veronika Ojo** |
| **Title** | **What is it?** |
| **Topic** | **Communication between us** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Imitation and gestures to dramatize the story.<br>■ Follows the development of the story and thinks logically to discern the story's meaning.<br>■ Recollects the plot of the story. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We recommend selecting a character with whom children can identify as closely as possible to facilitate a smooth and emotionally calming dramatization. Children vary in knowledge and skills. |
| **Preparation/materials** | Short story. |
| **Instructions** | Children, we are going to enact a fairy tale that, unfortunately, has lost its title. Would you like to try to guess it based on the storyline? Pay close attention, and after we've performed the story, let's discuss as a group which fairy tale it might be. We will divide into two groups, and each group will later swap their roles.<br><br>First, let's go over the rules of proper social behavior. What's important to remember when participating in theater activities? Raise your hand if you've been to the theater before. What observations or experiences did you have there?<br><br>Now, let's listen to the story and decide on our roles. Determine which part of the story you'll be acting out so that the other group can recognize it. |
| **Description** | The teacher divides the children into two groups, with one group having more children than the other. The larger group remains with an assistant who reads them a short story. The second (smaller) group moves away to ensure they don't overhear what the assistant is reading and engages in a conversation with the teacher regarding societal behavior, theater etiquette, and culture in general. They may also create simple tickets.<br><br>After the story is read, the assistant asks the children to allocate roles from the story and quickly practice how they would act out the narrative. Subsequently, she invites the smaller group of children to return and sit on the floor to watch the performance.<br><br>The children's task is to guess which story their friends are portraying. To make the task more challenging, the children can act out the story without uttering a single word. This means they will solely use facial expressions and movements to convey the storyline. |

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| **Feedback and support during the activity** | What do you believe the story is about? What is the central theme? What do you think the characters are discussing or referring to?<br>You collaborated exceptionally well as a group.<br>You've crafted an exceptionally captivating story.<br>I commend you for allowing the younger kids to take on the role of narrators. |
| **Questions for reflection** | Would you be interested in playing like this again?<br>What aspects of the activity intrigued you the most? Which part of the task did you find the most challenging? Did you encounter any problems that you had to solve? Did you feel more comfortable as an observer or as a participant?<br>How did it feel to watch your friends act out a story without any sound? Was it easy or difficult? Can you draw a comparison between the two experiences? |
| **Anticipated challenges and suggestions** | The maximum length for the story is 8 minutes. We suggest using a story that all the children in the class are familiar with. |



*Image – Dramatization of the fairy tale The Three Little Pigs*

## 5.3.12 Four Seasons

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| **Authors** | **Zuzana Sádovská, Veronika Ojo** |
| **Title** | **One year in a circle** |
| **Topic** | **Four Seasons** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Determine weather conditions (rain, wind, snow, sun, light clothing, heavy clothing).<br>■ Group objects based on specific characteristics (objects typical of a particular season).<br>■ Describe the changes in the natural world throughout the year. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The teacher identifies each section's corresponding topic for the children and explains it through real-life situations. Meanwhile, they encourage the children to think and make independent decisions.<br>The teacher provides support and guidance to children in groups for discussing individual subjects. |
| **Preparation/materials** | "Seasons" Thursdays, different items for each season (winter jacket, swimsuit, sweater, sweatshirt, T-shirt, shorts, warmers, sweatpants, raincoat, colored leaves, blooming flowers, small Christmas tree, Easter eggs, diving goggles, stuffed animal, toilet paper. |
| **Instructions** | We've already discussed the seasons and how to recognize them. Now, let's play a game to put your knowledge into practice. You'll be divided by color into different seasons. Your task is to find items that are related to the assigned season.<br>Name the selected items and explain to your friends why you chose them. Then, place these items inside the designated hoop.<br>How do children typically dress in winter, spring, summer, or autumn? Choose seasonal clothing items from the hoop and arrange them on the floor from head to toe or help a friend put them on when you all agree. |
| **Description** | The teacher divides the children into four groups. To help the children remember who they are grouped with and to prevent confusion, the teacher provides bracelets in four different colors to the children. Subsequently, the teacher distributes these bracelets, explaining that each color represents a season (spring-green, summer-yellow, autumn-orange, winter-blue). The individual groups are spaced apart enough to prevent their contents from mixing but are also positioned close enough to each other. In the center of these groups, there is a single hoop.<br>**Activity 1:** After dividing the children into groups, each group occupies one quarter of the circle. Various objects are scattered around the classroom or garden, including a winter jacket, swimsuit, sweater, sweatshirt, T-shirt, shorts, sweatpants, tracksuit, raincoat, colorful leaves, blooming flowers, small Christmas tree, Easter eggs, and diving goggles. The children's task is to match these objects to the season and place them in the quarter of the circle with the corresponding color based on their descriptions. |

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| **Description** | Upon completing this activity, the children gather and, together with the teacher, discuss and describe what they see on the squares laid out in front of them and outside of them. This allows the children to provide feedback to each other and engage in meaningful communication using complete sentences.<br><br>**Activity 2:** In the second activity, the children return to their respective quarters. Each child's task is to name an object associated with their assigned season, providing details about its color, use, material, and size. The other children listen, complete the characterization, or offer assistance as needed. After naming the objects, the children place them inside the hoop positioned in the center.<br><br>**Activity 3:** Following the completion of the second activity, the children take turns, with each person in the group selecting one friend to approach the hoop. They then choose one piece of clothing appropriate for the designated season. After taking turns, they arrange the clothing items as they would appear on a child or, if a volunteer is available in the group, they dress the child accordingly. |
| **Feedback and support during the activity** | Where else could the sweater be stored?<br>What materials are diving goggles made of?<br>Can the sun shine in the winter?<br>Can it snow in the summer?<br>What is your favorite season and why?<br>What other typical seasons can you think of?<br>Can some things have multiple parts? Why did you choose this particular subject?<br>What must we not forget in the winter? |
| **Questions for reflection** | What did you like about organizing subjects by seasons? Were you able to determine where the objects belong?<br>How did you collaborate within the group?<br>Is there one thing that we didn't address today that you would like to add?<br>Have you ever been in a place where the weather was "opposite" to that time of year?<br>Did you assist each other in the group? If so, how?<br>Would you like to participate in an activity like this again? Which part of the task was the most challenging and which was the easiest? |
| **Anticipated challenges and suggestions** | The teacher ensures that the children are completely engaged in the activity. If they aren't focused enough, they might incorrectly sort the objects and provide incorrect information to the other children.<br><br>It's important to explain the instructions for the activity clearly and at a suitable pace for the children. Always ensure that the children fully understand the instructions before beginning the activity. |



*Image – They dressed the mascot according to the weather 1*

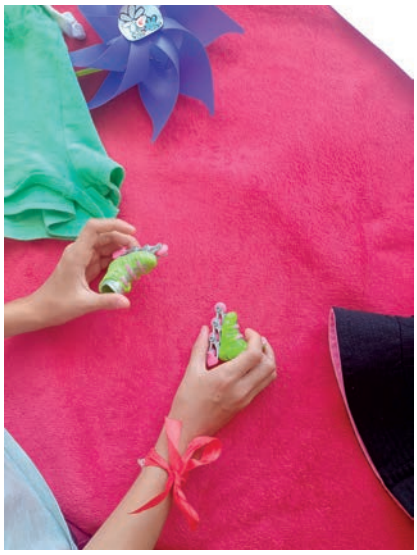

*Image – Summer, we are adding items*



*Image – Autumn, we are adding items*



*Image – Winter, we are adding objects*



*Image – They dressed the mascot according to the weather 2*



*Image – They dressed the mascot according to the weather 3*

## 5.3.13 Sport

| | |
|---|---|
| **Authors** | **Zuzana Sádovská, Yuliia Barzhak** |
| **Title** | **We do sports together with fairies** |
| **Topic** | **Sport** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Performs fundamental positions, stances, and instructions as directed (e.g., hopping on one leg, squatting, performing a long jump...).<br>■ Adheres to the rules during activities.<br>■ Demonstrates spatial orientation skills. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Additional supporting information should be available (e.g., 'Do 3 long jumps – one, two, three. Now pick up three stones – one, two, three'). |
| **Preparation/materials** | Basket, backpack/box, talking sticks (stiefel), stones, cones, sticks, leaves, acorns, wooden low obstacles, bench. |
| **Instructions** | Today is a special day, children. The Sports Fairies flew into our classroom this morning and left me these enchanted pins that contain some tasks to assist them in returning to their magical world. Your assignment is to listen to the enchanted pins and complete the task you hear from the pin with your friend. Afterward, work together to gather the appropriate number of natural items into the basket. Double-check the count.<br><br>Finally, gather with all your friends and compare whether everyone managed to collect the same number of natural objects. Then, collaborate to determine what shape you can create to help the Sports Fairies return to their world. |
| **Description** | The game can be played in both outdoor and indoor spaces at the kindergarten.<br><br>The teacher sets up 4-5 stations in the playground, each with a peg containing a task.<br><br>Children complete the task in pairs as they hear it and collect the corresponding number of doughnuts or sticks. In the end, the children compare their baskets with the teacher's basket. If a child has filled their basket incorrectly, they redo the tasks they were unsure about until they are correct.<br><br>1st station – Jump over all 5 wooden obstacles (cones).<br>2nd station – Perform 6 squats (leaves).<br>3rd station – Execute 3 long jumps (stones).<br>4th station – Skip 3 times on each leg. Pay attention to count your jumps together (sticks).<br>5th station – Take 4 steps on the bench (acorns).<br><br>Upon completing the tasks, the children gather and check whether they have the same number of natural objects. Finally, after a group discussion, they collaborate to create a shared image. |

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|---|---|
| **Feedback and support during the activity** | If you completed 5 squats, how many pebbles do you collect?<br>After making 3 jumps, how many cones will you pick up?<br>Do you have the same number of items in your backpack as I have in my basket?<br>Don't worry if you made a mistake; can you correct it? Do you know how?<br>It's fantastic that you recognized your mistake. I notice that you are double-checking your count as you go along. Are you able to collaborate effectively?<br>I see you are all making an effort. What's your task? |
| **Questions for reflection** | Which role did you enjoy the most?<br>Which task presented the most challenge?<br>Which task did you finish the quickest?<br>Is there a task you'd like to do again? Why?<br>Did you encounter any difficulties? If so, why? Were you able to reach a consensus as a group?<br>How did you perform as a team? Have you completed your collaborative work?<br>Are you content with the outcome? What did you achieve? |
| **Anticipated challenges and suggestions** | Children will be informed in advance about the importance of carefully listening to the instructions at the stations.<br><br>It's crucial to have spaces between the individual stations to prevent children from colliding with each other during the activities.<br><br>Depending on the children's abilities and age, a leader/assistant should be positioned at the bench. |



*Image – First station*



*Image – Second station*

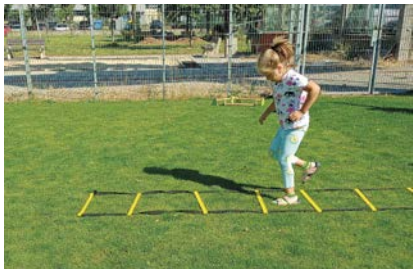

*Image – Third station*

## 5.3.14 Animals

| | |
|---|---|
| **Author** | **Yuliia Barzhak** |
| **Title** | **Our Little Animals** |
| **Topic** | **Animals** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Recognizes selected animal species and names them.<br>■ Assigns food to individual animal species – what do they eat? |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | A child with SEN works with an assistant who helps them with supportive questions. |
| **Preparation/materials** | Animal puzzle on cork with 15 pieces, animal inserts, A4 papers with animals (different and of the same character). |
| **Instructions** | Children, we have a game with many tasks ahead of us. First, we will divide into smaller groups. Each group will be tasked with creating their own simple symbol that can be easily drawn. You will need it for one of the activities. Now let's take a look at the individual tasks.<br><br>**1st Activity:** On the table, you have seven piles with different pictures, and for each pile, there is an envelope. Your task will be to carefully examine the animals in the pictures in each pile and insert into the envelope the paper with animal pictures where the animals do not have anything in common. For example: on one paper, you will have only gray animals, on another, only aquatic animals, and on the third paper, you will have animals of different colors, sizes, ... You will fold and insert the paper into the envelope and draw your group's symbol on it.<br><br>**2nd Activity:** At the second station, you have a 15-piece puzzle at your disposal. Your task will be to assemble these puzzles.<br><br>**3rd Activity:** In this game, you will be adding animal pictures to the corresponding picture. Each animal has its place, so you must correctly place all of them until none are left. |
| **Description** | The class is divided into 3 groups. Stations are placed in the space (on the playground, in the classroom) at a sufficient distance so that the children from different groups do not mix, and so that the materials do not get mixed up during the activities. The children are already familiar with various animals from different environments and can name them. The tasks will primarily serve to reinforce knowledge, promote cooperation, communication, and develop attention during the activities. |
| **Feedback and support during the activity** | What does the animal eat? What covers its body? What color is the animal? Where do these animals live? Are you sure you've placed all the animals in the holes? Did you assemble the puzzle correctly? Can you see a clear picture of the animal? What kind of animal is it? What can you say about it? Does this animal belong to this place? Check it with your group. How did you come up with this solution? Could there be another one? I see you're not sure. Have you tried asking another group for help? |

| | |
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| **Questions for reflection** | Which game did you like the most? Which one was the most challenging? Why? Which one was the simplest? Why? What typical characteristic did the animals on these papers have? (Show the A4 papers from the first activity to the children so that they come to the conclusion that the animals on the papers have a common characteristic.) Were you able to cooperate well? During which activity did you help each other the most? Did someone ask you for help? How did you handle it? |
| **Anticipated challenges and suggestions** | The puzzle is attached to a cork base, making it easy to handle even outdoors with the homemade puzzle. For puzzles with a higher level of difficulty, the activities can have animal puzzles with cutouts without animal silhouettes in the hole. |



*Image – Wooden puzzle*



*Image – Animals*



*Image – Cartoon animals*

## 5.3.15 Child's life events

| | |
|---|---|
| **Author** | **Veronika Ojo** |
| **Title** | **Birthday party** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Communicate using complete sentences.<br>■ Think and behave empathetically towards others.<br>■ Respect rules.<br>■ Cooperate with others.<br>■ Behave safely. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children will be evenly divided into groups by the teacher. They will discuss with the other children in the group who can help a friend who needs it and how to proceed if cooperation is not successful, and who to turn to in such a case. The teacher must be more attentive if children will be working with a knife. They will focus on verbal support. |
| **Preparation/materials** | Fruit from different countries, cutting boards, knives, toothpicks. |
| **Instructions** | Children, we're going to make fruit skewers for our doll Marta's birthday celebration. Where could we get the fruit? What do we need to buy? What will we put the fruit in? Let's see all the different types of fruit we managed to buy at the store. Can we sort them in any way? What criteria come to mind? Today, we'll focus on exotic and domestic fruits. Each of you will draw one piece of fruit from the basket. Do you have fruit from our country or something exotic? Consult with your friends and divide into two groups accordingly. Now, your task in groups is to prepare the fruit to make fruit skewers. You must follow one condition – the fruit types must alternate regularly. Coordinate among yourselves who will take care of each part of the task. What activities will you need to do to be able to skewer the fruit? Will you need a leader, a „head chef"? Who will ensure the fruit types are alternating? How will you handle the organic waste? How many skewers will you need to make so that each pair can have one? Would it be nice to make some tasting skewers for the other group, what do you think? Be careful with the knives. Observe each other, be attentive, and help one another. You can start working now. |
| **Description** | The teacher will explain to the children the task that awaits them. First, it's necessary to go to the market or the store together and buy various types of fruit. The teacher will ensure that the ratio of domestic and exotic fruit is the same, considering the number of children. Back in kindergarten, the children will discuss the fruit. They will look for different criteria by which fruit can be sorted (color, shape, hardness, size, pitted, berries, etc.). Then, the children will draw a piece of fruit from the basket. The teacher will instruct the children to divide into two groups based on the criterion of domestic/exotic fruit. In these groups, they will work on a common task – making fruit skewers. Together, they will explain the rules and agree on the procedures. The groups will then work independently. They will discuss the approach they need to take to create the skewers from the fruit. They will assign tasks, calculate how many skewers they will need, and work on the creation. They will ensure that the condition of alternating fruit types is met during skewering. The teacher will monitor the safety of knife use. Otherwise, she will not intervene in the activity unless requested. |

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| **Feedback and support during the activity** | I see that you are dividing tasks. Do you all know what you're responsible for? Did you manage to agree on how you will proceed? Who will ensure safety when working with the knife? Do you have all the necessary ingredients? Are you continuously checking if you're alternating the types of fruit? Have you figured out how many skewers you will need so that each pair has one, and there's still one left for the tasting by the other group? How did you solve this? |
| **Questions for reflection** | Which part of the task did you find challenging? What was interesting for you? How did you proceed when dividing the tasks? Did you all take turns? Did you encounter any problems? How did you handle them? What did you learn today? |
| **Anticipated challenges and suggestions** | It is necessary to monitor the use of knives. With a larger number of children, you can choose a different criterion to divide them into groups. |

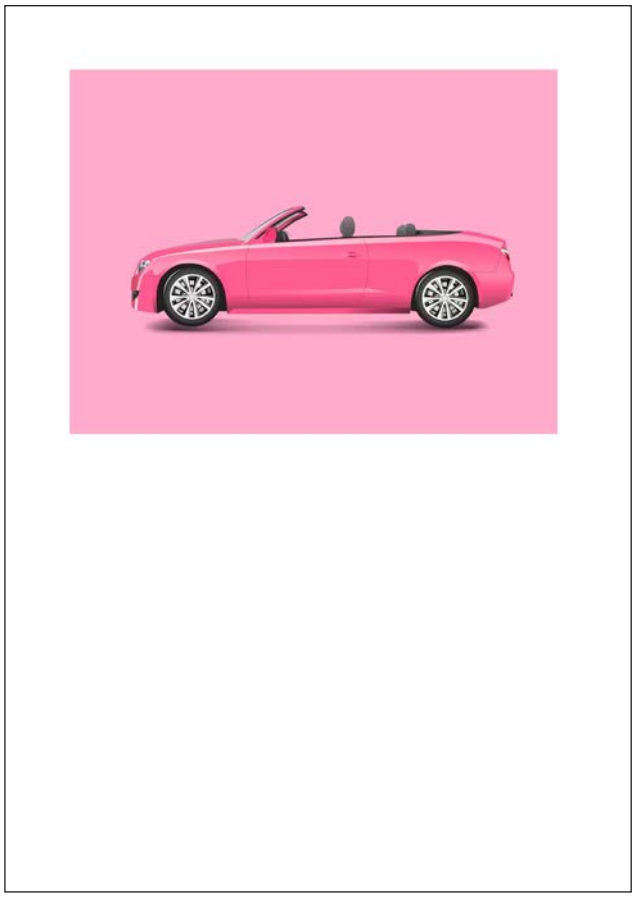

*Image – A car*

## 5.3.16 Safety in road traffic

| | |
|---|---|
| **Author** | **Julijana Kološa** |
| **Title** | **Safe route** |
| **Topic** | **Safety in road traffic** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Fostering visual and auditory attention.<br>■ Reviewing knowledge about traffic safety.<br>■ Recognizing and responding appropriately to traffic signs. |
| **Age of children** | 4-5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into smaller groups, providing each group with ribbons of different colors. Instruct the children to tie the ribbons on their left arm. Encourage them to help each other and ensure that the ribbons are tied correctly on the left arm. Instruct the groups to choose a child who will be responsible for the traffic signs. When the crosswalk sign is displayed, the other children in the group practice crossing the road safely by moving their heads left, right, and left again. The ribbons on their left arm can assist them in determining the direction. |
| **Preparation/materials** | Traffic sign (crosswalk), ribbons of different colors for each group, city map templates. |
| **Instructions** | Today's topic is traffic safety, and we will review the rules for crossing the road at a crosswalk ("L*eft, right, left, now let's go*.") with the help of a ribbon tied to our left arm. In the playroom, we will stop next to the crosswalk sign to review the rules of crossing roads.<br><br>We invite the children to the tables and encourage them to carefully observe the city map. They are given enough time to thoroughly inspect the visual material. The children talk to each other, answering the following questions, *"Where can we move as pedestrians?", "What do we need to do in order to stay safe in traffic?", "Which side of the road should we walk on?", "Where can we cross the road?", "How is a crosswalk marked?"* and *"Why is it marked?"*. In groups, the children take turns giving each other directions leading to various places in the city, such as the puppet theater, the art gallery, the regional museum, the sports center, and the elementary school. Using their fingers, they point to a safe route to each building and discuss traffic regulations. They are encouraged to tell stories and express themselves verbally. During their imaginary journey, they must pay attention to traffic signs and follow the rules for crossing the road safely. They are also encouraged to include additional crosswalks, traffic signs, and other relevant elements in the city map. |
| **Description** | Children are divided into groups using colored ribbons. We ensure that the activity takes place in a calm and pleasant environment. The children should choose a team leader, but they are to work, plan, anticipate, explain, help each other and provide encouragement together.<br><br>We provide groups with a city map. They look at the map together and engage in discussions. We encourage them to carefully observe and select proposals for visits various places. The children collaboratively prepare a safe route through the city in compliance with traffic regulations. |

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| **Feedback and support during the activity** | I noticed that you communicate and work well together. You also are keen observers and active participants in the activity. During group work, we encourage the children to express their opinions. We allow them to present to each other their route to their chosen destination. Furthermore, we encourage them to explain why they chose that path and what are the things they need to pay attention to.<br>We also incite them to include traffic signs into their maps and to explain the meanings of those signs. Our focus is on developing narratives, fostering traffic safety (reviewing directions, such as left and right, and developing traffic sign recognition), and nurturing problem-solving skills. |
| **Questions for reflection** | How well did you work together? Who initiated the activity? How did you reach an agreement? What challenges did you encounter? What have you learned from the experience? How should we cross the road? Where can we cross the road?<br>What should we pay attention to? You worked well together and helped each other. Great job! |
| **Anticipated challenges and suggestions** | The activity is conducted in a calm and pleasant environment within a small group. We encourage active communication among the children. They discuss dilemmas, present routes, explain and anticipate traffic situations. We adjust the duration and the approach of observing the visual materials to the child's abilities. |
| **Appendix** | Retrieved 4/20/2023 from:https://www.pinterest.com/pin/997828861166064850/ |



*Appendix 1 – Crosswalk sign and ribbons*



*Appendix 2 – Educational game Left, right, left, now let's go! 1*



*Appendix 3 – Educational game Left, right, left, now let's go! 2*



*Appendix 4 – Educational game Safe route 1*



*Appendix 5 – Educational game Safe route 2*

## 5.3.17 Materials and their properties

| | |
|---|---|
| **Authors** | **Sumedija Agić, Špela Dovjak** |
| **Title** | **Let's find materials in our surroundings** |
| **Topic** | **Materials and their properties** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Developing visual and tactile attention.<br>■ Developing skills for group work and discussion (listening to other children, promoting communication).<br>■ Training in classifying materials in a spreadsheet. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into smaller groups, ensuring that each group has at least one child who can already recognize and write letters and numbers. Provide additional explanations and support for children who do not understand the language. Encourage children to help each other during the activity. You can use cards with photos of objects made of different materials. Consider using a multilingual picture dictionary or cards with labels in multiple languages. For children who cannot yet write, modify the task so that they draw the objects in a table or spreadsheet. |
| **Preparation/materials** | Cards with photos of objects made of different materials, sorting table or spreadsheet, objects and an hourglass. |
| **Instructions** | Our topic is the properties of materials. Can you name the materials you already know? How do you recognize them? Is it always the case that glass is made of glass, and a spoon is always made of metal? Can the same objects be made of different materials? Which materials? If I show you a photo of an object, would you be able to identify the material it is made of? Could that material also be found in the playroom? What materials are most common in the playroom? Do you agree with the opinion of others?<br><br>Your task is to first divide into groups. Choose one person in each group to record the results in the table. Come up with a name for your group that everyone agrees on.<br><br>We will present to the children a sorting table, in which they will write the names of the objects. Each column in the table represents a specific material. The group's task is to find as many objects as possible made of a certain material in the playroom and allot them correctly in the table under the appropriate column. We will set a time limit of 20 minutes (you can place an hourglass in a visible spot) and after that, we will gather to present our tables. Each group listening to the presentation of the other group has to count the objects in the columns and write down the number. The groups can compare the number of objects found with other groups. It is crucial for group members to cooperate and divide the tasks among themselves.<br><br>If you come across objects made of different materials, categorize according to the dominant material. |

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| **Description** | We prepare cards for the children with photos of objects made of different materials. We encourage them to think about what material each object in the photo is made of based on its appearance. Using these cards, we will prepare tables with columns for different materials such as wood, plastic, glass, metal objects, etc. Children search for objects in the playroom and sort them into the appropriate columns in their tables. Once the time is up (after 20 minutes), the children will count the objects and record the numbers (e.g., using dots). Finally, each group will present their table to the other groups. |
| **Feedback and support during the activity** | Were you all active in your group? Did you find many items that are made of combined materials? How did you decide which column to write them in? Were you all in agreement? How did you reach a consensus? |
| **Questions for reflection** | Did you find the task challenging? How do you think you performed on the assignment? How did you determine where to search for items? Which column had the highest number of objects? Does this mean that this material is the most common in the playroom? Why do you think there is more of this material in the playroom? Did you anticipate this outcome prior to the assignment?<br><br>Do you think we could substitute some materials with others? Why are some items made of combined materials? |
| **Anticipated challenges and suggestions** | We remind the children to be mindful of the time and maintain a reasonable noise level to avoid disrupting their peers and fellow participants. We encourage them to count the items in each column together as a group to reduce the possibility of errors. It is important for all group members to agree on the final count before recording it in the table. |



*Appendix 1 – Forming groups*



*Appendix 2 – Giving instructions*



*Appendix 3 – Children participating 1*



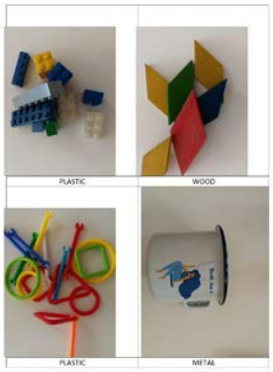
*Appendix 4 – Children participating 2*



*Appendix 5 – Presentation of posters and tables*



*Appendix 6 – Comparison of posters*



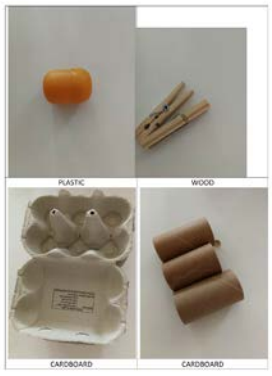

*Cards with different materials (the educator's own materials) 1*




*Cards with different materials (the educator's own materials) 2*




*Cards with different materials (the educator's own materials) 3*




*Cards with different materials (the educator's own materials) 4*




*Cards with different materials (the educator's own materials) 5*




*Cards with different materials (the educator's own materials) 6*




*Cards with different materials (the educator's own materials) 7*




*Cards with different materials (the educator's own materials) 8*




*Cards with different materials (the educator's own materials) 9*




*Cards with different materials (the educator's own materials) 10*




*Cards with different materials (the educator's own materials) 11*

## 5.3.18 Healthy diet

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|---|---|
| **Author** | **Maja Geršak Banović** |
| **Title** | **Me, the carrot** |
| **Topic** | **Healthy diet** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Developing visual and auditory attention.<br>■ Developing joint attention when reading a text.<br>■ Developing visual associations. |
| **Age of children** | 3–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | At the beginning, we browse through the book together, looking at the illustrations and observing the food that is illustrated. We divide the children into smaller groups to make it easier for them to follow the story. For children who do not understand the language, we point out and repeatedly name the different kinds of food we see. We can use multilingual dictionaries to name food items in other languages. |
| **Preparation/materials** | Lauren Child's picture book (Morphem 2011): *I will never ever try a tomato* (Lauren Child: I will not never ever try a tomato. London: Orchard, 2001.), cards with food items from the picture book, quiet nooks to carry out the activity in a small group setting (5-6 children). |
| **Instructions** | As part of the topic of *Healthy food,* we will foster our attention.We will observe, flip through, and read the mentioned picture book. Which food did you recognize in the illustrations? Which traffic light color would you chose for it? Do all food items belong to a healthy diet? What do you have at home? What do you like to eat the most? Do you ever try foods you don't like? Why?<br><br>**Stage 1:** Now, we will read the picture book together. We will give you cards with food items from the book (peas, carrots, potatoes, tomatoes, fish sticks, etc.). I will read the picture book to you. Every time you hear the name of the food item that matches your card, I want you to lift your card.<br><br>**Stage 2:** Since you now all know the story well, you can continue the game in smaller groups, with one of you acting as the narrator. Form a circle, and each person should have a card with three types of food (randomly sorted). Whenever you hear the name of the food that matches one of your cards, you have to perform a squat. For example, if you hear the word "pea" and you have peas on one of your cards, you have to perform a squat. Feel free to choose a different movement for subsequent rounds. |
| **Description** | We look at the picture book with the children and talk about the illustrated foods. Let's classify them using the nutritional traffic light system that we created in the previous days.<br><br>During the dramatic reading of the picture book, the children will raise their cards (stage 1). Then, we divide the children into smaller groups and prepare to work in nooks with sufficient space. We place the picture books and the cards with pictures of food items in each nook. The game is handed over to the children (stage 2), and the educator only participates when necessary or if the children require assistance. |

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| **Feedback and support during the activity** | Did you understand the instructions? Do you know what your task is? How did you work in the group? Did you recognize all the food in the pictures? Did you also narrate? |
| **Questions for reflection** | Is all food healthy? Why do you think so? Anyone missed a squat? Have you tried all the food presented by Charlie and Lola? What do you not like? |
| **Anticipated challenges and suggestions** | Remind them that they must be quiet enough to listen to the storyteller without being disturbed, so as not to overhear their food, squatting or picking up a card. We advise them to choose the storyteller using a calculator, so that there is no ill will when choosing. The activity can also be carried out in nature (on the playground, in the park). |



*Appendix 1 – Flipping through the picture book*



*Appendix 2 - Giving instructions*



*Appendix 3 - Children while reading (first stage)*



*Appendix 4 - Second level: children in a small group*



*Appendix 5 – Activity cards 1*



*Appendix 6 – Activity cards 2*

## 5.3.19 Traditions and folk tales – attention

| | |
|---|---|
| **Author** | **Špela Petrovič Štempihar, Alekseja Glinšek** |
| **Title** | **Catching pictures with a flycatcher** |
| **Topic** | **Traditions and folk tales** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Developing (visual and auditory) attention.<br>■ Developing joint attention when reading a text.<br>■ Developing a quick and appropriate response to visual and auditory stimuli. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We support children from disadvantaged backgrounds by talking about objects, animals and people. We can choose shorter stories with fewer objects, animals and people. |
| **Preparation/materials** | Make cards with pictures of animals, people and objects from the story: bears, a girl, chairs, tables, beds, spoons, bowls, a house, a forest and make a fly swatter. It is recommended to do the activity in a calm, quiet space, free from distractions or stimuli. |
| **Instructions** | We ask children about folk tales and their meaning. What is a fairy tale? Do you know one? Which ones? Which is your favourite? Have you ever heard the term folktale? What does a folktale mean?<br>Introduce the folktale picture book The Three Bears and a picture book by an author, e.g. Marcus Pfister: The Rainbow Fish. Point out the difference between a folk tale and an author's fairy tale and show a photograph of the author, writer.<br>In the book corner, look for some folk tales (e.g. The Three Little Pigs, The Pot, Cook!, Little Mitten, etc.) and some fairy tales by authors.<br>We record the teacher's reading of the folktale The Three Bears.<br>After the reading, we recreate the content of the fairy tale together with the children. Discuss the literary characters, their characteristics, the actions of the girl and give the children the opportunity to express their own opinions and experiences.<br>Discuss the ending of the fairy tale and the possibilities for possible changes.<br>Encourage discussion about recording and storing footage and opportunities for recording.<br>Have you ever recorded yourself? What occasions do we usually record ourselves? How do we then save the recording? Where can we upload it? Why do we save it?<br>Give the children pictures of objects, animals and people that appear in the chosen story. The children attach the pictures to the wall.<br>Play the recording of the fairy tale while the children follow the story by looking at the board. When they hear an object, animal or person appear in the story, they touch the corresponding picture with their fly swatter - catching the words.<br>The activity can be made even more challenging: when children hear an object, animal or person appear in the story, they „catch" the word with their eyes, by looking. |

| | |
|---|---|
| **Description** | Together they discuss the recording that was made and the benefits of ICT. The children share their experiences, operate the device, record themselves and play back the recordings.<br><br>The children themselves divide the roles (choose the child who plays the recording and the one who does the task first). Then they swap roles. |
| **Feedback and support during the activity** | Have you looked carefully at all the pictures on the wall? Are you listening to the recording that is being played in silence? Can you find the pictures quickly enough? Be quick and responsive - really concentrate and focus. |
| **Questions for reflection** | What was most difficult for you?<br>Did you have difficulty changing roles?<br>What would you have done differently? And why? |
| **Anticipated challenges and suggestions** | We recommend that you provide a calm environment where children can successfully concentrate on the task at hand. If necessary, remind them not to turn up the volume too loud so that they can listen to the recording in peace. |
| **Appendix** | https://sl.wikisource.org/wiki/Trije_medvedi<br>Pictorial material<br>Three Bears Cliparts:<br>Download Free High-Quality Three Bears Cliparts (clipart-library.com)<br>Goldilocks and the Three Bears Small World Characters (twinkl.si) |



*Appendix 1: Preparing and viewing images*



*Appendix 2: Describing the images*



*Appendix 3: Attaching the pictures to the board/wall*



*Annex 4: Finished picture board*



*Annex 5: Searching for pictures with the fly swatter*



*Annex 6: Using the recording to play the fairy tale*

## 5.3.20 Child's life events

| | |
|---|---|
| **Author** | **Karmen Meško** |
| **Title** | **Experiencing winter** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Attention** |
| **Objectives** | ■ Developing visual attention when looking at pictures.<br>■ Counting details in an image.<br>■ Developing focus and attention when tracing and drawing objects.<br>■ Identify and determine what pictures have in common. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Children are organized into small groups and seated at tables.<br>We provide them with sheets featuring pictures of winter motifs placed on the table. We encourage them to ask questions about the contents of the pictures, to describe them and to tell a story related to them. We check if they have ever held the objects in their hands. We engage in one-on-one conversation with the children and ask questions: "Is the object pleasant to touch?", "When is this item used?" and "What do these objects have in common?" |
| **Preparation/materials** | Drawn objects (e.g., snowman, sleigh, scarf, gloves, hat, skis, etc.) on the left side of the (halved) sheet, felt-tip pens. |
| **Instructions** | When I say WINTER, what comes to mind? Have you ever held snow in your hands? What do we need to make a snowman? How do we dress when we go out in the snow? What do we wear in winter? Why do we need gloves in winter?<br>Your task is to take a good look at the picture and the objects in the picture. Pay attention to details. How many items do you see? Which way are the objects facing? What is drawn below and above the objects.On the other side of the sheet, draw a picture. Make sure your drawing matches the picture. |
| **Description** | The educator and the children are seated at the tables. We offer them a sheet of paper which is divided into two parts with a center line; on one side, there is a drawing of an object (e.g., a snowman). We instruct the children to copy the picture on the right half of the sheet. We encourage them to pay attention to details: correct placement, size and the object's position on the sheet.<br>After they have traced their drawing, we encourage them to color it. At the same time, we reinforce the characteristics of the season: "In which season do we make snowmen?", "What is characteristic of wintertime?", "What clothes do we wear in winter?". We encourage them to think and make connections. During the activity, children talk, think, observe and debate. Each child gets their own sheet, so they all work simultaneously and talk in groups at the tables. |

| | |
|---|---|
| **Feedback and support during the activity** | Children are encouraged to look at all the pictures and to count the details. We also encourage them to talk, describe, identify common element and observe one another's pictures to determine if there is something missing. |
| **Questions for reflection** | What was the most difficult part of this assignment? Did you notice any differences between the pictures? In what season would you place them? Why? What would you like to do in winter? |
| **Anticipated challenges and suggestions** | When identifying differences or details in the picture, they can give clues to the child. For example, "Take a good look at the picture. Pay attention to what the snowman is wearing on his head. Check if you have drawn the object he is holding in his hand. Have you checked if the image includes all the elements?" We encourage them to think about where the drawn object appears. Counting details can be indicated by dots. For correct or appropriate proportions, we advise them to help themselves with a grid. |



*Appendix 1 – The child looks at the picture and copies it 1*



*Appendix 2 – The child looks at the picture and copies it 2*



*Appendix 3 – The child counts the individual elements in the picture*



*Appendix 4 – The children accurately copy the picture*

# 5.4 Language

## 5.4.1 Everybody is different

| | |
|---|---|
| **Authors** | **Vlasta Maxová, Erika Zelenková** |
| **Title** | **What I can do that makes me unique** |
| **Topic** | **Everybody is different** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Pronounce clearly, control breathing, manage the pace and intonation of speech, and express independent and meaningful thoughts, ideas, feelings, opinions, and judgments using appropriately worded sentences.<br>■ Engage in conversations by actively listening to others, waiting for the speaker to finish, following the speaker's content, and asking questions when necessary.<br>■ Utilize words and gestures to convey agreement and improvise when needed.<br>■ Comprehend spoken language, including grasping the main idea of a story, following the plot, and summarizing it in correct sentences.<br>■ Formulate questions, provide answers, evaluate verbal performances, and respond verbally to various situations.<br>■ Describe real-life situations or those depicted in pictures.<br>■ Listen attentively to readings, music, and engage with theatrical performances, films, and use the telephone effectively. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | It is not necessary to pre-divide the children into groups. The children will form groups of three during the game as instructed. The teacher will serve as their guide. |
| **Preparation/materials** | Without aids |
| **Instructions** | We're going to explore the concept of uniqueness. We'll investigate whether we're all the same or if we each have our own distinctive qualities. What does it mean to be unique? It means that each of us is an original, and there's no one exactly like you or me. However, even in our uniqueness, we can still find common ground. What might that common ground be? Today, you'll discover what we share in common. Now, take a moment to think about your strengths, your interests, and your favorite activities.<br><br>Your task for today is to find friends who share something in common with you. Whisper and use short sentences to communicate, like "I can run" or "I can jump." Seek out each other in the group. When there are three of you with a common skill or interest, move aside and discuss how you'll use pantomime to showcase your abilities. What is pantomime, you ask? Who's willing to give it a try and demonstrate for the others? In your group, you can either perform your skill in the same way or choose different approaches. The others will then guess what skill each of you possesses. |

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| **Description** | The children gather in a circle, engaging in a conversation centered on the themes of uniqueness, individuality, and abilities. The teacher encourages open-ended questions from the children to explore what they might share in common.<br><br>Following the discussion, the children are organized into groups based on their skills. They communicate in whispers as they search for others with similar abilities. Each group collaboratively decides how they will use pantomime to convey their respective skills to the rest of the participants. The remaining children then attempt to guess the skill being demonstrated. |
| **Feedback and support during the activity** | What is your shared skill? How do you plan to showcase it? Will you all perform the same skill in different ways? How well do you collaborate? |
| **Questions for reflection** | How did you showcase your skill?<br>In what manner?<br>What aspect of your skill do you excel at the most? (For example, if it's drawing, is it comics, family portraits, or cars?)<br>What challenges did you encounter?<br>What came naturally to you?<br>What changes would you consider for the next time? |
| **Anticipated challenges and suggestions** | What's important for the game is that children comprehend the concepts of features and uniqueness. Children form groups independently, and the teacher should respond promptly and adaptably if a child with difficulties is left alone (assign the child to another group). |

## 5.4.2 What I like to play with

| | |
|---|---|
| **Authors** | **Věra Isáková, Naděžda Husová** |
| **Title** | **Production of puppets from recycled material + theatre performance** |
| **Topic** | **What I like to play with** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Express their imagination and creativity in various creative activities, whether they are constructive, artistic, or dramatic, and in verbal expressions.<br>■ Collaborate effectively with others.<br>■ Engage in negotiations with both children and adults in their environment and reach mutually agreeable solutions. |
| **Age of children** | 4–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The teacher will introduce the concept of recycling to the children and provide them with materials to create puppets. The children will have the creative freedom to decide the outcome of their puppet designs.<br>Divide the children into groups. An optimal group size is 4–5 children. The child selects a colored ball, and the other children draw marbles from a bag to form teams based on matching colors with the child who has the same-colored marble. |
| **Preparation/materials** | Glass bottle, plaster, water, glass, plate, spoon, bandage, polystyrene ball, fabric, glue, glue gun, paper, markers, scissors, scenic materials. |
| **Instructions** | Let's talk about what we enjoy playing with. What are your favorite toys at home? Can you describe your favorite toy? How would you create a toy? What materials would you need for its creation, and where could you find them? Have you ever thought about using older, recycled materials for making toys? Can someone explain what recycling means, and why is it important? Who else can share the significance of recycling with the group?<br>In front of you, there are various materials that can be repurposed. How can you use these materials, and what kind of puppet can you create with them? Which of these materials would you choose for making a puppet, and why?<br>Your task is to craft a puppet. Divide into groups and collaborate to decide on the puppet's appearance. You'll be using water and plaster for this task, and you can find instructions on your group's table. Once the plaster has set on the bottle, work together to decorate the puppet according to your group's plan.<br>Does anyone need a recap of the instructions for using the bottle, water, and plaster? Who can explain these instructions to the rest of the group?<br>Now that you've created a puppet, what do you plan to do with it? How can you incorporate it into a theatrical performance? What elements make up a theater production, and what materials are needed? Who will design the set, and how will you create it? Decide within your groups what performance you'd like to present to others and assign roles accordingly. |

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|---|---|
| **Description** | The teacher initiates a conversation with the children about the importance of recycling. She explores their understanding of recycling, environmental protection, and creative ways to reuse materials that might otherwise be discarded. This discussion naturally leads to the topic of toys and puppets through open-ended questions.<br><br>Following this, the teacher organizes the children into groups. Each group is provided with the necessary tools to craft a puppet and clear instructions for constructing the puppet's base. Within their respective groups, the children collaborate to envision and plan the appearance of their puppet. They have access to a wide range of materials such as fabric, leather, wool, and felt to bring their puppet ideas to life, fostering teamwork and creativity.<br><br>Expanding on the concept, the teacher encourages the children to explore various ways they can use their newly created puppets. Through open-ended questions, she guides them in brainstorming ideas for a theatrical performance. The children continue working in their groups to decide on a theme for their performance and allocate roles, including creating a stage using available resources in the kindergarten, selecting actors, and designating an audience. |
| **Feedback and support during the activity** | I see that you've organized who will handle the plaster, who will cut the bandages, and who will wrap the bottle. How do you determine if the cast is thick enough, and what should you add if necessary? Can someone assist you with cutting the bandage or applying the "plaster" wrap around the bottle? I noticed that your plaster has already hardened. Do you understand why this happened, and how do you plan to address it? What steps will you take next time to avoid the same issue? Do you have any advice for the other group based on your experience? I commend your team for reaching a consensus on the materials to use for completing the puppet.<br><br>Now, let's consider what we need to create a puppet. Which tools are available in the classroom that you can use? How have you divided the roles among yourselves? Who will be the audience, and who will take on the role of the actor? Can you provide a brief overview of the storyline you've developed? I appreciate the thought you've put into dividing the roles effectively. |
| **Questions for reflection** | Were all of you able to collaborate effectively within your groups? Can you describe your individual roles in the puppet-making process? Did someone from another group or your own provide assistance? Can you think of any advice you could offer to help a friend with their task? Were you able to successfully complete your puppet? Did you encounter any challenges during the process? How did resolve those issues, and what do you think caused them? Lastly, did you feel comfortable in your assigned roles during the theater performance? |
| **Anticipated challenges and suggestions** | Encourage the children to collaborate and work together effectively. Utilize open-ended questions to stimulate their thinking and decision-making in the puppet and backdrop creation process. Assess the results of their work and motivate them to further engage in the activity. Emphasize the importance of reaching agreements and fostering teamwork within the groups. |




*Image – Instructions for the preparation of plaster*

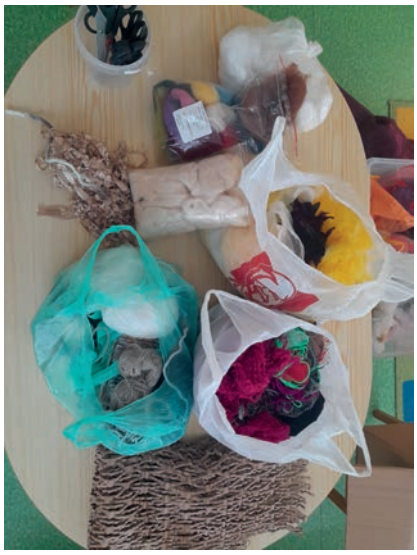

*Image – Material tender*



*Image – Cooperation in the production of the plaster puppet*



*Image – Samples of plaster puppets*



*Image – Mutual cooperation*



*Image – Material application*



*Image – Finished product*



*Image – Theatrical performance*

## 5.4.3 The water around us

| | |
|---|---|
| **Authors** | **Vlasta Maxová, Naděžda Husová and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **A story about water** |
| **Topic** | **The water around us** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Pronounce clearly, control breath, maintain a suitable pace, and vary intonation while speaking.<br>■ Express thoughts, ideas, feelings, opinions, and judgments independently and effectively in well-structured sentences.<br>■ Engage in conversations by actively listening, allowing others to complete their thoughts, and following the speaker's content. Ask relevant questions during conversations.<br>■ Communicate effectively using both words and gestures, demonstrating improvisational skills.<br>■ Comprehend spoken information by grasping the main idea of a story, following the plot, and accurately summarizing it.<br>■ Formulate questions, provide answers, evaluate verbal performances, and respond verbally to various stimuli.<br>■ Narrate and retell stories, fairy tales, or anecdotes.<br>■ Describe situations, whether real or depicted in pictures.<br>■ Comprehend wordplay and humor.<br>■ Develop left-to-right eye movement, which is essential for reading and writing.<br>■ Show interest in books, listen attentively to reading, music, and engage with theatrical performances and films.<br>■ Utilize information technology effectively.<br>■ Collaborate and interact effectively with peers and others in various social contexts. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into groups of three. To achieve this, the teacher can distribute colored crayons to the children. Then, place cut ribbons of the same color in a hat and have the other children draw lots from the hat. |
| **Preparation/materials** | Sheets of paper divided into six equal squares, crayons, recorder. |
| **Instructions** | The topic we are discussing is water. Your task today is to create a story about water. You will first have access to a dictaphone for recording, and then only paper and crayons. Who among you would like to try inventing the beginning of a story and recording it on a voice recorder? Who else would like to help this group? It's up to you how you agree and take turns in the group. Your group's task at this point is to come up with the beginning of the story and record it on a recorder so that others can listen to it. Once you have finished the beginning of the story, you and the other children will complete it. |

| | |
|---|---|
| **Instructions** | Story Completion: Now I will play the recording of the beginning of the story from the recorder. Each group has a piece of paper in front of them divided into six boxes. Your task is to guess and draw the continuation of the story in all the boxes on the paper as a group. Later, we will read all your stories in a circle. Do you understand what to do? Can I assist you with anything? Do you comprehend the recording from the dictaphone? Do you know how to transcribe your story onto paper? |
| **Description** | Before starting the activity, the teacher provides an opportunity for all the children to express their interest in inventing the beginning of the story. A group of children who are interested in this task invents and records the beginning of the story on a recorder.<br><br>Then all the children gather in a circle, form groups, and listen to the recording together. In their respective groups, they collectively imagine the conclusion of the story, which they illustrate in the provided boxes. After a designated time, which the children themselves manage during the class, they reconvene in a circle. They take turns sharing and narrating stories based on the pictures they have drawn. Within their groups, they reach a consensus not only on devising a story and creating illustrations but also on how they will present their story at the end. |
| **Feedback and support during the activity** | I can see that you are able to reach agreements and take turns effectively. What would facilitate your task? For instance, playing the recording one more time could be helpful. Do you understand the process? I commend all of you for actively participating. Is it suitable for one person to work while the others are not involved? Would you like some advice from a peer? Can I offer you some guidance? Are you arranging the elements of your story on paper in the correct sequence? |
| **Questions for reflection** | You worked in a group. Did you encounter any challenges during the activity? Were you able to understand the beginning of the story and continue it in the same theme? Did anything unexpected happen that caught your attention? Is there anything you would consider doing differently if you were to repeat this activity? Did you find any aspects of the task particularly challenging? Did you find it more challenging to create the beginning of the story or to conclude it? If so, why? |
| **Anticipated challenges and suggestions** | Remind the children about the importance of cooperation and taking turns in their roles. While engaging in this activity, the teacher should pay attention to aspects such as drawing skills, the ability to "read" from top to bottom and from left to right, effective communication among children, and their ability to share and take turns. |



*Image – Bargaining – Making up a story*



*Image – Discussion while making up the story*



*Image – Collaboration – Rotation*



*Image – Collaboration*



*Image – Telling a story*



*Image – Evaluation by children – Collaboration*



*Image – Story Rating – Keeping the theme*

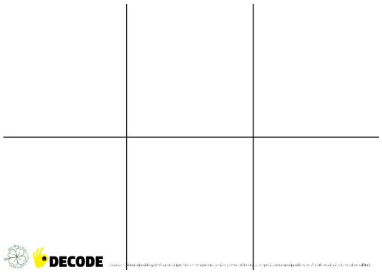


*Image – Division into 6 boxes*

## 5.4.4 The World Around Us

| | |
|---|---|
| **Authors** | **Naděžda Husová, Erika Zelenková and the collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **Puppet theater** |
| **Topic** | **The World Around Us** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Pronounce correctly, control the breath, pace and intonation of speech.<br>■ Conduct a conversation (listen to others, wait for the other to finish a thought, follow the speaker and the content, ask questions).<br>■ Follow and tell a story, a fairy tale; understand what is heard (capture the main idea of the story, follow the plot and repeat it in the correct sentences).<br>■ Learn new words and actively use them (ask about words they don't understand).<br>■ Understand puns and humor.<br>■ Capture and express one's experiences (verbally, creatively, using music, musical movement or dramatic improvisation, etc.).<br>■ Follow and tell a story, a fairy tale.<br>■ Formulate questions, answer, evaluate verbal performances, respond verbally. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Use shorter texts and fairy tales with short sentences and appropriate words.<br>If the child is in the position of a listener, ask questions to ensure they understand and follow the text. Throughout the story, ask questions multiple times to confirm comprehension.<br>If the child is in the role of an actor in the theater, provide a suitable and quiet place for the fairy tale performance. When selecting the audience, start with a smaller group of children who are more receptive to the narrated texts. Begin with fairy tales featuring a minimum of characters, and later progress to more complex stories and characters.<br>Engage the children in tongue exercises in a fun manner. This helps motivate them and reduces inhibitions. (You can find an example of a warm-up in the appendix.)<br>For children with difficulties, provide visual support using cards with a sequence of events (included in the appendix). Gradually introduce the children to the fairy tale.<br>When assigning roles, ensure that children with difficulties have the opportunity to be captains and select others for their team. |
| **Preparation/materials** | Puppet theater, stage sets, puppets, warm-up exercises for performers, materials for creating puppets, sequence cards (visual aids). |
| **Instructions** | We have been discussing trees. Do you know how we can incorporate a "tree" into our puppet theater production? Today, you will be participating in a theater performance. Do you have any idea about the preparations required and the tasks that need to be completed before the show begins? Do you have any thoughts on what materials we could use to create puppets and scenery? Today, you will take on the roles of theater organizers, creating your own wooden puppets and backdrops for the fairy tale "About Otesánek." |

| | |
|---|---|
| **Instructions** | Your mission is to rehearse this fairy tale, craft the puppets and scenery, and decide how you want to organize the performance. You can decide among yourselves who will play which role in the story, whether it's the narrator, the actor, or the audience. Once you've prepared everything, you will perform the fairy tale for us. So, where will you begin? If the children are not going to create puppets and scenery, you can skip the questions related to them. |
| **Description** | Right from the start of our topic, children will have the opportunity to view the list of activities on cards, providing an overview of all the available tasks.<br>These activities are represented by pictograms, and these same pictograms will be displayed at designated stations. The children can select the activities they want to engage in based on their preferences and needs. Throughout these activities, the children will collaborate in determining roles and cooperate in both preparation and execution. |
| **Feedback and support during the activity** | Let's think about what we need to create puppets and backgrounds. Can you explain to me your next steps? Could you describe what the story will be about?<br>I can see that you've done an excellent job inventing, building, and cutting out the scenery. I appreciate how you've been taking turns with your roles. |
| **Questions for reflection** | What was challenging for you, and what felt easy? Do you think there was a mistake somewhere, and if so, how would you correct it? How did you feel in the roles of spectators, actors, and stagehands? Did you enjoy making the puppets, and if so, which puppet was your favorite and why? Is there anything you'd like to change about the fairy tale, or can you imagine an alternative ending for it? |
| **Anticipated challenges and suggestions** | Remind them to agree on the procedure and roles. |




*Image – Fairy tale "O Otesánek" visual support*

## WARMING UP THE TONGUE – OTESÁNEK

Mom and Dad have a little cottage in a clearing by the oak tree. They're poor, but they really want a baby. A baby that will have big eyes and a beautiful smile.

In the morning, Daddy digs stumps in the woods and digs a stump. He looks like a little baby: head, body, arms, legs (POINT AT BODY PARTS). The baby stump cries (SHOW CRYING).

Daddy carries the stump home and says to Mommy: Here's your baby – Otesanek. Mummy holds the baby and sings happily to him (LALALA, LILILI – NO MOVEMENT OF THE CHIN, MOUTH OPEN ENOUGH, TONGUES ARE MOVING UP AND DOWN). She whispers in his ear (WHISPER): "When you wake up, little boy, I'll cook you some porridge".

Watch out, a fly flies by (SMILE, SHOWING YOUR TEETH, BREATHE THROUGH THE NOSE, EXHALE THROUGH THE MOUTH, MAKE THE BUZZING SOUND "ZZZZZ") and wakes the baby up BLINKS WITH THE EYES). Mommy is surprised (LIPS ARE POUTED UP, THEY'RE IN THE SIZE OF A CIRCLE). The baby cries out (SCREAM), "Mommy, I'd like to go!" Mummy runs to cook porridge (HANDS ARE MOVING IN CIRCULAR MOTIONS, LIKE COOKING) and baby eats it all (IMITATING EATING). And he shouts (SCREAM), "Mama, I want to eat again!"

Mom hands Otesanek a sip of milk (LICKS THE LIPS), a loaf of bread (IMITATING EATING THE BREAD), and an apple (IMITATING EATING THE APPLE). The stump eats it all and shouts (SHOUTS), "Mama, I'd like to eat!"

He opened his mouth (OPEN MOUTH) and ate his mom and dad (MAKING STROKING MOTIONS ON THE BELLY).

He met a farmer with horses (IMITATING SOUNDS THAT A HORSE MAKES). Chramst. The stump has eaten the farmer and his horses.

He also ate the sheep (IMITATING SOUNDS THAT A SHEEP MAKES), the geese (IMITATING SOUNDS THAT GEESE MAKE) and the cat (IMITATING SOUND THAT A CAT MAKES).

He wanted to swallow grandma too. When she saw Bran, she said, "Bran, you are knock, knock, knock (KNOCK ON THE HEAD), you will not eat me." He licks his lips and says nothing (LIPS FULLY CLOSED). Grandmother doesn't wait and cuts open his belly with a hoe. He rolls down on the floor (LYING BACK AND KICKING HIS LEGS IN THE AIR).

They all jump out of his belly and dance together (SMILING).

*Appendix – Warm-up*

## 5.4.5 Life event

| | |
|---|---|
| **Authors** | **Věra Isáková, Naděžda Husová** |
| **Title** | **International Children's Day – Conversation of the ants** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Control hand-eye coordination and master fine motor skills.<br>■ Recognize and name most of the objects in their surroundings.<br>■ Express thoughts and ideas independently and meaningfully in appropriately worded sentences.<br>■ Engage in conversations, which includes listening to others, waiting for others to finish their thoughts, following the speaker and the content, and asking questions.<br>■ Distinguish pictorial symbols and understand their meaning.<br>■ Follow directions and instructions.<br>■ Solve tasks and situations, think creatively, and present ideas.<br>■ Express agreement and disagreement.<br>■ Communicate naturally and without inhibitions with other children.<br>■ Cooperate effectively with others.<br>■ Adhere to agreed-upon rules.<br>■ Negotiate with both children and adults in their surroundings to reach common solutions. |
| **Age of children** | 4–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | **If the teacher has room to divide children into groups:**<br>We organize the children into groups. The ideal group size is 4-5 children. To facilitate this, the teacher utilizes differently colored balls and assigns bees of corresponding colors to each group. The remaining children draw lots from small, colored bees and are assigned to a group where the captain holds a ball of the same color in their hand. |
| **Preparation/materials** | Cards with master concepts (ladybug, bee, ant, butterfly), cards with subordinate concepts (10 subordinate concepts for each master card), gloves, glue gun, magnets, laminator, and foil. |
| **Instructions** | You are in a space where ants communicate. How do ants communicate with each other? What do they understand? Now, you will become ants that will communicate with each other. You see the cards spread out in front of you. Put on the glove with the magnet attached. Each team has its designated color (blue, pink). As a source of your communication, instead of antennae, the magnets on the gloves will serve you. How does a magnet work? It has two poles – one that attracts and one that repels. The picture with the magnet that attaches to the glove is the correct one. Each group gets a basket in which to store the pictures.<br>After collecting the images: You have ten pictures in front of you. Think about the word that connects all these pictures. Why do you think it is that word? Look at the pictures and describe what you see in them. What word did you come up with? How does this word relate to the others? What word is superior to all others? What is the superordinate word? |

| | |
|---|---|
| **Description** | The teacher prepares 20 cards with subordinate pictures, magnet side down, on the surface. There is a total of 44 cards (4 superordinate words + 10 subordinate words for each superordinate word), but only 20 cards are used for this activity; the parent image cards may not be used or will be used only for review.<br>The children are divided into groups and each group is given gloves of a designated color. Using open-ended questions, the teacher encourages the children to engage in a discussion about how ants communicate and how children could communicate even if they don't have antennae. The teacher also asks about the functionality of the magnets. The groups are encouraged to be active, and the teacher advises them to place the magnet pictures in the basket one at a time and return repeatedly until they have collected all ten pictures.<br><br>Once the groups have collected all ten pictures, the children are asked to identify what is in the pictures and what they have in common. Children work together in their groups to search for superordinate words for the group of pictures. If the teacher has the superordinate word cards ready, they can check the answers together with the children. |
| **Feedback and support during the activity** | Feedback and support during the activity: I notice that there are ten of you. We need to divide into teams. I appreciate how you initially organized yourselves, but now it's time to mix up the groups. How can a friend assist you with this task? Let's briefly review how a magnet functions. You have a set of pictures in front of you. How can you ensure that all the images are correct? Take a moment to carefully observe the pictures. Consider what word (I'll suggest "INSECT") might connect all the pictures. How did you get to this word? Were there any challenges you encountered? What did you discover in your pictures? How was your teamwork and cooperation within your group? Did you learn anything new during this activity? |
| **Questions for reflection** | How did your teamwork unfold? Which images did you locate? How did you ensure that you had all the required images? What common word linked these images together? What did you identify within your set of pictures? Were there any challenges you encountered? I commend your ability to reach a consensus. |
| **Anticipated challenges and suggestions** | Explain to the children that they should take turns taking a picture one at a time, rather than all at once, and encourage them to be considerate of each other. Additionally, remind them that the cards are face up, so there's no need to flip them over, as doing so might accidentally take a card from another group.<br><br>One potential challenge could be some children struggling with putting on the glove. Monitor how well the children are cooperating and ensure that children with difficulties are actively participating in the team. If a group has difficulty coming up with a superordinate concept, the teacher can provide reserve pictures for the team to choose from.<br><br>If there's a left-handed person in the group, it's important to have two left-handed gloves available as reserves. |



*Image – Gloves with magnets*



*Image – Aids*



*Image – Spreading the Cards*



*Image – Use of gloves*



*Image – Function of the magnet*



*Image – Magnet test*



*Image – Card Search*



*Image – Allocated basket*



*Image – Thinking about the superior word*



*Image – Mutual cooperation 1*



*Image – Mutual cooperation 2*



*Image – We figured it out!*

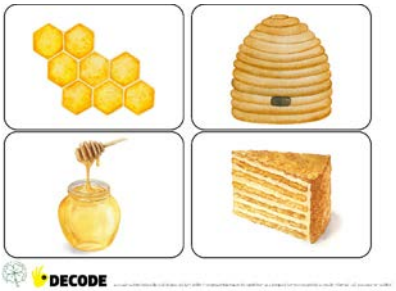


*Image – Master concepts*

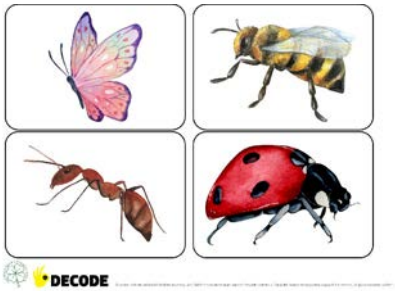


*Image – Subordinate concepts*

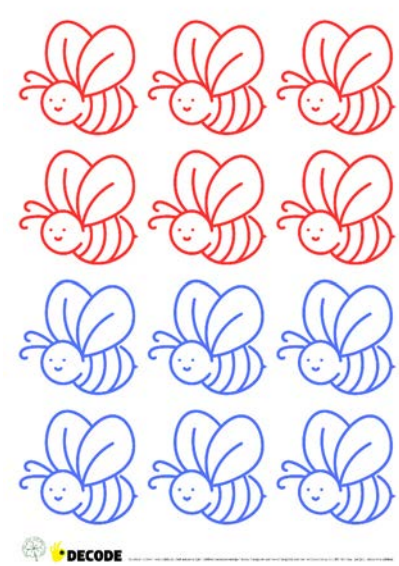


*Image – Colored bees to sort into groups*

## 5.4.6 Our surroundings

| | |
|---|---|
| **Author** | **Hana Zárubová** |
| **Title** | **A walk, a narrative** |
| **Topic** | **Our surroundings** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Pronounce words correctly, control breathing, pace, and intonation of speech.<br>■ Name most of the objects and elements in the child's surroundings.<br>■ Formulate questions, ask inquiries, and assess verbal performances.<br>■ Follow and narrate a storyline.<br>■ Describe a real situation based on a picture. |
| **Age of children** | 5–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Along the way, we can collect various natural materials, such as leaves from trees, a pebble from a circle on the dance floor, grass from a specific location, a clean plastic bag from the trash, and so on. |
| **Preparation/materials** | Pictures of things, trees, various objects, etc., that children are familiar with from the route of the walk. |
| **Instructions** | Arrange the pictures in sequence as we walked. Once you have organized them, take one picture at a time and describe what you see in it. Share what you find interesting about each picture. What can you tell us about each picture? |
| **Description** | We will take a walk with the children through familiar places, stopping at each location where we have a hidden picture. We'll discuss each place along the way.<br><br>When we return, we'll gather in a circle, and the children will collaborate to arrange the pictures in the order they were encountered during the walk.<br><br>Then, one by one, each child will select a picture, describe what they see in it, and continue until we reach the last picture. |
| **Feedback and support during the activity** | The teacher assists the child with guiding questions, such as:<br><br>"What can you observe behind the bench?"<br>"Is that tree a deciduous or coniferous tree?"<br>"Can you identify the specific type of tree it is?"<br>"Do you know the material from which the bench is made?"<br>"What is the purpose of the basket?"<br>"Have you wondered why there's a fence around the tree?"<br>"Can you recall how many trees line the road?"<br>"In what environments does this tree typically grow, and what can be crafted from its branches?"<br>"Could you offer some advice to your friend?"<br>"How might we support each other?" And more... |

| | |
|---|---|
| **Questions for reflection** | After completing the activity, we gather in a circle to discuss our impressions of the walk. We share what we enjoyed and what we might want to incorporate in future walks.<br><br>We reflect on the activity, addressing any challenges encountered. The teacher might ask questions like:<br><br>"How did you feel about the activity?"<br>"Were you able to identify all the locations?"<br>"Which location did you find most appealing?"<br>"Did you face any difficulties recognizing certain places?"<br>"Which location do you believe offered the best learning experience?"<br>"How did your group collaborate?"<br>"What strategies did you use when someone was uncertain about what to do?"<br>"Were you effective in making arrangements together?"<br>"What lessons did you gain for future activities?"<br><br>This discussion allows the children to express their thoughts, experiences, and ideas for improvement. |
| **Anticipated challenges and suggestions** | – |



*Image – Parquet*



*Image – Field road*



*Image – Dog waste basket, bench*

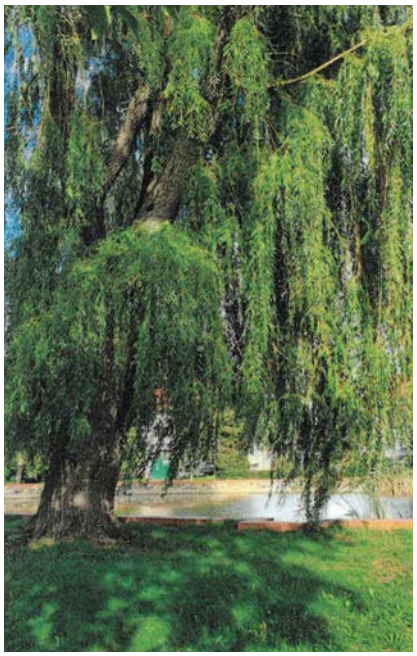

*Image – Willow tree by the pond*



*Image – Turnoff at the walnut tree*



*Image – Aids – hint*



*Image – Viewing pictures*



*Image – Sorting the pictures*



*Image – Sorted*



*Image – Field road*



*Image – Alder*



*Image – Bench*

## 5.4.7 Gifts of nature

| | |
|---|---|
| **Author** | **Petra Staňková** |
| **Title** | **Animals in the forest** |
| **Topic** | **Gifts of nature** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Utilize your vocabulary to its fullest extent.<br>■ Identify most of the objects and things in your surroundings.<br>■ Build connections with adults and overcome shyness. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Recommendation: Provide the child with simpler pictures of animals that they are familiar with and can name. If the child faces difficulties, encourage them to clap along with an adult. Encourage them to attempt to pronounce at least the first letter of the animal's name. This activity is designed for a small group of children. |
| **Preparation/materials** | Pictures with forest animals. |
| **Instructions** | Children, please observe the pictures on the board. Each of you should select one animal from the forest and share its name. We will then try to clap out the syllables and identify the initial sound it starts with. For instance, a fox (cz. liška). It begins with the letter 'L.' Now, let's collaborate as a group and assist each other in completing the tasks. |
| **Description** | Children gather around a table or on a carpet in a small group. One child takes turns approaching the board where pictures of forest animals are displayed. The child selects an animal, identifies its type to the other children in the group, and then claps out its name. They count the number of syllables in the name and determine which letter it starts with. Afterwards, the children attempt to carry out the activity on their own within the group. They collaborate, assist each other in solving tasks, and verify the accuracy of their answers. They provide support and offer feedback to one another. |
| **Feedback and support during the activity** | The teacher provides support to the child. If the child is uncertain, the teacher offers assistance by guiding them in clapping out the syllables. |
| **Questions for reflection** | What did you like or dislike today? What was your main challenge? What did you find easy and what was challenging for you? How did you contribute to the group? Was it challenging to remain attentive and assist your friends? Did you encounter any unique situations while working in a group? |
| **Anticipated challenges and suggestions** | We encountered the most difficulty when trying to identify the initial sound. Some children were not yet able to deduce it, so the teacher consistently encouraged anyone who believed they knew the answer to provide assistance to a fellow student. The children collaborated and discussed the provided words together. |



*Image – Clap the picture and identify the first sound*



*Image – Owl*



*Image – Fox*

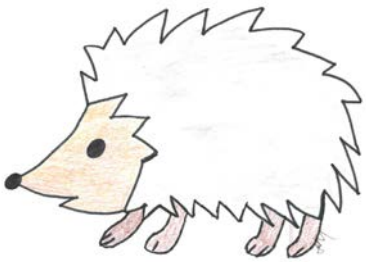

*Image – Hedgehog*

## 5.4.8 Human body

| | |
|---|---|
| **Author** | **Veronika Fusková** |
| **Title** | **Sign Language Day** |
| **Topic** | **Human body** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Consciously mimic simple movement patterns, social rules, and habits.<br>■ Understand verbal instructions.<br>■ Begin to form a basic understanding of child-appropriate rules of behavior and social norms, recognizing what aligns with them and what goes against them. In developmentally appropriate situations, act in accordance with these concepts.<br>■ Recognize that not all individuals adhere to behavioral rules and norms. Learn to reject socially undesirable behavior. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Recommendations for working with a child with difficulties: It is important to display pictures in a visible location that depict the signs (finger positions on the hands) along with explanations (pictures of activities such as handkerchief, toilet, etc.). |
| **Preparation/materials** | Wheels with pictures depicting finger positions. The game can be played throughout the day, both inside the kindergarten and outside. |
| **Instructions** | Do you know what sign language is? Have you ever heard of it? Who uses it, and for what reasons? Have you ever encountered it? Look at these pictures. Would you be able to interpret what these signs represent for 'yes,' 'no,' and 'I don't know'? Are you willing to try mimicking them? How should we position our fingers to convey the words 'yes,' 'no,' 'don't know,' 'know,' 'need help,' 'need a drink,' and 'need to go to the toilet'? Take a close look and attempt to replicate the signs. We'll use them for communication throughout the day. Now, I'm going to ask you simple questions, and you can respond using the sign that corresponds to your answer.<br><br>Next, try the same exercise with a friend. Take turns asking questions and responding with signs. Always confirm your response verbally. You can also have discussions based on these questions. If someone doesn't know the answer, support each other and refer to the picture circles.<br><br>We will continue practicing this throughout the day and discuss it tomorrow. Remember that even teachers can only use signs to respond. |
| **Description** | We will show and explain to the children that not everyone communicates using words. Some people require sign language to communicate. We will discuss what sign language is and why people may need it. Afterward, we will practice using signs.<br><br>The teacher has prepared wheels with pictures depicting various finger positions:<br><br>Thumb up for 'YES'<br>Thumb down for 'NO'<br>Fist for 'I DON'T KNOW'<br>Raised hand for 'I know the answer'<br>Raised index and middle fingers for 'I need a tissue' |

| | |
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| **Description** | Crossed index and middle fingers for 'I need to go to the toilet'<br>Raised thumb and little finger for 'I need a drink'<br>Raised index finger for 'I need help'<br><br>Below each hand/finger position, there are corresponding explanations (pictures) to facilitate remembering the gestures.<br><br>We will ask the children different questions, and they will respond using only sign language. We will prominently display the pictures, and this game can be played throughout the day for various activities. The teacher will also respond to the children in sign language (YES, NO). |
| **Feedback and support during the activity** | I understand that using signs may be challenging, but let's help each other remember. I can see you're doing a great job. Are you ensuring that others comprehend you? It's excellent that you're asking questions that can be answered with signs. Don't hesitate to ask a friend a question. If they can't recall, they can show you a picture, and you can repeat the sign together.<br><br>The teacher poses questions using spoken language – phonetically, and the children respond using sign language. They can only reply if they sign, indicating that they know the answer. Shouting is not allowed.<br><br>Encouraging critical thinking involves recalling signs, being conscious of managing your emotions, cooperating with others, and adhering to the rules. |
| **Questions for reflection** | What was the most enjoyable aspect of this activity? Did you encounter any particularly challenging parts? Did you assist each other during the activity? How did you feel about using signs? How did you ensure your friend understood your signs? Were you able to formulate questions that could be answered using signs? How did this experience make you feel? Was it challenging to refrain from shouting and rely solely on signs? Were you successful in controlling your impulses? Would you be interested in trying this activity again? |
| **Anticipated challenges and suggestions** | Younger children can carry cards (featuring finger/hand circles with explanations) and use them as aids for communication. For certain children, especially those with limited motor development or at a younger age, using hand signs can be challenging and challenging to remember.<br><br>This activity helps children practice self-control, acceptance of rules, cooperation, and communication with others. |

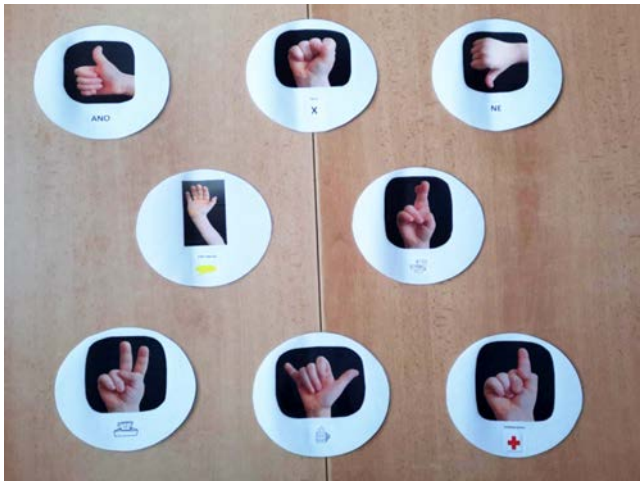

*Image – Photographs of cards/circles featuring finger/hand signs for our sign language – original photographs by the author.*

## 5.4.9 Plants

| | |
|---|---|
| **Author** | **Vladimíra Andrtová** |
| **Title** | **Painted reading – spring walk** |
| **Topic** | **Plants** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Accurate pronunciation of words.<br>■ Understanding and following the storyline.<br>■ Ability to distinguish between singular and plural forms. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Break the reading into individual sentences. Provide an individualized approach. |
| **Preparation/materials** | Worksheet with a story interspersed with images. |
| **Instructions** | I will read a story about a spring walk in nature, children. Your task is to fill in the correct word instead of the pictures. First, agree among yourselves on the correct word and then decide how you will take turns saying the words and who will report the words for the group. |
| **Description** | We will use a story interspersed with pictures. We read a simple story aloud, make a pause..., and the children agree on a word to complete and find its correct form. Then they have to try to figure out how to take turns fairly reporting the words to the teacher. |
| **Feedback and support during the activity** | What do you see in the picture? Do you recognize that flower? Have you ever seen it before? Where? Let's say together: "One tulip, two tulips, one tree and two..." (the child completes). Does this tree have leaves or needles? How many flowers are there, and what are their names? Where did the children go? Where were they first, and what did they see there? What flowers were in the gardens? Have you seen them before? What is your favorite flower? What were the names of the trees the children stopped at? What color is the bark of these trees? I see you are trying to find a solution. Could something or someone help you? I appreciate you figuring out a way to take turns in the group. Could you describe it to me? Can you find the correct word forms? |
| **Questions for reflection** | Did you find it difficult to identify the flowers in the pictures? How did you come to an agreement within the group? Did you encounter any challenging situations? What was the most enjoyable part for you? Can you think of alternative ways to engage with the story? |
| **Anticipated challenges and suggestions** | A complex story with overly long sentences can pose a challenge. |




*Image – Story with pictures – own creation.*



*Image – Painted reading – Complementing the text*

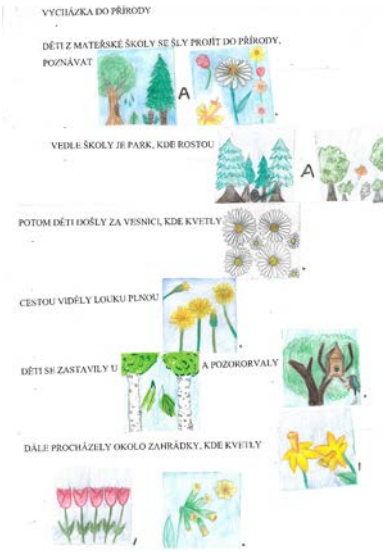


*Image – Nature walks*

## 5.4.10 Life anniversary of a child

| | |
|---|---|
| **Author** | **Veronika Fusková** |
| **Title** | **A fairy tale in a community circle** |
| **Topic** | **Childs's life events** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Pronunciation, grammatical correctness of speech, comprehension, expression.<br>■ Perception, attention, concentration, memory.<br>■ Communication with adults, communication with children, cooperation in activities, consistency. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | You can create story cards to visualize the story for better memorization and imagination. |
| **Preparation/materials** | The fairy tale "How Honzík was afraid to go to kindergarten" (author: Veronika Fusková) |
| **Instructions** | Read the fairy tale carefully with the teacher. Pay close attention, as we will be asking each other questions afterward. |
| **Description** | The teacher reads the fairy tale "How Honzík was afraid to go to kindergarten" to the children. She then retells the story with the children, and children with difficulties can use pictures with the story that the teacher has prepared. Emphasis is placed on the children forming complete sentences and pronouncing words correctly. If necessary, in cooperation with other children, they are advised and assisted in making corrections. Afterward, the children answer the questions provided below the text of the fairy tale (refer to the appendix titled "How Honzík was afraid to go to kindergarten," by Veronika Fusková) to assess their comprehension and attentiveness. Following this, the children create their own questions and take turns asking each other. The entire activity takes place within a communal circle so that everyone can participate and observe. |
| **Feedback and support during the activity** | Engaging in communicative activities within a communal circle strengthens the relationships between the child and the teacher, as well as between children themselves. These activities help children develop communication skills, enhance their ability to cooperate, and foster deeper connections with one another. |
| **Questions for reflection** | The teacher asks questions based on the ones provided below the text. These questions can be further expanded upon, for example, by asking, "Where was Honzík?" and so on. By encouraging children to think more deeply about the story through additional sub-questions, such as "What could happen if mom and dad behaved differently?" we stimulate their perception and imagination. |

| | |
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| **Questions for reflection** | Through this process, we assess various aspects of the child's development, including their vocabulary, logical thinking, sentence development, articulation skills, correct intonation, and comprehension of the questions. It's important to note that children are not only expected to answer but also encouraged to ask their friends questions derived from the text. This activity promotes the development of communication, cooperation, expression, tolerance, active listening, and concentration skills. |
| **Anticipated challenges and suggestions** | Next time, we could enhance the activity by incorporating a recording of the fairy tale narrated by the teacher. This variation allows the teacher to better observe and engage with the children. We can consider this activity as a relaxing interlude that complements our ongoing work.<br><br>However, it's important to be aware of potential challenges, such as diminished concentration, children's reluctance to answer questions due to a fear of being incorrect, and a potential impact on their self-assertiveness in group settings. These aspects may need to be addressed to ensure a positive learning experience for all children. |

## How Honzík Was Afraid to Go to Kindergarten

And the day has arrived! Honzík is about to go to kindergarten for the first time, and he is terribly afraid. He can't understand why he can't stay with grandma and grandpa in the countryside, where he spent almost the entire summer and enjoyed it so much. "What am I going to do there? Mom can't just give me to strangers," Honzík cries. But his mother assures him that he will like kindergarten. She tells him he'll have little friends, beautiful toys, and a wonderful teacher. Honzík remains unconvinced; he thinks his mom is just saying that to keep him from crying.

"Honzík, Honzák, wake up!" Honzík's mother gently awakens him. "Already? So early?" Honzík protests. But he can't contain his curiosity and jumps out of bed as his dad brings a wooden box into the room. Dad eagerly opens the box and reveals beautiful photos. Honzík begins to sift through them and selects one that features him, his mom, and his dad. "And when you're feeling sad, you can look at it and remember how much we all love you," his dad tells him. Honzík agrees and joins his mother in the kitchen, where she has prepared a small breakfast – a bun with cocoa. "Yum, I really like this," he says.

After breakfast, it's time to brush teeth, get dressed, comb hair, put on shoes, and they are off to kindergarten, accompanied by Honzík's parents. The kindergarten is not far away, almost around the corner. Honzík is amazed when they arrive – a large colorful building adorned with beautiful pictures and a garden filled with swings, climbing frames, and a sandbox. He likes it a lot, but he's still apprehensive, clutching the photo of his mom and dad in his hand.

Inside, in the dressing room, his mother points out a sign to him where he can hang his coat and pants. "I have a beautiful green frog," Honzík proudly exclaims. With new booties on, they make their way to the classroom, where the teacher is waiting. "Well, welcome to our kindergarten, Honzík. I hope you were looking forward to joining us," says the teacher. Honzík lowers his head to hide that he is on the verge of tears. His mom reassures him that she'll stay for a while, have a snack, and that she and dad will come to pick him up soon.

Holding Honzík's hand, the teacher shows him around, introducing him to the toys, tables for drawing, and building kits. There's so much to explore, Honzík thinks, although he admits, "I can't even remember everything the teacher showed me."

After a while, Tomášek, a boy from the second year of kindergarten, comes to invite Honzík to play. Tomášek wants to build a car track together. Honzík hesitates at first, worried about missing the time when his mother arrives, but he eventually decides to join Tomášek in playing on the carpet.

Soon, the cooks bring in a delicious snack of semolina porridge. "I really like this," Honzík remarks as he enjoys his meal. Just as he finishes eating, he notices that his mom and dad have arrived to pick him up.

Honzík discovers that kindergarten is a wonderful place, and he doesn't need to worry about a thing. He eagerly shares his experiences with his mom and dad. He realizes that he never even needed to look at the photo he brought; the time passed by so quickly. But he decides he wants to keep it with him.

Honzík is now looking forward to the second day of kindergarten, knowing that his mom and dad care for him deeply and will always pick him up on time.

Autor: Veronika Fusková

**Questions about the text "How Honzík Was Afraid to Go to Kindergarten":**

1. Where did Honzík spend his holidays, and with whom?
2. At what time does Honzík wake up on the day he is going to kindergarten?
3. How did Honzík's father try to comfort him and ease his fear of going to kindergarten?
4. What did Honzík think about kindergarten before he went there?
5. What did Honzík like in the kindergarten once he arrived?
6. What special item did Honzík have, and where did he hide it?
7. Who came to get Honzík to play with him?
8. What did Honzík have for a snack at kindergarten?
9. Who picked up Honzík from kindergarten, and at what time?
10. Did Honzík remain afraid of going to kindergarten the next day?
11. Can you children recall your own first days in kindergarten?
12. What aspects of kindergarten do you enjoy?
13. What aspects of kindergarten do you dislike, and what changes would you make if you could?

*Appendix to the story: Questions about the text*

## 5.4.11 Communication between us

| | |
|---|---|
| **Author** | **Mgr.Yuliia Barzhak** |
| **Title** | **It's Karolínka's birthday** |
| **Topic** | **Communication between us** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Observing the basic rule of dialogue (do not interrupt others; wait for your turn).<br>■ Creating coherent sentences on the given topic.<br>■ Pronouncing the words in the sentence clearly and distinctly. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Fostering empathy and motivation for participation and completion.<br>If there are multiple children with difficulties in the class during the story creation, the teacher assists in promoting group cooperation and actively engages the children in the activities. |
| **Preparation/materials** | Class mascot, A4 paper, coloring pencils. |
| **Instructions** | Teacher with children sitting on the carpet, holding the class mascot.<br>Children, do you know what day it is today? What makes today special? What's different today? Today is a significant day for our little owl, Karolínka. Can you guess why? It's Karolínka's birthday today. How old do you think she is? Would you like to prepare a gift for her? What do you think would make her happy? Do you believe she would enjoy it if we created a story about Caroline the owl?" |
| **Description** | The teacher, in agreement with the children, establishes the basic rules of communication in the classroom. The activity will be conducted in pairs or individually, depending on the children's abilities.<br>The children independently form pairs or congratulate each other individually.<br>The teacher sits on the carpet with the children. Together, the children create a short story, with each child contributing 1-2 sentences. The teacher records or writes down the story. After reading or listening to the entire story, the children design a birthday card for the mascot. They discuss the card's shape and the text to be included. Each child gets the opportunity to present their own wish proposal to the mascot and explain why their suggestion should be included. We promote positive communication and cooperation. The children then divide the tasks for fulfilling the wish, deciding who will cut, glue, draw, etc.<br>Finally, the children enjoy a classic birthday snack, in which they actively participate in the preparation as much as possible (fruit). |

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| **Feedback and support during the activity** | What can you contribute to the owl's story? What should the story revolve around for Karolína the owl? Where should the story be set? Who might join Karolína in the story? I notice you are negotiating. Does everyone in the group have a role? How can you resolve this if there's any uncertainty? If you're unsure, consider asking a friend for assistance. How can you tell when a wish is finished? What's the next step with the wish? |
| **Questions for reflection** | Have you reached a consensus on the storyline's structure? Were you able to find common ground? Did everyone get a chance to provide input? Was it challenging to actively listen to each other? Did you encounter any obstacles during the creative process, and if so, how did you overcome them? How did you go about decorating the birthday card? What kind of designs did you include on them? How did you arrive at the final format for your wishes? How well did the collaboration among your group members work? Can you recall a situation where you had to seek assistance from the teacher? What valuable lessons did you learn today? Do you believe you can apply these skills in other situations? If so, when and where? |
| **Anticipated challenges and suggestions** | This activity can also be conducted in the outdoor areas of the kindergarten. Provide the children with ample time to contemplate which sentence they would like to contribute to the story and how they want to develop it further. The teacher plays the role of a facilitator, refraining from interfering with the story's content. Instead, the teacher observes the entire situation and assists in finding solutions to any challenges that may arise. |



*Image – Dianka donates a plastic box*



*Image – Greetings from Milky*



*Image – Maťko gives a ball*



*Image – Leila donates a tennis racket*



*Picture – Picture for Marta by Leila*



*Picture – Picture for Marta by Natálka*

## 5.4.12 Four Seasons

| | |
|---|---|
| **Authors** | **Veronika Ojo, Yuliia Barzhak** |
| **Title** | **The carousel of time** |
| **Topic** | **Four Seasons** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Knows and follows the basic rules of dialogue.<br>■ Explains, in their own words, the meanings of words they know (e.g., providing descriptions, using synonymous terms, and also offering negative definitions, i.e., using antonyms, etc.).<br>■ Answers questions about the setting, time, plot, and resolution of the plot, as well as the meanings of words that describe abstract qualities, feelings, and character wishes. They also respond to substantive questions related to informational texts.<br>■ Briefly summarizes the content of the text they've read.<br>■ Names the seasons and demonstrates awareness of changes in nature throughout the year. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | When asking questions in the discussion of weather. It's most effective to inquire about their personal, firsthand experiences with the weather. We also provide verbal encouragement to help them express their own opinions during the activity. |
| **Preparation/materials** | Season/weather images. |
| **Instructions** | Before reading the story 'About the Four Seasons,' the teacher asks: 'How does nature change throughout the year? Which seasons are depicted in the pictures? Please name them correctly.' Appendix 1<br><br>Weather Questions: 'What is the sky? What is the sun? Why does it rain or snow? What is a storm/wind/rainbow...? What do we see outside? What is the sky like? Can you describe it? What was it like yesterday?"<br><br>Match the weather markers to the seasons and explain why you made those choices.'<br><br>Try reciting the seasons out loud to yourself. Today, through a beautiful poem, you learned that the year consists of 12 months, in addition to the 4 seasons. Just as the seasons have their names, so do the months of the year. |
| **Description** | The teacher, in agreement with the children, establishes the basic rules of communication in the classroom (e.g., listen to whoever wants to speak, wait your turn when someone else is speaking, avoid interrupting) and ensures strict adherence to these rules. The teacher engages the children in conversations about the observable changes in nature that result from the shifting seasons. Together, they discuss topics such as rain, wind, and clouds, and they collectively make simple, short-term observations of weather changes. In pairs, the children match weather pictures to specific seasons and explain to each other why they selected a particular weather pattern. |

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| **Description** | Towards the end of the activity, the children work in pairs to create their own signs representing various types of weather (see Annex 3). The teacher reinforces the concept that we experience four distinct seasons every year and helps the children learn the names of the months through a poem. |
| **Feedback and support during the activity** | 1. Who were the characters in the story?<br>2. What was this story about?<br>3. What did you like the most about the fairy tale?<br>4. What is your favorite season and why? Is there a season you don't like? If so, why?<br>5. What other weather conditions could we include in our discussion? Is there any weather that occurs in all seasons? What is the difference between a sunny day in summer and a sunny day in winter?<br>6. Can you recall the months of the year? How many are there? Which one comes first? Did you miss any? Were there truly twelve of them? How can you tell when the seasons change? |
| **Questions for reflection** | Which season was easy for you to describe?<br>Did you collaborate effectively within the group?<br>What was the most challenging part?<br>Were you able to correctly match all the weather pictures to the seasons?<br>Did you experience any confusion or difficulties? |
| **Anticipated challenges and suggestions** | The teacher conducts the conversation in a manner that ensures equal participation from all children. They gently encourage less active children, allowing them the opportunity, space, and time to express themselves, while also offering supportive feedback, including input from other children. |



*Image – Adding tags 1*



*Image – Adding tags 2*



*Image – Adding tags 3*



*Image – Custom weather tag*



*Image – Season*

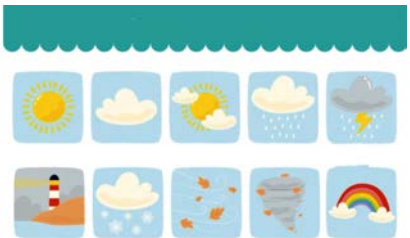

*Image – Tool – Weather*

## 5.4.13 Sport

| | |
|---|---|
| **Author** | **Veronika Ojo** |
| **Title** | **Guess what it is** |
| **Topic** | **Sport** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Pronounce all vowels and vowel groups correctly, clearly, and fluently.<br>■ Express the meaning of words they know in their own words (e.g., describing, using synonyms, as well as providing negative definitions, i.e., using antonyms, etc.).<br>■ Respond to questions related to the text (e.g., events, plot, facts, information, etc.).<br>■ Construct grammatically correct, simple, and well-developed sentences. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Within the class, we primarily choose children who will engage in activities that we are aware will assist them in developing or strengthening their self-esteem. |
| **Preparation/materials** | Pictures of sports (winter and summer), images of real sports equipment, rebus stories (stories with pictures). |
| **Instructions** | Children, today we're having a sports challenge. You and your friends will visit different stations and complete tasks together.<br><br>At the first station, there are various sports pictures. One of you selects a picture from the table and describes what is shown in the picture. Then, mention the sound at the end of the word you used. Based on that sound, come up with a word that starts with the same sound. Then, choose another classmate who identifies the last syllable in your word and creates another word. Keep playing this game like a caterpillar until I tell you to stop. There should be at least 7 children at this station.<br><br>Station 2: You will choose a picture from the table, and your task is to share everything you know about what's in the picture.<br><br>Rebus story: You will read a rebus story. What was the story about? Who were the main characters? Where did the story take place? How many characters were featured? Now, two of our friends will help us speculate about how the story could have ended.<br><br>Your challenge is to describe a sport or a piece of sports equipment that we haven't discussed during today's games, and we will guess what it is. If we can't figure out the sport for a while, you can demonstrate how the athletes move in that sport using your body. |
| **Description** | The children in the classroom have already absorbed information about sports (where it is played, when, how, with what). In the classroom, the teacher will set up different stations where the children can review and consolidate their knowledge about sports.<br><br>The children will move through the activity together, not in groups. |

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| **Description** | At least 7 children will participate in Station 1.At Station 2, 4 children will engage in this game. The pictures depict the sports and sports equipment that the children have been discussing.<br><br>For the 3rd station, the children will read based on the pictures. The teacher selects at least 3 children who are capable of reading a rebus story. After reading the story, the teacher invites at least 2 children to narrate the story, while two other children try to come up with an ending to the story.<br><br>At Station 4, the teacher chooses 4 children to stand in front of the class and, as a group, attempt to describe a sport that hasn't been discussed in the game yet. The children plan in advance what they will demonstrate. If the other children can't guess it, they can also provide a movement demonstration. |
| **Feedback and support during the activity** | Are you certain that's the last syllable of your word?<br>What led you to select this particular word?<br>In what other ways could we describe this picture?<br>How did you determine what to include in the story?<br>Are you certain there were that many characters in the story?<br>I notice that my friends are having trouble guessing your sport. Would you like to attempt demonstrating it through movement? |
| **Questions for reflection** | How did you depict sports?<br>Would you be willing to read a similar story again? What other topics interest you?<br>Was this story easy to read? Why was it easy or difficult?<br>What is your favorite sport? Why do you like it?<br>Do you aspire to become an athlete one day? If so, which sport and why?<br>Is there another image you'd rather describe? Why?<br>How was your teamwork? Did you comprehend each other well?<br>Which task presented the most challenges for you? |
| **Anticipated challenges and suggestions** | For the initial position with a vowel, select words related to sports rather than random words.<br><br>Once a child has chosen a picture, ensure they do not return it to the others but select it in a way that avoids duplication.<br><br>Ensure that the pictures in the rebus story are sufficiently large and sharp to make them clear and easily readable, even for children seated further away from the paper. |



*Image – Sports equipment 1*





*Image – Sports equipment 2*



*Image – Sports equipment 3*



*Image – Sports equipment 4*



*Image – Sports equipment 5*





*Image – Sports 1*



*Image – Sports 2*



*Image – Sports 3*



ŠPORTOVÝ DEŇ V LESE

Obrázok nahraď slovom a prečítaj.

V hlbokom  si spokojne nažívali zvieracie rodinky vo vzájomnom priateľstve. Navštevovali sa, oslavovali spolu narodeniny aj sviatky a každý rok si usporiadali športový deň. Aj minulú sobotu sa na dube už od rána ozývalo krákanie  : „Krá, krá! Milé zvieratká! Všetky vás pozývam na dnešné športové zápolenie!" Zvieratká sa pomaly začali schádzať.  a  vyznačili farebnými  bežeckú trasu. Podľa pravidiel sa behu na 50 metrov mohli zúčastniť iba

štvornohé zvieratká pohybujúce sa na súši. Záujem bol veľký. Najprv dostal každý účastník svoje číslo. Potom sláviky štebotavým hlasom zanótili zvieraciu hymnu a  slávnostne otvoril podujatie. Na pisk jeho píšťalky vyštartovali na cieľ:  a ďalšie zvieratká. Športoví tréneri  i  zaujali svoje miesta na  a pozorne sledovali priebeh zápolenia. Vo vzduchu poletovali  a z kameňov, trávy a stromov sa prizerali  ,  ,  a lietajúci hmyz. Les

naraz ožil a okolím sa ozývalo: „Do toho! Bež rýchlejšie! Hurá!" Nakoniec porota vyhlásila poradie pretekárov. Najrýchlejšie zvieratká si odniesli poukaz na víkendový pobyt vo Vysokých Tatrách, ktorý im darovali  . Medzitým spustili svoje melódie stehlíky a všetci sa dobre zabávali až do zotmenia.



*Image – Rebus story*

## 5.4.14 Animals

| | |
|---|---|
| **Author** | **Zuzana Sádovská** |
| **Title** | **My favorite pet** |
| **Topic** | **Animals** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Come up with and assemble their animal and present it to the other children.<br>■ Connect the individual parts by gluing.<br>■ Complete the shapes by drawing.<br>■ Name the result.<br>■ Cooperation in a group, emphasis on the verbal part. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The teacher should create an appropriate communication environment for the child. It is essential for children to communicate with each other. The child should learn to listen, perceive others, and be able to respond to questions. |
| **Preparation/materials** | Pictures (eyes, ears, beak, snout) of various colors, shapes, and sizes, drawings/glue, scissors, crayons, storybook "What Kind of Bird is This?" |
| **Instructions** | I will read you a fairy tale, listen carefully and choose the animals from the pictures that you hear about. Were you able to follow the fairy tale? Why did the goose decide to change different parts of its body? How did the individual parts change its appearance and how could they help it in life? Would you like to exchange any body parts on yourself?<br><br>Now, we will divide into small groups, and you will try to create your own unique animal together. You have various body parts of different animals prepared in front of you. You can choose and assemble them as you agree within the group. If you are missing a certain part, you can draw it on the blank paper provided. Then, glue the entire animal onto a large white sheet of paper. While creating, think about how you would describe your animal, what it can do, where it comes from, whether it has special qualities, or even what its name is. In the end, you will introduce your new creatures to each other. Coordinate within your group, assign tasks, and collaborate so that everyone participates. |
| **Description** | During the reading of the story, the children select the animals mentioned in the story from the pictures prepared in advance by the teacher. After reading the story, they discuss it together, focusing on the story, character traits, and the main plot. They explore why the goose decided to change different parts of its body, how each part altered its appearance, and how these changes could have helped it in life. Find out if the children would like to exchange any parts of themselves and why. |

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| **Description** | Then, the children sit at a table with various body parts of different animals in front of them. Their task is to assemble an entirely new animal and give it a name. The finished animal must be glued onto a white A4 drawing. Then, they introduce or write to their classmates why they chose different body parts for their animal, what it eats, where it lives (forest, glacier, sea, etc.), and whether it has any special abilities. |
| **Feedback and support during the activity** | Do you want the animal to be big or small? Why? Do you want it to have feathers or fur? Why? How many legs do you think is best to have? Why? Create your own animal according to your imagination. I can see you're trying to negotiate. Is it working for you? Do you need some inspiration? Try sharing your ideas with each other. |
| **Questions for reflection** | Was it difficult to come up with your own animal? How did you negotiate during this process? Were you able to listen to each other? Did you manage to divide tasks among yourselves? Did someone take on a leadership role to help organize the work on creating the animal? How do animals like this live? Why is it good to have two beaks, six legs...? |
| **Anticipated challenges and suggestions** | During the activity, the teacher ensures that the children create unique animals and not copies from other groups or copies of real animals. She encourages their own creativity and motivates the group to be unique. |




*Source: V.G. Sutějev: Fairy Tales and Pictures – What Kind of Bird Is This?*



*Image – Animal 1*



*Image – Creation*



*Image – I'm done*



*Image – My pet*



*Image – Animal 2*



*Image – Animal 3*



*Image – Assembling*



*Image – Modelling a new animal*



*Image – Dianka has already finished*



*Image – Wooden puzzle 1*



*Image – Wooden puzzle 2*

## 5.4.15 Child's life events

| | |
|---|---|
| **Authors** | **Zuzana Sádovská, Yuliia Barzhak** |
| **Title** | **Butterfly´s life** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Actively and spontaneously initiates verbal contact with other individuals – both children and adults.<br>■ Responds to non-verbal signals (gestures, facial expressions), maintains eye contact, and adjusts the volume of speech to the situation.<br>■ Adapts language usage to social situations.<br>■ Perceives and responds according to verbal instructions. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | If children with difficulties are not actively engaging, we use direct questions to involve them in the conversation. |
| **Preparation/materials** | Butterfly garden. |
| **Instructions** | We have two butterfly gardens. Without our care, the butterflies won't develop. We'll divide into two groups by drawing. Each group will be responsible for one garden. Let's draw a paper butterfly and hide it in your hand. Show what color you have. Walk among your friends and group yourselves by colors. Now, we need to find out how to take care of the butterflies. Where could we find this information? Does anyone have any ideas? Encyclopedias and the internet will help us. What else do we need to prepare? We also need to create an observation chart, assemble the butterfly garden, and place the butterfly larvae. When, who, and how will observe and monitor the butterfly's growth? Discuss within your group how you will proceed in gathering information, divide tasks, and then you can get to work. This will be a task for an extended period. We will assess our observations regularly during meetings. Always inform us if something interesting happens in your garden. Record in the chart how the appearance of the future butterfly changes. When the butterflies hatch, we will observe them for a few days and gather more interesting information. Finally, we will organize a ceremonial release of the butterfly into the wild. |
| **Description** | Over the course of several weeks, the children take care of the butterfly larvae. They collaborate in preparing the activity, divide tasks, and monitor the progress of this long-term task. The teacher assists the children in finding the necessary information and keeps them engaged and interested with appropriate questions. The children try to independently organize the activities related to caring for the butterfly garden. In the end, they decide on the format of the ceremonial release of the butterflies. The entire day can be organized as a celebration, planned by the children according to their ideas. |
| **Feedback and support during the activity** | Were you able to divide the tasks within your group? Do you think you now know everything you need for taking care of the butterfly garden? How did you arrange the shifts for caretaking? Do you know what each person needs to do? Children, have you already looked at our butterfly farm today? What's new there? |

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| **Feedback and support during the activity** | Have you remembered to record your findings in the table? I see that you're discussing butterflies with your friends. Have you discovered anything interesting? Could you share it with the other group? Have any butterflies hatched yet? What do they look like? Where can we find more information about them? Who is responsible for this part of the task? Have you discussed within your group how you'll release the butterfly? Do you want to organize a celebration for others, or will it be a simple release? If you need any help with anything, do you know where to turn? |
| **Questions for reflection** | How did you perceive this long-term task? What was the most interesting part of it? Was it challenging to maintain interest and attention for such a long period? Were you successful in working as a group? What problems did you encounter, and how did you solve them? Did you experience any interesting situations that you'd like to share with others? What have we learned during this time? Which tasks were the most difficult? Could you describe all the things you had to manage? What was it like to release the butterfly at the end? Did you have any thoughts or ideas during that moment? |
| **Anticipated challenges and suggestions** | Due to the time-consuming nature of the task, it is necessary to regularly communicate with the children, encourage their activity, and continue with related activities on the same topic. In the case of children being absent from the class (due to illness, etc.), teachers respond to the current situation by involving the children in different ways in the groups. They then inform each other about what is happening in the class and what the groups are working on. |



*Image – Our caterpillars*



*Image – Our little caterpillar*



*Image – We observe butterflies*

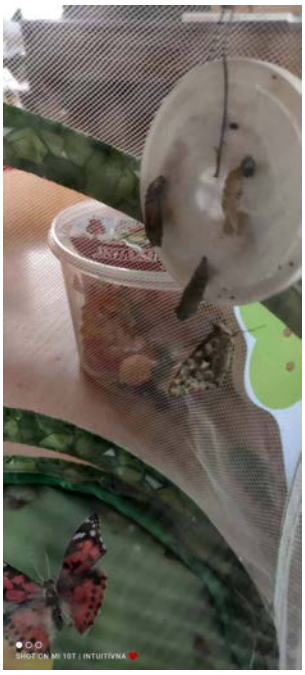

*Image – In a moment there will be a butterfly*



*Image – Food for butterflies*



*Image – Our first butterfly*

## 5.4.16 Safety in road traffic

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|---|---|
| **Author** | **Julijana Kološa** |
| **Title** | **A story in pictures** |
| **Topic** | **Safety in road traffic** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Fostering language and communication skills.<br>■ Reviewing the importance of traffic safety.<br>■ Recognizing dangerous situations in traffic.<br>■ Developing attention. |
| **Age of children** | 4–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We show children various pictures and materials depicting dangerous traffic situations. The children engage in conversation while observing the visual materials. We encourage children who speak in a foreign language to share their thoughts in their mother tongue. If they do not perceive the depicted situation as dangerous, we prompt them to describe the pictures. We encourage active observation, independent speech, and participation. |
| **Preparation/materials** | Visual materials with dangerous traffic situations for pedestrians, a road map, toy cars, figurines, and traffic signs. |
| **Instructions** | Our topic today is traffic safety. *What do we already know about traffic safety? How do we behave in traffic? What is important? What should we pay attention to? Where should we be when walking on the road? Why?*<br><br>To explore the topic further, we have prepared visual materials showing different dangerous situations for pedestrians. We ask the children to carefully observe the pictures and point out any peculiarities or hazardous situations to their friends. We encourage them to actively participate and comment in groups.<br><br>Next, we provide each group with road maps, cars, and figurines of people. The children will have the opportunity to recreate scenes from the visual materials on the road map, demonstrating the correct behavior for traffic safety to their friends. Through symbolic games and group interactions, they can act out different traffic situations. |
| **Description** | Each group chooses its own visual materials. During the observation, they revise their knowledge of traffic regulations, talk about traffic signs, recognize them, share experiences, make suggestions and predictions. They actively listen to each other, pointing out and presenting dangerous events on the road. Educators monitor the progress of the activity and get involved only at the request of the children. |
| **Feedback and support during the activity** | *I see that you work and play together well. You can also reach agreements*.<br>The educator encourages the children to observe the visual materials, and gives them ample time to carefully look at the pictures and to describe dangerous traffic situations. They offer them the opportunity to share thoughts and experiences, and to develop language skills. They further motivate and encourage children by praising them. *You observe well. Well done! Good thinking! Don't forget to pay attention. I see you would act wiser in such a situation*. |

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| **Questions for reflection** | What do you notice in the picture materials? What happened? Did the people in the picture do the right thing? Yes? Why? No? Why not? How should we act? What can those people do next time? What should they pay attention to? How would you act? How would you help them? Who would you warn this about? |
| **Anticipated challenges and suggestions** | Observation of visual materials is carried out in a calm environment, within a small group. We encourage the children to express themselves and to communicate. We discuss dilemmas and help children understand the visual materials. We adjust how long and in what manner we observe visual materials to suit the child's abilities. We encourage each child to speak independently to the best of their abilities. |
| **Appendix** | Retrieved 18/04/2023 from: https://staywise.co.uk/public/resource/interactive-spot-the-difference-road-safety<br><br>Retrieved 18/04/2023 from : https://www.postojna.si/Datoteke/Slike/Novice/78573/l_78573_1.jpg |



*Appendix 1 – Sharing thought and experiences in a group while viewing the visual materials*



*Appendix 2 – Educational materials for recreating situations from the visual materials*



*Appendix 3 – Conversation about traffic safety while demonstrating a situation from the visual materials*

## 5.4.17 Materials and their properties

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|---|---|
| **Authors** | **Sumedija Agić, Špela Dovjak** |
| **Title** | **Syllabification** |
| **Topic** | **Materials and their properties** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Developing syllabic skills and phonological awareness.<br>■ Matching the number of syllables with the appropriate number of dots and practicing sorting.<br>■ Encouraging cooperation and tolerance in the group. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children are divided into smaller groups. Additional individual assistance is provided for children who do not understand the language or have language deficits. Cards with photos of objects made of different materials and multilingual names are used for this purpose. The educator clearly pronounces challenging words several times and encourages other children to try to do so as well. It is important to consider adjusting the pace of activities for children with disabilities who may require more time to understand and complete tasks. |
| **Preparation/materials** | For the activity, we utilize pre-prepared cards containing pictures of objects made of various materials. On the back of these cards, there are numbers and dots indicating the number of syllables. We also use a syllable table. |
| **Instructions** | Our topic is materials and their properties. So far, we have learned about various materials. Can you recall the material that stood out to you the most? Is there any material that you find difficult to pronounce? Which one is it? If you can't remember what it's called, you can search for it in the playroom and show it to a friend. Do they remember the name of the material?<br><br>Today, we will focus on chunking syllables, syllabifying. Do you know what that means? What is a syllable? (A syllable is the smallest part of a word.) How are words formed? Can you explain the difference between a letter and a sound? (A letter is what we write, a sound is what we hear.)<br><br>First, try to syllabify your own name." The educator also uses their own name as an example to illustrate how syllables are chunked. "Syllabify together shorter, then longer words to make the task easier.<br><br>Next, divide into smaller groups. Each group will receive several cards with pictures of objects made of different materials, along with a table. You will divide the tasks within the group so that everyone participates. Everyone chooses a card and names the material from which the object in the picture is made of. If someone is unsure about a material, talk it through with each other and find a solution. The child who selected the card will then name the material, attempt to identify the first and last sound in the word, then syllabify the word by clapping for each syllable. The other children will check the syllabification and count the number of claps to determine the number of syllables in the word. Finally, sort the cards in the syllable table. The syllable table consists of multiple columns, each with dots indicating the number of syllables (the first column has 1 dot, the second has 2 dots, and so on). Sort the cards based on the number of syllables and then verify if you have sorted them correctly by checking the number of syllables indicated on the back of the card. |

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|---|---|
| **Instructions** | To further enhance the task, you can try to find another word that starts with the same sound as the word you spelled. You can also look for a word with the same number of syllables as the word on your card. |
| **Description** | The educator introduces children to syllabification and sounds in words. First, choose two-syllable words, and then gradually progress to longer ones. Initially, the children should syllabify together with the educator and identify the first sound in each word. This process will help the children become aware of syllables and sounds in words.<br><br>Next, we prepare cards with pictures of objects made of different materials and encourage the children to syllabify. The children should accompany their syllabifications by clapping. |
| **Feedback and support during the activity** | Are you quiet enough so as not to disturb others while working? Are you checking if you syllabified and counted the syllables correctly? Is everyone active in a group? Can everyone in the group agree on the first sound of the chosen word? |
| **Questions for reflection** | Did you find the task difficult? What was the most challenging task, and what was the easiest? Which column in the table is the fullest? Are the columns of the other groups filled in the same way? How do you help each other when someone is in trouble or doesn't know how to syllabify a word correctly? What helped you better understand how to syllabify words? How do you know if you spelled a word correctly? How could you improve work in your group? What could you do differently next time to better understand the first sound in the word? |
| **Anticipated challenges and suggestions** | We recommend reminding children in groups to listen to each other and to verify the number of syllables. We should also encourage them to actively participate and provide them with positive reinforcement for their efforts. |



*Appendix 1 – Giving instructions*



*Appendix 2 – Naming materials*



*Appendix 3 – Syllabifying*



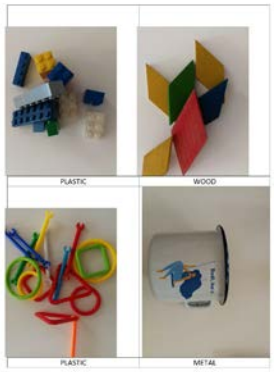
*Appendix 4 – Counting syllables*



*Appendix 5 – Sorting 1*



*Appendix 6 – Sorting 2*



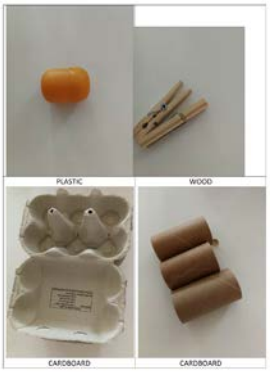

*Appendix 7 – Cards with different materials 1*




*Appendix 8 – Cards with different materials 2*




*Appendix 9 – Cards with different materials 3*




*Appendix 10 – Cards with different materials 4*




*Appendix 11 – Cards with different materials 5*




*Appendix 12 – Cards with different materials 6*




*Appendix 13 – Cards with different materials 7*




*Appendix 14 – Cards with different materials 8*




*Appendix 15 – Cards with different materials 9*




*Appendix 16 – Cards with different materials 10*

## 5.4.18 Healthy diet

| | |
|---|---|
| **Authors** | **Sanja Marinšek, Barbara Bednjički Rošer** |
| **Title** | **Preparing a healthy drink** |
| **Topic** | **Healthy diet** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Identifying and naming words for fruit and other utensils.<br>■ Creating a picture recipe (multimodal text).<br>■ Identifying and writing letters and numbers.<br>■ Reading multimodal text.<br>■ Formulating instructions. |
| **Age of children** | 4–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Use of visuals (e.g. posters on the wall, pictures of ingredients and utensils used to prepare the drink).Individual repetition of instructions, directions, multilingual picture books, picture dictionary. |
| **Preparation/materials** | Blender, knives, cutting boards, jars, bowls for fruit, milk, bananas, apples, pears, mint leaves. |
| **Instructions** | ■ Start a conversation about healthy eating. See what children already know about it. Ask if they know the food pyramid and what it means.<br>■ What do you already know about healthy eating? Does anyone know the food pyramid? What does the food pyramid mean? Why is it important to eat fruit and vegetables every day? Which foods contain vitamins? Which foods give us strength and energy to be active all day? Is it healthier to eat raw or cooked food? Why do you think so?<br>■ Encourage children to share their experiences of drinking fluids. Ask them what they like to drink and why it is important to drink enough fluids.<br>■ What do you like to drink? What is the best liquid to drink for good health?<br>■ With the children, name the food items next to the food pyramid on the wall (poster).<br>■ We visit the local market and choose seasonal fruit to make a healthy drink.<br>■ The children are divided into small groups (up to 5 children). In the group they create a picture recipe to guide them in making the drink. The children discuss, divide the tasks and work together on the preparation - wash, clean and cut apples and pears, peel and cut bananas into large pieces. With the teacher's help, they chop all the ingredients to make a drink. The drink is poured into glasses and decorated as desired, e.g. with pieces of fruit and mint leaves from the nursery's organic garden. |
| **Description** | In small groups, the children talk about healthy eating, name ingredients and utensils when preparing the drink.<br>They follow the steps of an illustrated recipe.<br>They are encouraged to taste and smell all the ingredients and describe their smell and taste.<br>After the activity, the children describe the process of making a healthy drink in a discussion. |

| | |
|---|---|
| **Feedback and support during the activity** | The children expand their vocabulary during the activity (e.g. peel, stone, skin, drink, glass, fruit colours).<br>The teacher gets an insight into the children's knowledge, identification of fruit, expression, memorisation, following and understanding instructions.<br>Do you have enough fruit? Do you need more cutting boards? Be very careful when cutting the fruit. You have cut the fruit nicely, taste it and tell me how it tastes? How does the milk, the banana, the mint smell? Do you need help? |
| **Questions for reflection** | How did you agree and divide the tasks? How do we behave when cutting with a knife? Would you be able to make your own fruit drink at home? What is your favourite ingredient? What was the biggest challenge in making the drink? And why? What else could you prepare in kindergarten? |
| **Anticipated challenges and suggestions** | The blender is only used by the teacher (adult). Children can only put fruit in the blender in the presence of an adult. We use seasonal ingredients. The children's parents may be invited to participate. The children are encouraged to prepare the ingredients for the fruit drink and decorate it themselves. |



*Appendix 1 – Creating a pictorial recipe for a fruit drink*




*Appendix 2 – Pictorial recipe*



*Appendix 3 – Preparing the fruit*



*Appendix 4 – Preparing the ingredients in the blender*



*Appendix 5 – Making a healthy drink (mixing the ingredients to make a drink)*



*Appendix 6 – Tasting the healthy fruit drink*

## 5.4.19 Traditions and folk tales

| | |
|---|---|
| **Authors** | **Špela Petrovič Štempihar, Alekseja Glinšek** |
| **Title** | **Creating a fairy tale** |
| **Topic** | **Traditions and folk tales** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Developing and expanding vocabulary.<br>■ Forming meaningful sentences, fostering verbal expression, and stimulating the children's imagination.<br>■ Describing pictures using visual templates and illustrations, promoting storytelling.<br>■ Developing language skills, including grammar and communication, and fostering pre-reading and pre-literacy skills.<br>■ Creating a positive impact on the development of emerging literacy through various components of children's speech, such as vocabulary, metalinguistic awareness, and storytelling. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We actively involve children who speak foreign languages by developing and scaffolding areas that are challenging to them. Before carrying out the activity, we encourage them to look at the pictures and describe them in their own words. |
| **Preparation/materials** | Cards with pictures of animals, people and objects that are in the fairy tale: bears, a girl, chairs, tables, beds, spoons, bowls, a house, a forest, a path, and trees.<br>We should provide a calm and peaceful environment for the activity. |
| **Instructions** | We tell the children that they will work together to create their own unique fairy tale. It doesn't have to follow the storyline of a familiar fairy tale; in fact, it's encouraged to be completely different, innovative, and even unconventional.<br>Have you ever created your own story? Maybe you've tried drawing it or telling it to someone? To whom? Did you enjoy the experience? Do you still remember the story? Share your story with us.<br><br>The children are paired up, and each child selects a few pictures cards. The first child places one of the cards on the table and starts telling a story based on that picture. Then it's the turn of the next child, who selects another card, places it on the table next to the previous one and continues the story. The children take turns adding new cards and inventing original sentences to weave together a captivating story until they've used all their cards. They can then shuffle the cards, rearrange them, and create a new story. |
| **Description** | During storytelling, we encourage the children to unleash their imagination and come up with novel and intriguing ideas. We also emphasize the importance of helping each other by suggesting different ideas.<br><br>When the picture cards run out, the children can get creative by making their own cards. They can cut out square-shaped cards and draw various objects, people, or animals on them. They then pair up and exchange cards with each other, taking turn telling stories based on the new cards. |

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| **Feedback and support during the activity** | If a child cannot continue the story, the others can help them with hints and encourage them to continue. We offer vocabulary support mainly to children with a weaker vocabulary. We involve children as much as possible and encourage them to form sentences. |
| **Questions for reflection** | What have you discovered about yourself? Do you enjoy making up stories? What did you like most about it? How do you think your story could be made even more interesting? |
| **Anticipated challenges and suggestions** | For children speaking foreign languages, it is recommended to start with a smaller number of cards, perhaps just two, and gradually add more. It is important to ensure that the children do not interrupt each other and allow the child whose turn it is to think and speak. This encourages patience. Creating a stimulating and calm environment is also beneficial for their participation. |
| **Appendix** | https://en.wikisource.org/wiki/Trije_Medvedi<br>Visual materials:<br>Three Bears Clipart:<br>Download Free High-Quality Three Bears Clipart (clipart-library.com)<br>Goldilocks and the Three Bears Small World Characters (twinkl.si) |



*Appendix 1: Viewing the pictures from the fairy tale The Three Bears*



*Appendix 2: Discovering and selecting pictures*



*Appendix 3: Helping with storytelling*



*Appendix 4: Creating your own story with selected pictures – 1*



*Appendix 5: Creating your own story with selected pictures – 2*

## 5.4.20 Child's life events

| | |
|---|---|
| **Author** | **Karmen Meško** |
| **Title** | **Winter riddles** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Language** |
| **Objectives** | ■ Development of auditory perception of language.<br>■ Development of auditory attention.<br>■ Vocabulary expansion.Sentence formation.<br>■ Development of cognition in connection with auditory perception. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We divide the children into smaller groups.<br><br>We prepare visual materials, a USB drive, and a radio for each group. We check if they know how to use the USB drive. We suggest that each group chooses an individual who will oversee playing the recordings from the USB drive. We demonstrate its use and recommend rotating roles once the task is completed.<br><br>We encourage the children to take a good look at the visual materials.<br><br>We encourage them to use the radio independently, insert a USB drive into it and listen to the riddles. They try to find the answers to each riddle using the prepared visual materials. They arrange the pictures in the correct order.<br><br>To prevent distractions during the activity we divide the children into separate corners. We also ensure that they don't turn the radio volume too high. Headphones could also be provided.<br><br>If there are children with limited vocabulary in the group, they can help themselves with hints (e.g., additional pictures or choosing between two options). |
| **Preparation/materials** | Riddles about the season (WINTER), radio, USB drive, visual materials. |
| **Instructions** | Our theme for today is life events. We will be playing a riddle game. Your task is to listen to the riddles attentively and try to guess the answers. The provided visual materials can help you with your guessing. As you make your guesses, think about the relations between the riddles. How are items related to one another? Arrange the visual materials of the riddles in the correct order. You can organize the materials into rows or columns. Do you know what a row is? Do you know how to sort things in a row? Do you know how we sequence in a column? I wish you successful work, and if you need help, just call me.<br><br>First, you decide among yourselves who will oversee playing the recordings. Then, discuss each riddle and find the solutions together. During the activity, think about what connects the riddles. When you're done, exchange the USB drive with the next group, switch roles, and continue with the riddles. |
| **Description** | We present the children with visual materials, a radio, and a USB drive. We encourage them to insert the USB drive with uploaded audio recordings of riddles into the radio and use the radio independently. We suggest that they listen to the riddles multiple times and look for solutions among the visual materials. For example:<br><br>1. "*It is round, cold and everyone is afraid of it when it rushes in your direction.*" (Answer: a snowball). |

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| **Description** | 2. "*He stands there and holds a broom in his hands, and if you hug him, he melts.*" (Answer: a snowman).<br>3. "*I wear it on my head because my ears are cold. In summer it's in the closet because I don't need it*" (Answer: a cap).<br>4. "*It's prickly, but not a hedgehog. In winter it remains green.*" (Answer: spruce tree).<br>5. "*When its time comes, it brings us cold and snow and freezes everything in place.*" (Answer: winter), etc. |
| **Feedback and support during the activity** | We encourage the children to listen attentively to the riddles. If needed, we recommend that they listen to the riddles multiple times. We suggest that they make use of the provided visual materials, as they can be particularly helpful in identifying relations between riddles. |
| **Questions for reflection** | What was the most challenging part of the assignment? How did you find the solutions to the riddles? Did you switch roles? Could you put together a riddle yourself? Try to come up with a riddle and draw its solution on a blank card. |
| **Anticipated challenges and suggestions** | If the children are unable to solve the riddles, we provide them hints. Through conversation, we encourage them to discover on their own that the riddles relate to seasons. Additionally, we reinforce the characteristics of each season and prepare riddles for each season in the upcoming days.<br>Activities can be designed to accommodate group work, paired work, or individual work based on our assessment of the children's needs and their needs for differentiation. |



*Appendix 1 – Familiarization with the use of the USB drive and the radio*



*Appendix 2 – Using a USB drive and listening to audio recordings of riddles*



*Appendix 3 – Searching for solutions via visual materials*



*Appendix 4 – Audio riddles (talking and finding solutions)*

# 5.5 Perception

## 5.5.1 Everybody is different

| | |
|---|---|
| **Authors** | **Sabina Plechingerová, Naděžda Husová** |
| **Title** | **Know who this vote belongs to** |
| **Topic** | **Everybody is different** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Developing auditory perception.<br>■ Intentionally concentrate on an activity and sustain focus throughout.<br>■ Make voluntary efforts and maintain concentration to complete tasks.<br>■ Follow and learn from directions and instructions.<br>■ Utilize all senses for perception and discrimination, including auditory discrimination of sounds and tones.<br>■ Solve problems, tackle tasks and navigate situations with creativity, and express ideas. |
| **Age of children** | 4–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Begin the activity with a group of three children, and adjust the group size based on their abilities, with a maximum of 4-5 participants.<br><br>Variations to increase difficulty include:<br><br>■ Having children identify who said each word.<br>■ Having children identify the order in which the other group spoke.Having children guess the recordings of children from the same class.<br>■ Having children identify the recordings of children from another class.<br>■ Having children identify the voices of the teachers.<br><br>Emphasize the 'uniqueness of children' as appropriate to the situation. For instance, the teacher may say, 'In each group, there will be one child who wears glasses,' or 'In one group, there will be a child with glasses, while in another, there will be a child with black hair,' and so on. The teacher's goal is to ensure that children are evenly distributed across all groups. |
| **Preparation/materials** | Tablet, or photos of children. |
| **Instructions** | We're exploring the concept of uniqueness today. What have you already discovered about uniqueness? Can anyone share what you've learned so far? You mentioned that every person and creature is unique. I'm particularly interested in the topic of voice. What are your thoughts on this? How about the voices of animals? It's not just animals or insects that have distinct voices. Today, we'll put this to the test. Who here can identify a friend just by their voice?<br><br>What cues do you look for? Why is it sometimes challenging to determine who's speaking behind a closed door? Can anyone imitate a friend's voice? Can you demonstrate? How about mimicking the voice of someone you know? Do you know what we call someone who can imitate the voices of people or animals? It's an impersonator. Let's say that word together three times. However, today, you won't be impersonators; instead, you'll try to recognize your friends by their voices. |

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| **Instructions** | Now, let's divide into groups. Within your groups, brainstorm names of insects that align with our current class topic. Each group should come up with one word. We'll record these words one at a time on the tablet. As a group, decide on the order in which the words will be recorded. Do we have any tablet experts here? Can you demonstrate how it works? Who knows how to start and stop the recording? If you need to review the recording, you can listen to it and re-record if necessary. I understand you've completed your task and are ready to record. Please pass the recording to another group.<br><br>**GUESSING ASSIGNMENT:** You each have a tablet in front of you with a recording of words from another group. Play the recording as needed. Collaborate as a group to determine who is speaking each word and arrange the photos of your friends according to your beliefs about who is speaking behind you. Can someone summarize the assignment? Work together and reach a consensus. |
| **Description** | The teacher gathers the children in a circle to engage in a discussion about the concept of uniqueness. During this discussion, the teacher employs open-ended questions to encourage the children to share their thoughts and insights on the uniqueness of voices in both humans and animals.<br><br>Following this discussion, the teacher assigns a task, and the children are divided into groups according to the provided instructions. The groups assigned to guess the voices relocate to a separate area, ensuring they cannot see or hear the recording of the words. Meanwhile, the remaining groups are provided with a tablet.<br><br>The teacher provides clear instructions to the group responsible for recording the words. The children within this group collaborate to decide on the words they will use, determine who will say each word, and establish the sequence in which they will record them. The teacher ensures they understand the tablet's functions, enabling them to record their voices effectively. They have the flexibility to review and re-record their recordings as needed. Once the recording is complete, they pass the tablet, which contains the finished recording, to the group assigned to guess.<br><br>The guessing group listens to the recording, playing it as many times as necessary, and works collectively to identify which friend in the group said each word based on their listening.<br><br>The children employ various methods to check the accuracy of their guesses. For example, they may ask the child identified as the speaker to confirm or deny the claim. Additionally, they can arrange the photos of the children in the order they believe the words were recorded and cross-reference their findings with the other group to ensure accuracy.<br><br>Within the group, the children agree on a form of visual support, such as having the guessed child stand up, to signify their guesses. |

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| **Feedback and support during the activity** | Which words did you select, in line with our current topic? What strategies can you employ to ensure clarity in both the words and the recording? I've noticed that you are proficient at operating the tablet and recording words. Can you share your knowledge with others? How does the recording function work? How can you adjust the volume and enhance recording quality? What methods do you have to ensure unanimous agreement within your group? What agreements did you establish as a group? What would assist you in tracking which guesses have already been made? How do you organize among yourselves to ensure everyone has a turn? How can you ensure that only one person's voice is consistently clear and understandable? Describe your recording; did each person say only one word, or was there a different approach? If it was not one word per person, how do you manage this situation? Whose voice was the first one on the recording, and where should their photo be placed? Can you identify any mistakes? |
| **Questions for reflection** | How did you manage the rotation within your group? Were there any challenges you encountered? Did anything surprise you during this activity? Did you acquire any new knowledge? How challenging do you think it would be to recognize a friend from another class on the recording? What could have aided you in identifying them? How about getting to know the teacher through their voice? |
| **Anticipated challenges and suggestions** | The challenge to be aware of is having a larger number of children in the group initially and the possibility of the teacher's excessive involvement, which might hinder cooperation among the children.<br><br>To address this, it's important to reinforce the importance of cooperation among the children. Ensure that each group includes at least two children who are familiar with tablet operation. Allow the children to practice and repeat the recording process as needed. The teacher should guide the children to ensure they all have equal opportunities to participate actively. |



*Image – Grouping*



*Image – Assignment (instructions from the teacher)*



*Image – Recording*



*Image – Listening to the recording*



*Image – Cooperation in the arrangement*



*Image – Assigning voices*

## 5.5.2 What I like to play with

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|---|---|
| **Authors** | **Naděžda Husová, Věra Isáková** |
| **Title** | **The magic of fruit** |
| **Topic** | **What I like to play with** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Express independent and meaningful thoughts, ideas, feelings, opinions and judgments in appropriately worded sentences.<br>■ Developing visual perception.<br>■ Fostering auditory perception and phonological awareness.<br>■ Focus on an activity and maintain attention.<br>■ Understand spatial concepts (right, left, bottom, top, middle, behind, under, above, near, beside, between, etc.).<br>■ Be aware of one's own independence, take and express one's own opinions and attitudes.<br>■ Exercise one's individual needs, wishes and rights with respect to others (defend one's own position or opinion, respect another's position or opinion), accept and compromise, resolve conflict by agreement. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We'll divide the kids into research teams, where the ideal number is 5 children. The teacher hangs a pictogram of a light bulb with a specific colour around the neck of the children with difficulties. The teacher turns the other bulb cards with the captains' colors face up and has the children select them. They are assigned to a group with the same bulb color. They all hang the cards around their necks. |
| **Preparation/materials** | Jumper wires, metal nails or clips and pins (copper and zinc), LED, different fruits, card to record the experiment, cut cards of light bulbs on/off and fruit pictograms, writing utensils, knife, glue, different types of batteries to demonstrate, instructions for connecting the fruits, cards to divide into groups (with string around the neck). |
| **Instructions** | **Day one:** The topic we talk about is the game. What can a game be? What is your favourite game? And your favorite toy? What toys do you know? And how do these toys work? What is the function of the battery in them? What can the toy do with the help of the battery?<br><br>You have a game in front of you that needs a power source to work. What is a power source? Try this game. What would happen if you took the battery out? What other games or toys need a power source – a battery – to work? What kind of batteries do you know?<br><br>You have found that some games and toys need a power source to work. The power source can be a battery. There are many kinds of batteries. Does anyone know what a battery contains? It contains a very strong and dangerous liquid called acid. It makes the battery a source of energy. Think about it. What else contains some acid? What's acidic around you? Could it be fruit? What kind? You've listed the fruits that are acidic. Do any of you have an idea what would happen if you used a lemon or an apple instead of a battery? |

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| **Instructions** | **Day two:** Who can repeat what you learned yesterday? Together, we bought a selection of fruit. Why? What did you agree on yesterday?<br><br>In groups, you will do an experiment today. Your task is to find out which fruit will light up the light bulb in your toy and which will not. Divide into research teams according to the colour of the bulb on the card you have around your neck and work together in teams so that everyone has a task. Each group has a pictorial guide in front of them on how to connect the wires, terminals and diode. There is a bowl of fruit at the station. Each team chooses 4 different kinds and tests to see if the bulb lights up. You will record the experiment on the cards provided. In the first column, label the fruit you have chosen, in the second column record your prediction of whether or not the bulb will light up, and in the third column record what you have found from the experiment. There is also a help station where you will find a tablet with a video showing you how to proceed. However, please only use this station if no one in your group or another group can help you. Work together in groups. Divide your roles and work together on the experiment.<br><br>We will then compare all the results and check that the experiment is correct. See if you can light up your toy. |
| **Description** | **First day:** Children sit in a circle where they develop the theme of games and toys together. With open-ended questions, the teacher focuses on the development of thinking towards energy sources for games and toys. Children try to work with a game that works only with the help of batteries. Shows children the real sizes of batteries (pencil, micro-pencil, hour (flat, 9V).<br><br>The teacher summarizes the information they learned together. Continues the theme. They gradually come to the fact that they can find acid in fruit, among other things, and therefore fruit contains acid.<br><br>The teacher lets the children think about what will happen if they plug in a fruit instead of a battery. The teacher reacts flexibly, suggesting the purchase of the mentioned fruit and the experiment.<br><br>**Second day:** The teacher lets the children recall what they learned the previous day. Children are divided into research teams. Each team receives an experiment guide and a record card. The teacher explains how to record the experiment on the card. Children work together in a team. They agree on roles and work together on the given experiment. |
| **Description** | There is a help desk in the classroom, where there is a tablet with an instructional video. It is indicated by a lit bulb. The teacher of the group points out that they can only use the help desk if a friend from his or another group is unable to give them advice.<br><br>The groups compare the record cards with each other and evaluate the experiment. They find out if the fruit can light up their toy. |
| **Feedback and support during the activity** | The bulb is not lit, what could it mean? What will you do with it? How do you solve it? What happens if you don't follow the procedure and instructions? Can someone from another group advise you? Where can you find the help desk? How do you recognize him? How do you record the experiment on the card? Why do you assume the light bulb will light up/not light up? Why do you think this type of fruit doesn't light up/light up? What was your estimate and what was the fact? |

| | |
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| **Questions for reflection** | How did you work according to the instructions?<br>What fruit did you choose for your experiment?<br>Did you have any problem during the experiment?<br>How did you solve it?<br>What was difficult for you? Why?<br>What tools did you use?<br>Can you name them?<br>Is there anything that surprised you?<br>What interested you? |
| **Anticipated challenges and suggestions** | Remind children to work in teams. Remind children that everyone in the team has a role and that one child cannot do everything. Work with precision and care.<br><br>Children cooperate with the error (find out why the light bulb doesn't light up and fix the problem). |

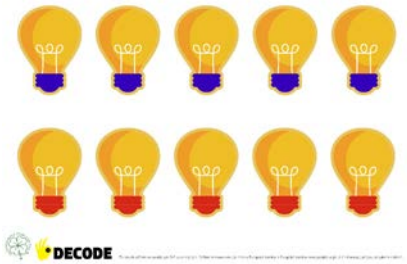


*Image – Colored Light Bulbs to Distribute to Research Teams*

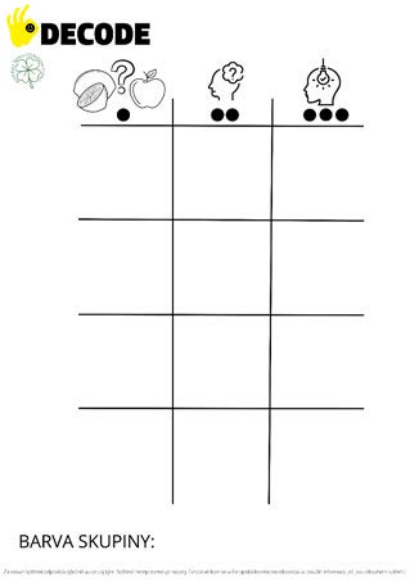


*Image – Card to record the attempt*

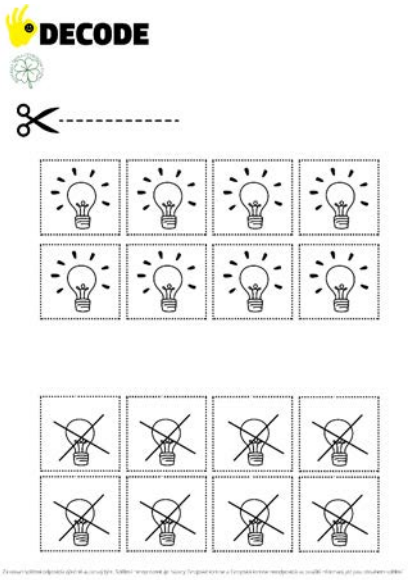


*Image – Light bulbs on and off flashcards, cut-out fruit pictograms*

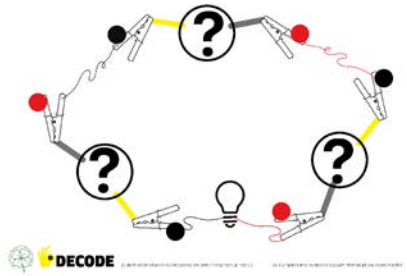


*Image – Instructions for connecting fruits*



*Image – Selection of fruit*



*Image – Engagement Team Collaboration*



*Image – Engagement Cooperation – Banana*



*Image – Engagement Cooperation – Lemon*



*Image – Evaluation of the lighting of the toy*

## 5.5.3 The water around us

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| **Authors** | **Marcela Dietlová, Naděžda Husová and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **Ohře river** |
| **Topic** | **The water around us** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Perceive and distinguish using all the senses (e.g., hearing to distinguish sounds and tones, visually distinguishing the shapes of objects and other specific signs, distinguishing smells, tastes, perceiving by touch, etc.).<br>■ Express thoughts, ideas, feelings, opinions, and judgments independently and meaningfully in appropriately worded sentences.<br>■ Deliberately focus on an activity and maintain attention.<br>■ Cooperate with others.<br>■ Consciously use all senses, deliberately observe, notice, and recognize.<br>■ Solve problems, tasks, and situations.<br>■ Acquire elementary knowledge about the surrounding environment that is close to the child, meaningful, beneficial, interesting, understandable, and usable for further learning and life practice.<br>■ Create elementary awareness of the wider natural, cultural, and technical environment, including its diversity, development, and constant changes.<br>■ Learn to work with IT. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We divide the children into groups. The optimal group size is 3–6 children. To facilitate grouping, the teacher employs photo icons. The teacher distributes cards featuring icons (such as stork, rain, duck, weir, frog, stone, dragonfly, swan, seagull).<br>It is advisable to conduct this activity in a quiet and peaceful room. |
| **Preparation/materials** | 1. A tablet with an application for reading QR codes.<br>2. A photo of a river divided into nine parts, each featuring icons.<br>3. A number pad on the ground, which remains uncut.<br>4. Cards with QR codes, icons, and cut-out colored wheels to divide the children into teams. |
| **Instructions** | Our topic is water. What do you remember about water? Do you remember the name of the river we visited? Can anyone tell us where it flows or name some cities it passes through? What did you find interesting at the river? Were there any things you couldn't identify? Did you spot any animals? Can you describe them? Did you see any other things near the river? Do these animals also live near our river? Did you hear any sounds at the river? Can you name them? What was the most prominent sound you heard? Was there any sound that surprised you? Apart from the river, did you hear any other noises? Can anyone imitate one of those sounds? |

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| **Instructions** | Now, take a look at the pictures in front of you. Can anyone recognize the photo we took together? Where was this photo taken? What do you see in it? Are you able to identify all the icons in the photo? Is there one icon that you find challenging to identify? Can a friend help you identify that icon? How many parts is the photo divided into? Can anyone count them? Do you understand the significance of this symbol (QR code)? Who can explain to their friends how to use a QR code? Is there anything else you need in addition to the QR code? Perhaps a tablet? Why?<br><br>Today, you will be using a tablet, cards with QR codes, cut-out parts of a photo, and a number pad. Does anyone have an idea of how to use all these items together? Does anyone have an alternative idea?<br><br>I will now place a mat with numbers on the ground in front of you. I will mix and distribute the parts of the photo with icons and cards with QR codes. Each group will receive a tablet. Your task is to scan the QR codes on the cards using your tablet as a group. Each card with a QR code corresponds to a specific icon in the photo, and there is a hidden sound beneath the QR code. Based on the sound, you need to find the part of the photo with the matching icon. Each part of the photo has a number on the other side, and you should place the piece in the corresponding spot on the mat according to the number. You can also cross-check by counting the dots, which should match the number. Work together and communicate effectively. Try to whisper to avoid disturbing others while listening to the audio. Listen to the sound several times before matching it with the icon in the picture.<br><br>Do you all understand your task? Does anyone need a recap? Can someone from the group explain the task again? Is there anyone who can assist their friends with the task? |
| **Description** | The teacher initiates a discussion with the children on the topic of water and rivers, prompting them to recall their recent experiences. The previous day, they embarked on a field trip to a nearby river, exploring its surroundings and making observations of various elements, including animals, plants, objects, and sounds. While by the river, the children engaged in group discussions, sharing their observations and listening intently to the sounds of nature. They even played a game where they closed their eyes and tried to guess the sources of different sounds such as birds, frogs, dragonflies, rushing water, and more. To further enrich their experience, the children utilized a dictaphone to record these sounds, fostering a sense of curiosity and exploration. Additionally, they collaboratively took numerous photographs of the river and its environs.<br><br>Upon returning to the classroom, the children collectively recollected their riverside adventure. They recounted the sights and sounds that had captured their attention and even attempted to mimic the sounds they remembered.<br><br>The teacher presents the children with a puzzle: a photograph divided into nine separate pieces, each adorned with an icon representing various elements (e.g., stork, rain, duck, weir, frog, rock, dragonfly, swan, seagull). Adjacent to the divided photograph, a mat bearing numbers, cards featuring QR codes, and a tablet are laid out. Together, they work to decipher the nature of the task at hand, including an explanation of how QR codes function with the tablet. |

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| **Description** | The children are divided into groups, with each group being assigned a specific task. Armed with a tablet, the children scan a QR code (e.g., representing the sound of rain) and employ the auditory cue from the QR code to identify the corresponding piece of the photograph (in this case, 'rain'). Afterward, they retrieve the matching segment of the photo, flip it over to reveal a number, and accurately position it on the mat in accordance with the number. To verify their placement, the children can cross-reference the number with the corresponding number of dots. |
| **Feedback and support during the activity** | Are you actively listening to the sound produced by the QR code? Is the environment quiet enough for you to discern the sound clearly? As a group, do you collaborate to confirm that the sound you've heard corresponds to the correct icon in the picture? Does the number and quantity of dots on the back of the image match those on the mat? Are the dots indeed in the same quantity? Are you taking turns to fulfill your roles and reaching a consensus? Is everyone in your group engaged in this task? Have all members in the group been assigned a picture? Have you reached a mutual agreement?<br><br>Please let me know if you need any further assistance or if you have additional text to be corrected! |
| **Questions for reflection** | How did your teamwork unfold? Who initiated the process? How did you reach a consensus within your group? Were there any challenges or difficulties you encountered? Do you believe you have successfully accomplished the task?<br>If given another opportunity, what changes or improvements would you make?<br>Could you describe how a QR code functions? Were you able to reconstruct the photo so that it resembled the original? |
| **Anticipated challenges and suggestions** | We recommend regularly reminding children to use hushed voices when communicating with each other to avoid disrupting others while listening to sounds and collaborating, as well as taking turns in their roles. Encourage them to double-check the symbol in the picture, the number, and the corresponding number of dots. |



*Image – Preparation of aids*


*Image – Preparation of the activity*


*Image – Working with a tablet*


*Image – Working with QR codes*


*Image – Children's cooperation 1*


*Image – Children's cooperation 2*



*Image – Children's cooperation 3*






*Image – Cards with QR codes*



*Image – River with icons and numbers*

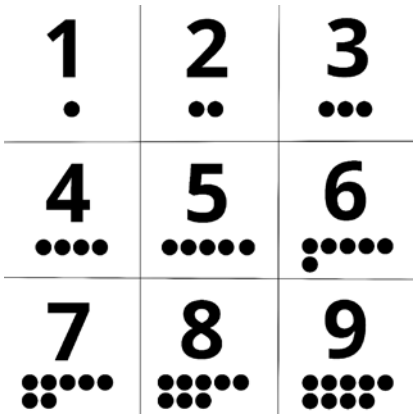
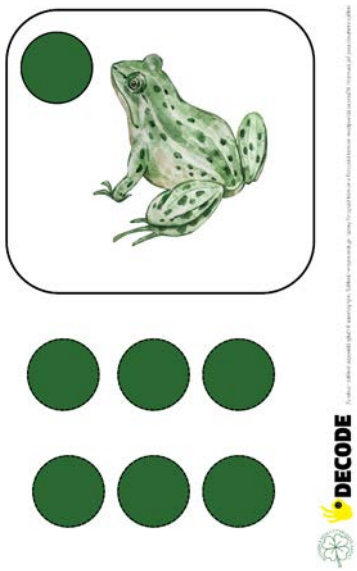



*Image – Pad with numbers on the ground*




*Icons and colored dots to sort into groups*



*Image – Division into groups*

## 5.5.4 The World Around Us

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|---|---|
| **Authors** | **Naděžda Husová, Erika Zelenková and collective of MŠ Čtyřlístek Kadaň** |
| **Title** | **A window to the forest** |
| **Topic** | **The World Around Us** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Perceive that the world has its own order, that it is diverse and remarkable, infinitely varied and diverse – both the world of nature and the world of people.<br>■ Help take care of the surrounding environment (take care of order and cleanliness, dispose of waste in an appropriate way, take care of plants, co-create the well-being of the environment, protect nature, the surroundings, living creatures, etc.).<br>■ Cooperate with others.<br>■ Learn to work with IT. |
| **Age of children** | 2–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide children into groups.<br><br>The board with the cut-out window can also be used to examine tree bark when children bring it from the forest and match it to picture supports in kindergarten. For example, photographs of different types of tree bark are pasted on the chart. Children examine them by touch and sight, matching and comparing them to the pictures in the book.<br><br>**Questions to consider:** Do you know what tree bark is? What do you think its purpose is? Can you identify trees by their bark? Which types of bark have you seen and touched before? Which ones are new to you? Which bark feels pleasant to the touch, and which is unpleasant? |
| **Preparation/materials** | A wooden board with a cut-out window painted with blackboard paint, chalk, a camera, a magnifying glass. |
| **Instructions** | What comes to mind when you hear the word "forest"? Do you know what we can find in the forest? Which animals live in our forests? What is a forest (property…)?<br><br>Your task now is to explore and document what you find in the forest. You will take pictures of your discoveries through the table window. It's up to you to decide who will take pictures and who will search. Afterward, we will gather in a circle to review the photos together. Let's see if we can indeed find the things you imagined in the forest, and perhaps discover even more. Do you know how to proceed? Do you need any guidance? |
| **Description** | The children and the teacher sit in a circle. The teacher asks what can be found in the forest and records the children's ideas on the board in large print. Subsequently, they venture into the forest together, where the children verify whether their assumptions and ideas were accurate. The children capture images of their forest discoveries, and then, in a circle, they assess whether they managed to locate everything listed on the board, if anything is absent, or conversely, if something unexpected appeared, discussing the reasons behind these outcomes.<br><br>Throughout these activities, the children collaborate, strategize, and work together during both the planning and execution stages. |

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| **Feedback and support during the activity** | I see that you have decided who will be searching and who will be taking pictures. How could you address the situation when everyone wanted to take pictures? Take a moment to consider what you might discover in the forest and where you should focus your search. I notice some of you touching the trees. Why do you think this is important? I commend you for taking turns during the search. |
| **Questions for reflection** | What was challenging for you to locate? On the contrary, what was straightforward? Did you manage to identify the items you initially thought about? Did you stumble upon something that doesn't typically belong in the forest? Was there a particular type of bark that caught your attention unexpectedly, and if so, why? What did you recall from this experience, and what surprised you the most? What did you learn during this activity? |
| **Anticipated challenges and suggestions** | Remind them to alternate between searching and photographing. |



*Image – A board with a cut-out window in practice 1*




*Image – A board with a cut-out window in practice 2*

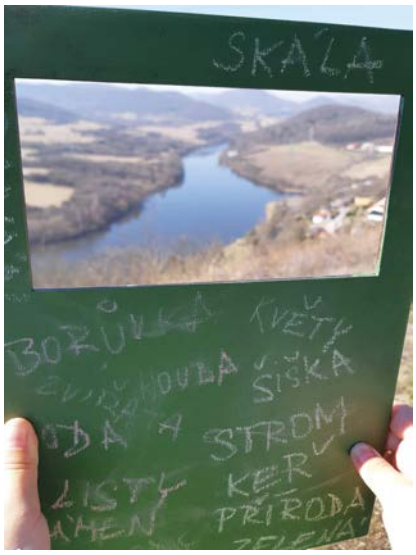


*Image – A board with a cut-out window in practice 3*



*Image – Joint work with the board*



*Image – A board near the bark of a tree*

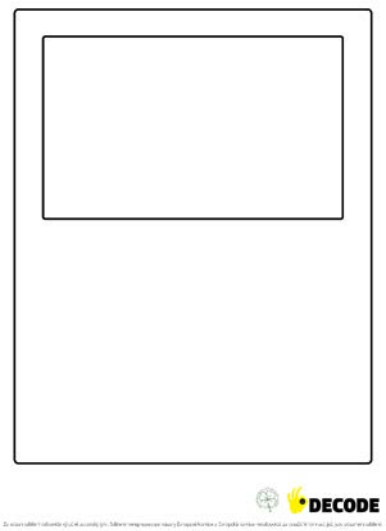


*Image – Template of a board with cut-out window*

## 5.5.5 Life event

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| **Authors** | **Sabina Plechingerová, Naděžda Husová** |
| **Title** | **International Children's Day – How things go in an anthill** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Master basic movement skills and spatial orientation, including common ways of moving in different environments (such as managing obstacles, throwing and catching a ball, using various equipment, moving in a group of children, and navigating different surfaces like snow, ice, water, and sand).<br>■ Develop the ability to perceive and distinguish using all the senses (such as distinguishing sounds and tones through hearing, visually recognizing shapes of objects and specific signs, identifying smells, tastes, and tactile sensations, etc.).<br>■ Cultivate the capability to consciously focus on an activity and maintain attention.<br>■ Grasp spatial concepts (e.g., right, left, below, above, in the middle, behind, under, over, at, next to, between, etc.) and basic time concepts (e.g., now, today, yesterday, tomorrow, morning, evening, spring, summer, autumn, winter, year).<br>■ Develop orientation skills in both space and on a plane, with partial understanding of time concepts.<br>■ Foster the ability to cooperate effectively with others. |
| **Age of children** | 5–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | **If the teacher has space to divide children into groups:** We divide the children into groups, ensuring that there is a child with difficulties in each group. The ideal group size is 4-6 children. To facilitate this, the teacher uses sticks of varying lengths (short, long, medium). Children with difficulties receive one stick from each set, while the other children draw lots to select sticks of the same length, determining the groups.<br><br>**If the teacher does not have space to divide the children into groups:** Groups are formed independently, but the teacher remains flexible and ensures that a child with difficulties is included in each group. It's important that a child with difficulties is not assigned the role of navigator.<br><br>The teacher should also prepare several route variants, including shorter, longer, simpler, and more complex routes, with, for example, 2-5 instructions on the board. |
| **Preparation/materials** | Cardboard tubes (representing logs) filled with various materials (rice, lentils, sand, stones). Tactile plates with arrows and dots (3D-printed or made from cardboard). The same materials (stones, sand, rice, lentils) for affixing to cardboard plates. Eye masks. Rubber bands. Pictures of ants. |
| **Instructions** | **Introduction:** What does an anthill look like? How do you think the ants can build it? How do ants carry heavy things into an anthill?<br><br>Due to the size of the ants, it is necessary for them to help each other in almost everything. Now, we will try their ant cooperation. |

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| **Instructions** | **Navigator's Task (for the Oldest Child):** Please designate the oldest child in your group as the navigator. The navigator's task will be to lead the others to the anthill while wearing a blindfold.<br><br>We will provide the navigator with a plate containing rice, lentils, sand, or stones. The navigator's task is to determine, by touch, what material is on the plate.<br><br>The navigator will communicate the material to their team, who will then select the corresponding log to carry to the anthill.<br><br>The navigator's hands will be the only ones helping to transport the log.<br><br>In front of the navigator, there are cards with arrows. Each arrow points in a different direction (forward, backward, right, left). There are also dots next to the arrows. The navigator will feel the arrow and tell the team which direction it's pointing and count the dots to specify the number of steps in that direction.<br><br>Can you repeat the navigator's task for me? What do the dots represent, and how will the navigator describe the log to choose?<br><br>**Assignment for Ant Workers:** Stand in a line behind the navigator. Each of you will receive a rubber band to connect all of you, leaving your hands free.<br><br>The navigator will instruct you on which log to bring to the anthill, and your task is to determine, by ear, which log the navigator is describing.<br><br>After identifying the correct log, you will pick it up together and carry it above your heads.<br><br>You must cooperate as a group to safely transport the log to the anthill.<br><br>The navigator will provide directions such as "BACK, FOUR," indicating that you should take four steps backward.<br><br>Follow the navigator's instructions to reach the anthill and carefully place the log there.<br><br>Who can repeat the assignment for the ant workers? What are the possible directions the arrows can point to? |
| **Description** | The teacher introduces the topic of ants and their roles in an anthill. The children brainstorm and discuss the various jobs that ants have and how their roles are divided within the anthill.<br><br>During the week, the children have access to a tablet with an educational video in the classroom to further study how ants work in an anthill.<br><br>The children divide into groups and designate the oldest or most capable child as the navigator.<br><br>The navigator sits at a table and puts on a blindfold. In front of them, there is a board with one of the materials (stones, rice, sand, lentils) attached, which the navigator must identify by touch.<br><br>The other group members line up closely, and the teacher places a rubber band around them to connect them while leaving their hands free.<br><br>Once the group is ready, the navigator communicates to the group which material they need to find within the log. The team of "ant workers" listens carefully to identify the material by sound (such as the sound made when the pipe is sanded). |

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| **Description** | Together, the group carries the log with their arms extended above their heads. The children must collaborate and come to a consensus on how to transport the log effectively.<br><br>The navigator has a board with arrows and dots in front of them. By feeling the arrow, the navigator determines the direction for the group (forward, backward, right, left) and counts the dots to indicate how many steps they should take in that direction.<br><br>The group follows the navigator's instructions, ultimately reaching an "anthill" where they place the log. |
| **Feedback and support during the activity** | How do you determine the contents of the log by touch?<br>How do you ensure that you've chosen the correct log as instructed by the navigator?<br>Can you explain what the role of the navigator is in this activity? |
| **Questions for reflection** | What was the main objective of this activity?<br>Can you identify any challenges you encountered during this task?<br>How might you approach this activity differently if you were to do it again?<br>Were there any specific issues you faced, and how did you resolve them?<br>What new knowledge or skills did you gain from today's activity?<br>Can you describe how you used your sense of touch during this task?<br>What were the key actions you took during the activity? |
| **Anticipated challenges and suggestions** | When forming groups, it's advisable to take into account the children's heights to ensure that everyone can reach the log comfortably.<br><br>Difficulty in distinguishing between the right and left sides. |



*Image – Tactile plates*



*Image – The role of the navigator*



*Image – Searching for material by ear*



*Image – Role of Ant Workers*



*Image – Navigation*

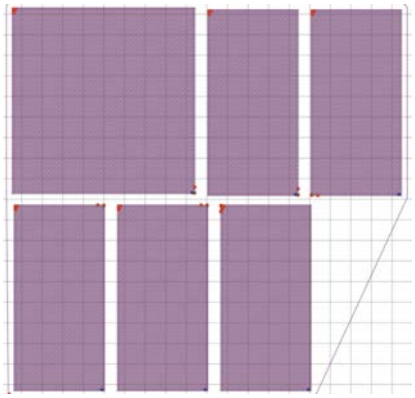

*Image – G code for 3D printer – Arrow and dots*

## 5.5.6 Our surroundings

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|---|---|
| **Author** | **Hana Zárubová** |
| **Title** | **Life in a water droplet** |
| **Topic** | **Our surroundings** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Distinguish between what is beneficial for health and what is harmful.<br>■ Have an awareness of the importance of the environment.<br>■ Be sensitive to nature.<br>■ Have knowledge of living and non-living things.<br>■ Hand-eye coordination.<br>■ Perceive the world with all the senses.<br>■ Work in a group, cooperation. |
| **Age of children** | 4–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Limit the number of samples being examined – for example, only water from the pond and tap water. Or let the child choose which sample they want to examine. |
| **Preparation/materials** | 3 glasses with lids, small magnifying glasses, a microscope and accessories, an iPad (for connecting and detailed examination of a water droplet under the microscope), a paper filter. |
| **Instructions** | We will play hydrologists and turn into little researchers. We will collect in glasses:<br>a) water from the pond<br>b) water from the small lake<br>c) tap water<br>d) if there are puddles outside, we can also use water from the puddle. |
| **Description** | Talking about the watercourses we know<br>Collecting waterExamining water in glasses – with the naked eye<br>Examining water in glasses with small magnifying glasses<br>Examining a drop of water from each glass under a microscope, transferring the microscope image to an iPad.<br>Filtering water from each glass<br>Examining the filtered water<br>Children investigate individual samples in small groups. |
| **Feedback and support during the activity** | The teacher encourages the children to examine watercourses.<br>She assists the children in collecting water.<br>During the examination of water in the glasses, the teacher encourages the children to try to describe what they see.<br>She asks questions about the difference between examining with the naked eye and using a magnifying glass or microscope. |

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| **Questions for reflection** | Before we start examining the water, the teacher asks the children: "Do you think, kids, that the water will be clean?" Which water would you choose to drink? Do you think such water would bother or not bother fish, and why? Could fish live in tap water (drinking water)? What did you kids discover and observe from your samples? Did you enjoy the observations or not? How did it work for you in your group? |
| **Anticipated challenges and suggestions** | While collecting water, the teacher helps the child to avoid falling into the water or getting hurt. |



*Group discussion – watercourses – pond.*



*Image – Visual difference detection with the naked eye.*



*Image – Observation with small magnifying glasses. 1*



*Image – Observation with small magnifying glasses. 2*



*Image – Observation of differences with a microscope. 1*



*Image – Observation of differences with a microscope. 2*



*Image – Microscope detail.*

## 5.5.7 Gifts of nature

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|---|---|
| **Author** | **Petra Staňková** |
| **Title** | **Food** |
| **Topic** | **Gifts of nature** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Utilizes his senses in various games and activities.<br>■ Collaborates effectively in a group and actively participates in communal activities.<br>■ Develops fine motor skills through activities like tasting and pricking.<br>■ Demonstrates respectful behavior towards others when putting objects in the mouth.<br>■ Displays coordination in his movements. |
| **Age of children** | 2–7 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Recommendations for working with a child with SEN or a child with difficulties: Offer the child familiar foods that they are comfortable with. |
| **Preparation/materials** | **Fruits:** Apple, banana, kiwi, blueberries, lemon<br>**Vegetables:** Cucumber, radish, pepper, arugula<br>**Other Foods:** Bread, pickles, sausage, sliced cheese, salty chips<br>**Sweets:** Chocolate, lentils, candies<br>**Tools:** Wooden cutting board, knife, tray, plate, eye cover, toothpicks |
| **Instructions** | Children, please pay close attention to what is in front of you. Let's work together to make a list of what we see on the table. Can you identify which foods are healthy and which ones are not? We'll also explore our taste preferences, including salty, sweet, bitter, and sour. Is there something on the tray that no one has tried yet? Take a toothpick and try a small sample. See if you can guess what it is by answering these questions: 'What do you taste? What is the flavor like? Is it salty, sweet, sour, or bitter? What do you think it might be?' |
| **Description** | The children gather around the table, where a tray of food has been prepared. To begin, the children examine the items on the tray together. They discuss what foods they can identify, what is considered healthy or not, and what each person likes. Each child will have the opportunity to use a blindfold to cover their eyes and try to guess the food based solely on taste. First, the teacher will demonstrate how to delicately offer the food for tasting to others. The children form pairs or small groups, taking turns offering each other a taste. They engage in spontaneous conversations about the flavors they experience and taste. |
| **Feedback and support during the activity** | The teacher encourages the children to take their time and taste the food properly, prompting them to think carefully about what it reminds them of, whether it has a sweet, salty, sour, or bitter flavor. |

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| **Questions for reflection** | Next, the children gather in a circle to reflect on their enjoyment of the game, discussing both their likes and dislikes. They may consider questions such as:<br><br>What did you like or dislike the most today?<br>What did you particularly enjoy or not enjoy?<br>What stood out or left an impression on you?<br>Were there any challenges or issues that bothered you?<br>What seemed to be the easiest part of the activity?<br>Can you identify something that was especially sweet about the game?<br>Is there anything specific you'd like to include in the game next time?<br>Let's also talk about the various tastes we experienced. |
| **Anticipated challenges and suggestions** | For the game, if there are more children, it is better to divide them into smaller groups. This way, children can concentrate better, everyone gets a turn, and they won't have to wait long or shout over each other. This activity is highly engaging for all children, so a larger number of them may want to participate. Ensure you use only softer foods. Prior to the activity, be sure to inquire about the children's allergies and taste preferences. |



*Image – Food*



*Image – Talking about what is salty, sweet, sour*




*Image – Tasting with a scratcher*




*Image – Tasting*




*Image – Tasting*

## 5.5.8 Human body

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| **Author** | **Veronika Fusková** |
| **Title** | **Discovering the human skeleton** |
| **Topic** | **Human body** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Name parts of the body and some organs. Understand basic terms related to health, movement, and sports.<br>■ Identify visible parts of the body, including certain parts (e.g., shoulder, knee, elbow, wrist) and select internal organs (e.g., heart, lungs, brain, stomach).<br>■ Recognize most of their immediate surroundings.<br>■ Express thoughts, ideas, and feelings independently and coherently using appropriate sentences.<br>■ Prioritize cognitive significance.<br>■ Perceive and discriminate using all the senses.<br>■ Consciously utilize all senses, purposefully observe, and take note of new, altered, or missing details. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | If there is a child with difficulties in the class, consider selecting a smaller number of cards and limiting the locations where the cards are placed. The choice should be based on the child's age and individual characteristics. If the child is facing significant difficulties, opt for one or two cards that the child can at least name and correctly identify where the card(s) are located. |
| **Preparation/materials** | Pictures (photographs) of a human skeleton or its parts (skull, arm, heel bone, shoulder blade, etc.) in the form of cards, a large picture (photograph) of a skeleton, or an actual skeleton model. |
| **Instructions** | You will work in pairs. We will search for pictures of parts of the human skeleton. As you follow the route, pay attention to your surroundings. If you navigate the path carefully, you will come across images of the human skeleton. Remember both the locations and the pictures. Afterwards, chart the path and mark the spots where you found the pictures on a prepared map (photos) of the classroom, garden, etc.<br><br>Now, one of you will follow the trail and use the map to locate and collect the pictures. With the pictures you collect, you will then attempt to assemble a human skeleton. This task will require a lot of communication and teamwork. |
| **Description** | Divide the children into pairs. One by one, each child must follow the route provided by the teacher, which could be in places such as a classroom, corridor, garden, or along a designated walking path. In these chosen locations, which the children are not aware of in advance, there are pictures of a human skeleton displayed visibly (prior to the activity, the children are informed of the number of pictures they need to find). The children's task is to identify and remember the pictures and take note of the location where they spotted each picture. |

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| **Description** | Next, the child will mark the positions of the hidden pictures on a prepared map and capture photographs of the surroundings where they conducted their search. Subsequently, following the map, the other child will set out to collect the pictures from the designated points. Finally, the children will collaborate to assemble a human skeleton using the pictures they have collected.<br><br>Throughout this activity, the children will need to cooperate and communicate effectively. They are encouraged to be independent, seeking assistance from their peers before approaching the teacher if they encounter difficulties. Following the completion of the task, the children will review and reinforce their understanding of the names of the skeleton parts, either by locating them on a skeleton model or referring to an encyclopedia. |
| **Feedback and support during the activity** | Did you and your friend decide who would go first? It looks like you successfully marked the picture locations. Did you find all of them as per your count? How did you document the picture locations on the map? Would you like to swap roles? Can you assemble the skeleton? I hear you naming the parts of the skeleton. Have you remembered all the names? What's your plan if you miss a picture? |
| **Questions for reflection** | Which part of the activity did you find the most enjoyable/challenging? What parts did you recall/forget? How did your teamwork go? Were you able to reach a consensus as a pair? How did you feel about the markings on the map? What was it like navigating based solely on points? Which aspect of the task posed the greatest difficulty for you? |
| **Anticipated challenges and suggestions** | Children with a limited vocabulary do not need to describe the location where they found the specific picture; instead, they can indicate it on the map and simply mention the name of the picture they recall.<br><br>One potential challenge may arise from a child's limited vocabulary and a lack of familiarity with the names of picture concepts. |



*Image – Large photograph of the human skeleton*



*Image – Images (photographs) of parts of the human skeleton*

## 5.5.9 Plants

| | |
|---|---|
| **Author** | **Vladimíra Andrtová** |
| **Title** | **Edible and inedible plants** |
| **Topic** | **Plants** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Perceive and distinguish using the senses.<br>■ Expand vocabulary.<br>■ Stay active and ask questions. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We provide verbal assistance and use pictures. |
| **Preparation/materials** | Watercress seeds, cultivated plants such as dill, parsley, and chives, houseplants, pots with soil, watering cans. |
| **Instructions** | We're going to play gardeners and grow our own herbs. Let's split into groups and work together on a plan for growing watercress seeds. Would anyone like to share their ideas with us? Where should we begin? What steps do we need to follow to take care of the seeds properly? Let's observe how the seeds change over the next few days, and when they start to sprout, we'll continue with our task.<br><br>Now, let's discuss these questions as a group: Do you know how we can categorize different types of plants? What criteria can we use for categorization? When it comes to kitchen plants, what important things should we keep in mind? On the table, we have various types of plants. Can you think of a way to classify these plants? How can we differentiate between edible and non-edible plants? What are these non-edible plants called, and what about the edible ones? How might we use edible plants? Would you consider tasting them? Do these plants remind you of anything? Have you encountered them before?<br><br>Let's also talk about indoor plants. Do any of you have indoor plants at home? Do you help take care of them? What do plants need to survive? How can we make use of edible plants? |
| **Description** | We will sow watercress seeds with the children in groups, and they will start growing within three days.<br><br>1. The first step is to sprinkle watercress seeds on the pulp and then cover them with water. We will continue the task once the watercress has started to grow. The children can observe the plants' growth right here in the classroom.<br><br>2. Now that our watercress has grown, we will learn how to distinguish between edible and non-edible plants. We have various plants ready on the table, including houseplants, watercress, dill, parsley, and chives. Together with the children, we will discuss these plants, identify them, and categorize which ones are edible and which ones are not. Finally, we will set aside the indoor plants and let the children taste the edible ones. |

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| **Feedback and support during the activity** | Examine the plants closely. What color are they? Describe the leaves. Take a taste. Share your observations within the group. If some of you are not participating actively, can you change your approach to cooperation? How did you categorize these plants? What criteria did you use? What other plants do you know? Discuss why some plants are edible while others are not. Who will be tasting the plants in your group? Can you describe the taste? Will others also try them? |
| **Questions for reflection** | How was your teamwork? Were you able to engage all group members? Did you encounter challenges in reaching a consensus? Did you seek assistance or guidance for any issues? Did you reach a solution that everyone agreed upon? |
| **Anticipated challenges and suggestions** | We need to ensure that the indoor plants are not toxic, and it's important to prevent children from actually tasting them. |



*Image – Sowing watercress – Preparing the experiment*



*Image – Learning about the plants*



*Image – Watercress tasting*



*Image – Tasting of edible plants*

## 5.5.10 Life anniversary of a child

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|---|---|
| **Author** | **Vladimíra Andrtová** |
| **Title** | **Number of syllables and isolation of the 1st vowel** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Fostering auditory perception and phonological awareness.<br>■ Learn and actively use new words.<br>■ Actively ask questions. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Individualized approach.<br>Begin with simple words (two syllables).<br>Emphasize the 1st sound with your voice.Assist with clapping out syllables.<br>Count syllables on fingers. |
| **Preparation/materials** | Pictures of items that children need for school. |
| **Instructions** | You'll be going to school soon. On the board, there are pictures of things that schoolchildren need. Your task is to name the things, clap out the syllables, determine the number of syllables, and identify the first sound in the word – what the word starts with. But watch out! There are also pictures of things that don't belong in school. Now, try this as a group. Be careful, and if necessary, help your friend or provide advice on how to proceed. Finally, describe how you did. |
| **Description** | We discuss school with the children and may even take a field trip to a 1st-grade elementary school so they can get an idea of what school is like. Next, we present the children with the prepared pictures, and they clap out the syllables, count the number of syllables, and identify the first sound in each word. For those children who are more advanced, we also practice identifying the last sound in a word. Afterward, we divide the children into small groups, allowing them to independently manage the activity. We encourage collaboration and the active use of descriptive feedback. |
| **Feedback and support during the activity** | Display the picture. What do you see in the picture? Clap the word into syllables. How many syllables did you clap? What does the word begin with? Repeat your word one more time." If someone is having difficulty, encourage them with, "Come on, let's try together." Can you offer some advice to your friend to help them complete the task independently? I notice that only one person is speaking in the group. Can you figure out how to take turns? |
| **Questions for reflection** | When did you work better, and why? How did you describe your friend's success? Was it difficult to pay attention to what others were saying? Why? What was the most challenging/easiest part of the task? What subjects will you study at school? What doesn't belong in school? Do you already know some letters? What skills should a student have? |
| **Anticipated challenges and suggestions** | The child cannot hear the sound at the beginning of the word – the children form pairs/groups and try to identify the sound together, or the teacher or other children can assist in cooperation. |



*Image – Isolation of the first vowel*



*Image – Syllables*



*Image – Naming objects*

## 5.5.11 Communication between us

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|---|---|
| **Author** | **Yuliia Barzhak** |
| **Title** | **Kindergarten cinema** |
| **Topic** | **Communication between us** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ The teacher encourages the children to describe what they observe in the film using words, movements, or facial expressions.<br>■ Incorporates movement in music and motion games.<br>■ The teacher sets up scenarios in which children engage in dramatic improvisation using various elements. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We aim to actively engage children with SVP in dialogue and dramatic improvisation to the greatest extent possible.<br>If children with difficulties are not expressing themselves or participating, we make an effort to include their input during communication and listen to their version of the story. We are ready to assist them with supportive questions if needed. |
| **Preparation/materials** | Interactive whiteboard, film/fairy tale. |
| **Instructions** | We will watch the story/narrative without sound. We will carefully observe what is happening on the screen. At the midway point, we will pause the film and collectively speculate on what the characters might be discussing and what the story is about. Afterward, we will watch the film, and once it concludes, we will discuss how accurately we were able to guess the content or if the story turned out to be entirely different. Can you retell it? Should we attempt to create our own narrative for the story? Maybe we can even act it out a bit. Let's assign roles. |
| **Description** | The teacher watches a movie/fairy tale without sound with the children in the class. At the midway point of the film, it is paused to allow the students to brainstorm and discuss their ideas about what the story might be about. Encouraging multiple children to share their thoughts is beneficial. Afterward, they resume watching the movie together, and once it concludes, they engage in a discussion to exchange opinions about the story's content once again.<br>Next, the children are divided into groups of 2–3, and their task is to create dialogues based on their own imagination and ideas. Subsequently, the children act out the story." |
| **Feedback and support during the activity** | What do you believe the movie is about? What are the actors addressing in this situation? What do you think they are discussing, or who are they talking about? I notice you're discussing this scene; what ideas did you come up with? How do you think the story will unfold? I commend your willingness to share your thoughts and create your own narrative.<br>You collaborated exceptionally well as a group.<br>You've crafted a truly intriguing story.<br>I appreciate your generosity in allowing the younger kids to take on the role of narrators. |

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| **Questions for reflection** | Would you be interested in playing like this again?<br>What aspects of it did you find interesting?<br>How did you feel about watching a fairy tale without sound?<br>Did you find it easy or challenging?<br>Was there anything that surprised you during the activity? What posed the most significant challenge for you? Which part did you find the most intriguing? |
| **Anticipated challenges and suggestions** | Encourage as many children as possible to take turns telling the story.<br>The story should not exceed a maximum length of 10 minutes.<br>Space out the groups as much as possible when creating your own dialogue to prevent them from being influenced by another group's version. |



*Image – Communication between us 1*



*Image – Communication between us 2*

## 5.5.12 Four Seasons

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|---|---|
| **Authors** | **Yuliia Barzhak, Zuzana Sádovská** |
| **Title** | **Colorful seasons** |
| **Topic** | **Four Seasons** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Express music through movement.<br>■ Use your imagination.<br>■ Collaborate in group activities.<br>■ Describe the characteristics of the seasons.<br>■ Differentiate seasons based on typical indicators; utilize verbal and non-verbal communication within the context.<br>■ Convey a connection to the environment through artistic expression.<br>■ Apply creativity during play. |
| **Age of children** | 4–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Children do this activity together in pairs. |
| **Preparation/materials** | Colored ribbons, music recordings, CD player, pictorial materials (seasonal signs), brands. |
| **Instructions** | Lie on your back, close your eyes, and listen to the sounds of nature. Do you recall anything when you hear these melodies? Try to envision it, and then we'll discuss it. After listening to the music, the children sit down and engage in conversation: How do you think winter moves? And how does summer move? Which one is slower? How does a gentle summer breeze move, and how does a snowflake fall in winter? How do leaves dance in the wind during autumn? Now, we'll mimic the movements of spring flowers swaying in a meadow when a breeze blows.<br>We'll divide into groups and pairs, and you'll attempt to depict a specific weather scene to your friends in the group, who will guess what it is. Make sure to coordinate with your partner on how to complete the task.<br><br>Now, let's play a game about the seasons. You'll move according to the rhythm and mood of the music. When the music stops, rush to the corner that matches the color of the ribbon on your hand. |
| **Description** | The teacher plays a song for the children that vividly captures the changing aspects of nature. With their eyes closed, the children listen attentively, allowing the music to paint mental images of what the teacher is describing. The story within the music revolves around various seasonal cues: the warmth of the sun, the patter of rain, the rustle of the wind, the descent of leaves from trees, the graceful dance of snowflakes, the blossoming of flowers, and children flying kites, among others. Subsequently, they engage in a collaborative discussion, sharing their ideas and brainstorming alternative representations of weather and natural events. |

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| **Description** | Next, the children are divided into groups of at least two. One pair presents their interpretation of the weather, while the other pair attempts to guess what it represents. Then they switch roles.<br><br>Following this activity, the children participate in a movement game called 'Four Corners.' The teacher hangs a ribbon in each corner of the classroom, each symbolizing a season (yellow for autumn, blue for winter, green for spring, and red for summer).<br><br>The children select a colored ribbon from a bag and move freely around the classroom, synchronized with the music's rhythm. When the teacher lowers the music, the children's objective is to find and gather in their designated corner, matching the color of the ribbon they hold.<br><br>The teacher gradually alters the game by inviting only those children who represent autumn, spring, summer, or winter to enter the circle." |
| **Feedback and support during the activity** | You are a lovely leaf in the wind. When I observe you drifting gracefully, it brings to mind a spring meadow filled with butterflies. Could it be your imagination? Do you believe leaves only tumble along the ground, or could they also take to the air a little? How about giving it a try?<br><br>Do you think that when a snowflake drifts, it feels cold? Let's attempt to depict various types of wind, from a gentle breeze to a strong gale, and even a tornado. I can see that you're doing a great job agreeing on the shape of the wind. Have you all had a chance to take your turns? Does anyone else need more time to complete their task? |
| **Questions for reflection** | Have you heard the song I played at the beginning?<br>What did you find most challenging?<br>Which "weather" did you find the most enjoyable?<br>Was it tough to discern the mood of the music?<br>Have there been times when you couldn't recall anything?<br>Did it pose difficulties for the pair to reach an agreement on how your "theater" should appear? How did you handle the situation?<br>Did everyone get an opportunity to take their turn?<br>What other color would you prefer the ribbon to be, and why?<br>Are there any other seasons you'd like to include in our game?<br>What insights did you gain from this exercise?<br>Was it challenging to stay focused? |
| **Anticipated challenges and suggestions** | It's preferable to conduct the first activity outdoors.<br>Ensure the children's safety during the activity.<br>Permit confident children to move in pairs. |

## 5.5.13 Sport

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|---|---|
| **Author** | **Veronika Ojo** |
| **Title** | **What is it?** |
| **Topic** | **Sport** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Identify objects by touch and describe what the object is.<br>■ Can identify the sport and describe what is done and used in that sport.<br>■ Follows the rules of the game (does not whisper or reveal what object is in their hand). |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We will provide children with SEN with more time so that they can interact with the equipment during the activity. |
| **Preparation/materials** | Sports equipment (puck, basketball, baseball, etc.), grass, sand, ice, water, helmet, soccer jersey, swimming cap, skirt, gloves. |
| **Instructions** | Children, we are about to embark on a sports action game with three stations. |
| **Description** | In the kindergarten area (playground, classroom), there are three stations set at medium distances. Each station has pre-prepared materials and sports equipment, such as a puck, soccer ball, and skates.<br><br>At Station 2, there are containers with water, grass, ice, and sand.<br><br>Station 3 includes children's sports gear like a soccer jersey, swimming cap, helmet, and more.<br><br>The children are divided into groups of three to take on different roles at each station: the guesser, the assistant (who helps with putting on the mask and ensures safety for the guesser), and the guide (who leads the way to the station and hands out the objects to be guessed). Within the group, the children coordinate the rotation of roles and the progression of the activity.<br><br>1. In the first task, the children use their sense of touch to describe and identify the object they have selected from the pile.<br><br>2. Using their sense of touch, they guess and identify the sports associated with the given materials (e.g., swimming in water, ice skating, running on sand, etc.).<br><br>3. In the last activity, the children first explore the object through touch and then attempt to put on the item of clothing or sports equipment in the way they think it should be worn.<br><br>During all activities, the children wear a scarf or mask over their eyes to simulate blindness.<br><br>After the activity concludes, it's beneficial to discuss with the children the sports they've learned about through the materials and what they've discovered about sports. If time and resources permit, you may even consider engaging in some sports-related activities, even if they are improvised, to allow the children to experience the essence of each sport. |

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| **Feedback and support during the activity** | What do you think you're holding in your hand? Does the object you're holding make you feel cold? If so, what could it be? Do you like the texture of the object you're holding? What material do you think it could be made of? Where should you place the item you're holding? On your legs or on your hands? Can you think of other sports that are played on ice or in the water? I see that you're discussing something. Are you all comfortable with switching roles? |
| **Questions for reflection** | Which game did you enjoy the most? Why?<br>Would you like to play it again? What makes it appealing to you?<br>What was the most challenging item to guess?<br>Did you find it very difficult to identify the object you were holding just by touch, without seeing it?<br>What sports did you learn about during the activity? How well did you collaborate as a team?<br>Can you imagine what it's like to live without sight, unable to see anything? Can you describe the feelings you experienced when you couldn't see? |
| **Anticipated challenges and suggestions** | After the children have put on the blindfolds, we recommend that the guide mix up the items at the activity stations to prevent the guesser from choosing items based on memory.<br>For the first and third activities, we suggest placing the objects in opaque bags to prevent the children from identifying the items in advance. |



*Image – Alice guesses what it is*



*Image – What's on our plate?*



*Image – Leila guesses sand*



*Image – We got some ice*



*Image – We work together*



*Image – Objects*

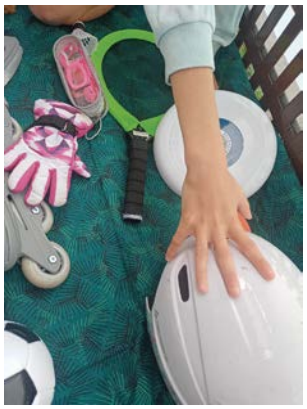

*Image – What could it be?*



*Image – Swimming gear*



*Image – Swimming gear 2*

## 5.5.14 Animals

| | |
|---|---|
| **Author** | **Zuzana Sádovská** |
| **Title** | **In the yard** |
| **Topic** | **Animals** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Actively listens to children's music, songs, and the teacher's singing.<br>■ Expresses reactions to the music verbally, through movement, or by employing other creative means.<br>■ Recognizes various aspects of music, such as different voices (child, male, female), solo and group singing, the sounds of classical instruments.<br>■ Identifies the source of sounds, and can distinguish different tones. |
| **Age of children** | 3–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We motivate children to participate in activities by assuring them that their cooperation is essential for the overall outcome. We offer assistance in choosing appropriate tools or collaborate with them on maintaining rhythm, among other aspects. |
| **Preparation/materials** | Audio: Animals – habitat, song "When I served", circles (hula-hoops), pictures, and figurines of animals. |
| **Instructions** | Children, today we have a listening task. You will use your hearing to identify animals in the group to which the voice from the audio recording belongs. Then, find a cub to match them from the pile of pictures on the ground.<br><br>At the second station, you will practice a concert for your friends using the song we sang in the warm-up, "When I Served." Your task will be to divide the instruments within the group and think about how you will accompany the song musically. Remember that every orchestra has a conductor who helps the musicians play at the right time. Would you find someone in your group who already has experience with this or could do well? You can also vote. |
| **Description** | The classroom can be arranged like a farm, with animals placed in the space using plastic figures, pictures, and other materials. Before starting the activities, all children warm up their vocal cords by doing breathing and vocal exercises, such as inhaling into the diaphragm and rhythmic warm-up. For example, they can create rhythms for words like "duck," "cat," "cow," and "goat" by combining clapping with singing the song "When I Served."<br><br>The children then move around the "yard" like animals and imitate the sounds of different animals suggested by their peers. The teacher plays the appropriate melodies on the piano to accompany these animal sounds. For instance, the cow sound might be accompanied by slow and lazy, deep tones, while the chicken sound is cheerful and accompanied by gentle and high tones.<br><br>The teacher helps the children divide into two groups, distinguishing them with colored bracelets. The children move through different activity stations together, completing tasks in groups based on the colors of their bracelets. While one group works on the first task, the second group works on the second task, and then they switch roles. |

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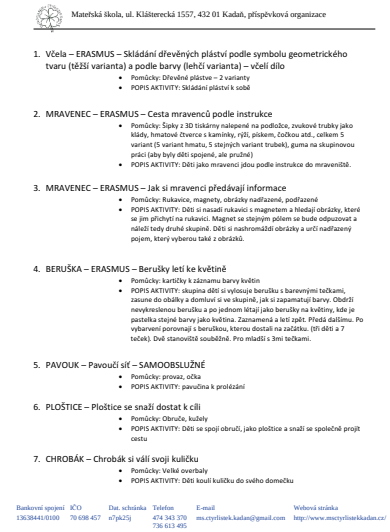
| **Description** | **1st Station:** On the ground, there are pictures of adult animals and their offspring. Guided by an audio recording, the group identifies the corresponding adult animal and matches it with the offspring. They classify different animal species based on the audio recording, check their answers together, and assist each other as needed.<br><br>**2nd Station:** With the teacher's guidance, the children prepare a "concert" using Orff instruments for the song "When I Served." Within their group, they allocate tasks, discuss the format of the concert, and plan the musical accompaniment. After rehearsing, they perform their musical piece for their peers from the other group.<br><br>Then they rotate to another station, and the second group gets a chance to practice and perform the "concert." |
| **Feedback and support during the activity** | I can see that you can identify all the animals by their sounds. Do any of these sounds seem similar to you? Discuss within your group what kind of animal each sound might belong to. Have you been successful in finding the offspring animals to match with their parents?<br><br>Now, let's divide the roles within your group to ensure that you practice the concert effectively. Do you already have someone designated as the conductor? What will be the conductor's role? Do all of you know when it's your turn to play your instruments? And if you need help, who can you turn to for assistance? |
| **Questions for reflection** | How was it to rely solely on your sense of hearing? Were you able to accurately identify all the sounds, or did you make any mistakes? Did you find it helpful to discuss within your group to identify the animals by their sounds?<br><br>Comparatively, do you think it's easier to search for animals based on hearing or sight? Were you able to successfully match all the animals with their offspring? How did you go about solving any challenges you encountered?<br><br>Regarding the division of tasks for the concert, how did you manage to organize it within your group? Did having a conductor make the process smoother? Were you able to listen and coordinate with each other effectively during the concert?<br><br>Lastly, what do you feel you learned from today's activities? |
| **Anticipated challenges and suggestions** | If space permits, it's advisable to separate the groups so they don't disrupt each other. The teacher should take on the role of a facilitator or advisor, allowing the children to take the lead and participate in the activity independently. |



*Image – We assign animals to their young*



*Image – Animals – Tool*



Mateřská škola, ul. Klášterecká 1557, 432 01 Kadaň, příspěvková organizace

1. Včela – ERASMUS – Skládání dřevěných pláství podle symbolu geometrického tvaru (těžší varianta) a podle barvy (lehčí varianta) – včelí dílo
   - Pomůcky: Dřevěné plástve – 2 varianty
   - POPIS AKTIVITY: Skládání pláství k sobě
2. MRAVENEC – ERASMUS – Cesta mravenců podle instrukce
   - Pomůcky: Šipky z 3D tiskárny nalepené na podložce, zvukové trubky jako klády, hmatové čtverce s kamínky, rýží, pískem, čočkou atd., celkem 5 variant (5 variant hmatu, 5 stejných variant trubek), guma na skupinovou práci (aby byly děti spojené, ale pružné)
   - POPIS AKTIVITY: Děti jako mravenci jdou podle instrukce do mraveniště.
3. MRAVENEC – ERASMUS – Jak si mravenci předávají informace
   - Pomůcky: Rukavice, magnety, obrázky nadřazené, podřazené
   - POPIS AKTIVITY: Děti si nasadí rukavici s magnetem a hledají obrázky, které se jim přichytí na rukavici. Magnet se stejným pólem se bude odpuzovat a náleží tedy druhé skupině. Děti si nashromáždí obrázky a určí nadřazený pojem, který vyberou také z obrázků.
4. BERUŠKA – ERASMUS – Berušky letí ke květině
   - Pomůcky: kartičky k záznamu barvy květin
   - POPIS AKTIVITY: skupina dětí si vylosuje beruškus barevnými tečkami, zasune do obálky a domluví si ve skupině, jak si zapamatují barvy. Obdrží nevykreslenou beruškus a po jednom létají jako berušky na květiny, kde je pastelka stejné barvy jako květina. Zaznamená a letí zpět. Předá dalšímu. Po vybarvení porovnají s beruškou, kterou dostali na začátku. (tři děti a 7 teček). Dvě stanoviště souběžně. Pro mladší s 3mi tečkami.
5. PAVOUK – Pavoučí síť – SAMOOBSLUŽNÉ
   - Pomůcky: provaz, očka
   - POPIS AKTIVITY: pavučina k prolézání
6. PLOŠTICE – Ploštice se snaží dostat k cíli
   - Pomůcky: Obruče, kužely
   - POPIS AKTIVITY: Děti se spojí obruči, jako ploštice a snaží se společně projít cestu
7. CHROBÁK – Chrobák si válí svoji kuličku
   - Pomůcky: Velké overbaly
   - POPIS AKTIVITY: Děti kouli kuličku do svého domečku

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*Image – Design of all stations*



*Image – Collaboration – Balloons*



*Image – Presentation of medals*

## 5.5.15 Child's life events

| | |
|---|---|
| **Authors** | **Veronika Ojo, Zuzana Sádovská, Yuliia Barzhak and a collective of MŠ Kalinčiakova, Bratislava** |
| **Title** | **The night in the Kindergarden** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Develop auditory perception.<br>■ Communicate using complete sentences.<br>■ Respect the rules of the game.<br>■ Identify sounds occurring in everyday life based on attentive listening to a recording. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | This staff member will ensure that the child does not disconnect from the group on their own, does not get lost, and actively participates in the treasure hunt. |
| **Preparation/materials** | Audio player – pegs, reward for children (any according to kindergarten rules). |
| **Instructions** | Tonight, you will be searching for treasure in our kindergarten. On the pegs, there will be recorded various sounds, and your task will be to listen to the recording to figure out where the next peg might be hidden and find it. At the end of your journey, a treasure awaits you! However, you must listen carefully to the sounds on the pegs; they will guide you. Please leave the pegs where you found them.<br>Each group will have their own color of pegs, so another group doesn't take a peg that doesn't belong to them. |
| **Description** | In the kindergarten premises, there are talking pegs with various recorded sounds that guide the children (footsteps, door opening, turning a faucet). The children always listen to the recording and decide as a group which way to proceed, following the direction of the sound. They leave the peg where they found it.<br>The children are divided into 4 groups, and at the end, there is a treasure waiting for them in different locations. |
| **Feedback and support during the activity** | Good job, you found your peg! What could the sound on the recording mean? Where do you think it might lead you? Does the sound remind you of anything? Try discussing it in your group. I can see that all of you are focusing on listening. Share your ideas with each other about what the sound could be and where it might lead you. It's good that you're listening to each other. |
| **Questions for reflection** | Was it difficult to guess what was recorded on the pegs? Why? Where else could the pegs be placed? Was any sound confusing? How did you proceed in uncovering the sound? Did your teamwork go well? Did you help each other in the groups while searching for the treasure? |
| **Anticipated challenges and suggestions** | We recommend dividing the children into groups based on different skills and knowledge. Place the pegs at greater distances to make it more challenging for the children to find the next peg. Leave the pegs in visible locations so that the children notice them and don't walk past them. |



*Image – Hooray! We're going to look for treasure.*



*Image – We found something.*



*Image – We have a treasure!*

## 5.5.16 Safety in road traffic

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| **Author** | **Julijana Kološa** |
| **Title** | **Red/green traffic light** |
| **Topic** | **Safety in road traffic** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Fostering visual and auditory perception.<br>■ Acquiring traffic safety skills.<br>■ Indoor and outdoor orientation. |
| **Age of children** | 4–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We provide individual help to children from disadvantaged backgrounds to ensure they understand the instructions. We offer additional demonstrations and explanations if needed. We adjust the task duration and provide necessary accommodations to enable their participation in the group. We promote cooperation among all children, allowing diverse media of expressions such as pantomime, using their native language, or non-verbal communication. We provide resources such as picture dictionaries and other aids. |
| **Preparation/materials** | Visual materials (traffic lights), racket (in red and green), tokens (green on one side, red on the other), balance bikes, helmets, traffic signs, traffic lights. |
| **Instructions** | Our topic today is traffic safety. To begin, we will introduce the concept of traffic lights to children. Does anyone know what traffic lights are? Where can we find them? What's happening at the traffic lights? What does the change of colors mean for traffic participants? I am holding two rackets in my hands; they are our traffic lights. One racket is red, the other one is green. Have you ever noticed these two colors in traffic? Where? What do they mean? Can you explain? Red means stop, so you come to a standstill. Green means go, so you start moving.<br>Pay attention to the color of the rackets, because they will alternate.<br><br>Then we will give each child a token that has red on one side and green on the other. We will encourage them to engage in dialogue and discussions in small groups. Each child will throw a token, and if it lands on green, they will have a chance to talk about traffic safety, sharing their experience of arriving at kindergarten, describing traffic signs they are familiar with to their friends, and more. If the token lands on red side, they will have to wait for another round of throwing.<br><br>We prepare an outdoor training ground with obstacles and traffic signs. We will remind the children about the importance of traffic safety and the need to follow traffic regulations. The use of helmets is mandatory. |
| **Description** | The children are divided into groups and the game can be played either on the playground or in a larger space, such as the gym. We engage with the children in a discussion about traffic safety and introduce them to the rules of the game. When the red racket is up, children stop moving, when the green racket is up, children move about the space. Children must pay attention to the rackets and react accordingly. |

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| **Description** | When distributing the tokens to the children, we explain the rules of the game and encourage them to listen attentively. The game can also be played in a playroom. Each child throws a token, reinforces the rules of traffic safety and explains what traffic signs mean. Other children listen, actively participate in the conversation, share their own experiences, and summarize. |
| **Feedback and support during the activity** | I see that you work well together and help each other. We encourage children to talk about traffic safety and to reinforce traffic rules. During the tasks, we praise them and give them additional motivation. If they do not understand the instructions, we additionally demonstrate the tasks, explain them, and offer the children individual help. To increase the child's concentration, we also motivate and encourage them with praise. "*You did well! Well done! Good thinking!*" |
| **Questions for reflection** | How did you feel doing the task? Who started first? How did you reach a consensus? Did you help each other? How did you go about solving the task? Did you find the task challenging? What have you learned? |
| **Anticipated challenges and suggestions** | The game is played in a calm and a relaxed environment. We can set a time limit for the game by ringing a bell to indicate when to throw the token, or we can adapt the game to the children's abilities. We encourage the children to think about and reinforce traffic safety, as well as to share their experiences. |



*Appendix 1 – Traffic lights and children talking*



*Appendix 2 – Rackets*



*Appendix 3 – Educational game red/green light*



*Appendix 4 – Educational game for reinforcing traffic safety*




*Appendix 5 – Safe driving range 1*



*Appendix 6 – Safe driving range 2*

## 5.5.17 Materials and their properties

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|---|---|
| **Authors** | **Sumedija Agić, Špela Dovjak** |
| **Title** | **Movement game** |
| **Topic** | **Materials and their properties** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Developing perception and differentiating with various senses (mainly auditory differentiation of tones, visual differentiation of objects).<br>■ Enhancing the ability to focus on an activity and maintain attention.<br>■ Practicing sound recognition and appropriate response, including following instructions to assume specific poses and recognizing and responding to two or more sounds by changing movement or poses in a sequence. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | Divide the children into small groups and allow them to decide among themselves who will take the role of group leader first. Later, they should switch roles with each other. If possible, ensure that the groups in the playroom are placed at a distance from each other or use different materials with distinct sounds to avoid interference. Provide individual assistance to children from disadvantaged backgrounds by offering additional explanations using slower and clearer speech, simpler language, or visual aids to help them understand the instructions better. |
| **Preparation/materials** | We use utensils made of different materials, such as glass jars, enameled pot, wooden and plastic bowls, metal utensils, and wooden spoons for cooking. These utensils can be found in the kindergarten or at home. |
| **Instructions** | Our topic today is materials and their properties. Have you ever heard a bell ringing? How would you describe that sound? Is it nice, loud, or quiet? How come? What material are bells typically made of? Do you think the sound would be the same if the bell was made of wood, plastic, or glass? What if the bell was made of metal but only the clapper inside the bell was made of a different material like wood or plastic? Do you think the sound would be the same? What would happen to the sound if you surrounded the bell in the bell with bubble wrap or felt?<br><br>Your task today is to identify different materials based on their sound in the playroom. Use a wooden stick or a wooden spoon to strike the objects. What do you think of the sound produced? Is it pleasing to the ear? Next, try using a metal spoon instead of the wooden stick or wooden spoon. How do you like the sound now? Is it quieter or louder? Finally, wrap the metal spoon with a piece of felt or bubble wrap and secure it with an elastic band. Try the sounds again. How do they differ now? Does it make a difference if you strike a hollow object or a solid one? What's the difference? |

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| **Instructions** | Now that you have explored different objects and their sounds, have a discussion in your group and determine what materials they are made of. Next, decide who will lead the task first, and bear in mind that you will switch roles later. You will be playing a movement game. The team leader will strike an object with a wooden spoon, and the rest of the group will create a specific movement for this sound. When you hear this sound, you should immediately perform the corresponding movement and get into the pose. Then invent additional movements and poses for sounds made on other objects. Repeat the movements for each sound several times to ensure everyone in the group remembers them. Now, the movement game can begin. When the leader strikes a certain object with the wooden spoon and you hear the sound, quickly perform the agreed-upon movement.<br>Pay attention to the sound to ensure you get into the correct pose. The leader can choose which object to strike. The objects may vary, but the leader can, if they choose so, strike the same object several times consecutively. After each strike, the leader should wait for a moment to allow the rest of the group to get into the agreed-upon pose. You can play the game competitively. For example, if a child gets a movement wrong they must sit down. The last child still standing wins the game.<br><br>During the first rounds of the game, make sure to face the leader while they are striking the objects. Later, you can repeat the game but face away from the team leader so you cannot see which object they are striking.<br><br>You can try another variation where the leader strikes two or three objects in succession and then wait for the rest of the children to change poses in the same order.<br><br>Do you understand what your task is? Do you understand the instructions?<br>Can someone in the group repeat the instructions? |
| **Description** | The educator introduces the topic of materials to the children and discusses with them how materials differ from each other regarding various properties.<br>The educator encourages the children to explore and list these materials and properties. In small groups, the children then test what how different materials sound when they are struck. Which materials muffle sound? Which materials amplify it?<br><br>Next, the children engage in the activity. They need to pay close attention to the object the leader strikes and react with the appropriate movement. Depending on the children's abilities, the task can be modified. For example, the children can turn away from the leader, which helps develop auditory perception. Alternatively, the leader can create a sequence of sounds that the children must recognize and then repeat the movements in the same order. Before starting the activity, the children should decide among themselves the movement they will use, who the first leader will be, and how they will take turns so that everyone gets a chance to be the leader. |
| **Feedback and support during the activity** | How is the game progressing? Are you finding it difficult to recognize the sounds? Do you make mistakes often? Is the playroom quiet enough for you to hear the sounds distinctly? Did everyone in the group get a chance to be the leader?<br>At the beginning, encourage the children to use fewer objects and movements. Then, gradually increase the complexity as they become more capable. |

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| **Questions for reflection** | Did you enjoy the assignment? Did you find it challenging? Which part of the assignment was the most challenging? Were you able to distinguish all the sounds from each other? Did you notice any similarities between the sounds? Why do you think is that so? If you could do this activity again, what would you do differently? How could you improve it? What was it like to be the leader? What did you learn about working in a group? |
| **Anticipated challenges and suggestions** | We recommend reminding the children to maintain a quiet and focused environment during the task, avoiding disturbing each other and listening attentively to the sounds produced by the leader. The leader should also check if the group members have responded appropriately to each sound. It is important to take turns so that each child has the opportunity to experience the role of the group leader. |



*Appendix 1 – Giving instructions*



*Appendix 2 – Listening to sounds*



*Appendix 3 – Discussion*



*Appendix 4 – Children participating 1*



*Appendix 5 – Children participating 2*



*Appendix 6 – Children participating 3*

## 5.5.18 Healthy diet

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| **Author** | **Maja Geršak Banović** |
| **Title** | **Food traffic lights** |
| **Topic** | **Healthy diet** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Recognizing food.<br>■ Developing pattern recognition and classification.<br>■ Fostering group collaboration.<br>■ Developing auditory and visual attention.<br>■ Developing fine motor skills. |
| **Age of children** | 3–5 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We show and repeatedly name depicted food to children who do not understand the language. We can also use a multilingual dictionary and name the food items in several languages. |
| **Preparation/materials** | We need advertising flyers from various stores (such as Tuš, Mercator, Spar, Hofer, etc.), scissors, glue, a bulletin board, and a thicker B2 paper sheet for the traffic lights (in three colors). First, cut out three large colored circles (red, yellow, and green) with a diameter of approximately 60 cm. Next, mount these circles on the wall where they will be visible and accessible to the children. Finally, prepare the crafting stations, scissors and the glue. |
| **Instructions** | This is a box of flyers. Do you know advertising flyers? What do we find in them? Do you look at or flip through flyers at home with your parents? What are they for? Do we buy all the food in the flyers? Which food do you prefer, and which one would you choose?<br><br>Now, you will cut out food items from the advertising flyers and categorize them under the individual traffic lights. What do the colors in the traffic lights mean? What do the red, yellow, and green colors in the nutrition traffic lights represent? Once you have categorized your food items under the corresponding traffic lights, you will glue them into place. |
| **Description** | We prepare three large circles in green, yellow, and red, and mount them on the bulletin board. In the green circle, we place healthy food items which we can eat a lot, such as vegetables and fruit, or food items which we can eat every day. In the yellow circle, we place food items which we eat occasionally, a few times a week, like pasta. And in the red circle, we place unhealthy food items which should be consumed rarely, such as sweets.<br><br>We offer the children advertisement flyers so that they can find different types of food and drinks. We instruct them to use scissors and glue to cut out the food items and glue them in place. |
| **Feedback and support during the activity** | Do you understand what your task is? Did you recognize all the food items in the pictures? Do you know how to distinguish healthy food from unhealthy food? What can we use to aid food categorization? (Food pyramid) |

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| **Questions for reflection** | Is all food healthy? Why do you think so? Which foods from the food traffic lights do you eat the most? Do you grow any vegetables yourself? |
| **Anticipated challenges and suggestions** | We remind the children to handle scissors with care and recommend that they stick cut-out food item onto a suitable base. The activity should take place in a quiet environment to allow the children to focus on cutting, sorting, and gluing the food items into the appropriate circle. |



*Appendix 1 – Browsing through advertising flyers*



*Appendix 2 – Cutting with scissors*



*Appendix 3 – Classifying food items*



*Appendix 4 – Gluing food items onto the traffic lights*

## 5.5.19 Traditions and folk tales

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|---|---|
| **Authors** | **Špela Petrovič Štempihar, Alekseja Glinšek** |
| **Title** | **Clapping syllables** |
| **Topic** | **Traditions and folk tales** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Developing sound perception.<br>■ Acquiring the syllabification of words with simultaneous clapping.<br>■ Identifying and naming people, animals, objects and articulating them appropriately.<br>■ Encouraging sound awareness and discrimination, and auditory-motor coordination. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | The children are divided into smaller groups of 5 or 6 children, paying attention to the inclusion of children with special needs. First, we give the task to the more active child to lead or demonstrates the activities, so later they can aid those children who might struggle. The children should divide the tasks among themselves and determine who will distribute the worksheets and lead the activity. Before carrying out the activity, the children should have a thorough look at the worksheets, describe what they see, and exchange ideas about the course of the activity. The group leader distributes the worksheets among the other children. |
| **Preparation/materials** | We design and print worksheets that feature a certain character with a corresponding label in capital letters underneath it and squares next to the character. The child colors as many squares as there are syllables in the character's name. This activity helps children to recognize and name characters, and to utter and simultaneously clap syllables. It is recommended to carry out the activity in a calm and quiet space, free from external factors or distractions. |
| **Instructions** | We start by drawing attention to the worksheet and looking at the characters from the folk tale *The Three Bears.* Next, we revise what we have already said about the characteristics of folk tales. How do they differ from other fairy tales? Do you still remember who our chosen fairy tale is about? Who are the characters that appear in it?<br><br>We show the worksheet and ask the children to name all the characters and items they recognize from the fairy tale, such as the bears, the forest, the tables, the bed, the chairs, the house, the fairy tale, Goldilocks, and the bowls. Each word contains a certain number of syllables. We ask the children what they think a syllable is and if they have ever heard this word before? What does it mean? Say your name out loud. Utter it slowly and clearly. How many syllables do you hear? How can you help yourself in distinguishing syllables? How can we identify them better and, consequently, count them?<br><br>With the children, we spontaneously list the words, pronounce them audibly, and determine the number of syllables by clapping. Then, we nominate a child to lead the game in our stead. They give each participant a word, who then pronounces and syllabifies it by clapping, and at the end, they express the appropriate number of syllables. |

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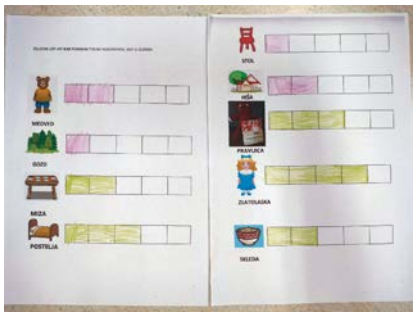
| **Instructions** | The worksheets are distributed to the children. In their groups, they discuss and divide the roles among themselves, and then switch roles. To check their understanding, we ask question, such as “Did you understand the instructions?”, “Do you know what you need to do?”, and “Who can you ask for help?”. |
| **Description** | The children are divided into groups, and the teacher provides them with detailed instructions for carrying out the activity. The children assign roles among themselves, and they also have the option to switch roles.<br><br>The teacher distributes the worksheets to the children and provides additional instructions to the child who has been assigned the role of the group leader to help and support the group.<br><br>The group leader distributes the worksheets and some crayons in their group. The children take turns presenting their experiences and prior knowledge related to the activity they are about to perform.<br><br>They attentively look at the pictures on the worksheet, name the characters and items, and use clapping to count the syllables. They listen to each other, make corrections, count syllables, and exchange discoveries.<br><br>When the group runs out of words on their worksheet, the group leader chooses their own words and checks the group’s ability to count syllables. The group leader then modifies the game and increases its difficulty by clapping their hands only to indicate the number of syllables without uttering the words themselves. The children then name the words that match the given number of syllables. |
| **Feedback and support during the activity** | Can you correctly name all the characters and items? Can you hear yourself when you utter the words? Can you hear and count the syllables in a word? Does something bother you while you count syllables? Listen carefully to each other. Focus and pay attention. |
| **Questions for reflection** | Did you successfully complete your task? What was the most challenging part? How well did you work together? Would you change, add, or omit anything? What would you do differently? Do you have any ideas how we could count syllables differently? Any suggestions? |
| **Anticipated challenges and suggestions** | We recommend providing a calm and quiet environment where children can fully focus on the task. Remind them to maintain a quiet atmosphere to ensure they can be attentive and concentrated while clapping and counting syllables. Encourage them not to rush and to perform the task slowly and deliberately. Emphasize the importance of cooperation and mutual assistance, encouraging them to help each other and point out any mistakes they notice. |
| **Appendix** | https://en.wikisource.org/wiki/Trije_Medvedi<br>Visual materials:<br>Three Bears Clipart:<br>Download Free High-Quality Three Bears Clipart (clipart-library.com)<br>Goldilocks and the Three Bears Small World Characters (twinkl.si) |



*Appendix 1 – Worksheets*



*Appendix 2 – Clapping syllables*



*Appendix 3 – Coloring squares in the worksheet*



*Appendix 4 – Completed task 1*



*Appendix 5 – Completed task 2*

## 5.5.20 Child's life events

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| **Author** | **Karmen Meško** |
| **Title** | **Recognizing school items by touch** |
| **Topic** | **Child's life events** |
| **Cognitive development domain** | **Perception** |
| **Objectives** | ■ Training tactile perception.<br>■ Identifying objects by touch.<br>■ Learning about school tools.<br>■ Making inferences about objects by touch.<br>■ Identifying the properties of objects by touch.<br>■ Recognising the variety of materials of objects by sight and touch. |
| **Age of children** | 5–6 years |
| **Anticipated challenges and recommendations, suggestions for children from disadvantaged backgrounds** | We make sure that children from disadvantaged backgrounds are evenly distributed among the groups.<br>We put different school items in a bag to motivate them to actively participate, share and find hidden items.<br>Pictures of school items, a poster, a picture dictionary, etc. can be used to help. |
| **Preparation/materials** | Large canvas bag, pens (2–3), pencils, erasers, small and large notebooks, rulers, crutch, safety scissors, brushes, watercolours, palette, slippers, reflector, notebook. |
| **Instructions** | We start a conversation about school, the children share their experiences and think about the subjects they need in school.<br>What do you think of when we say school? Have you ever been to school? What do we need to go to school?<br>The children are divided into small groups and each group is given a bag with different items.<br>Each child in the group taps the items and names them without looking in the bag.<br>The child takes the object out of the bag and tries to find out what it is used for and describe its properties.<br>Do you already know these objects? Have you used them before? Do the objects feel pleasant? When are these objects used? What do they have in common?<br>The child then names another child whose turn it is next.<br>The children in the group talk to each other, ask questions and help each other identify and describe the objects.<br>During the activity, the teachers give feedback and encourage the children to work together and help each other. |

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| **Description** | For extra motivation, we visited nearby primary schools together.<br>The planned activity aims to give children the opportunity to get to know objects they will use in their daily lives at school.<br>The children will work in groups to touch the selected objects, identify them, think about their use and be able to explain their purpose.<br>First, present the task to all the children, then divide them into smaller groups to continue their work.<br>The children try out the use of the objects they have chosen, and they can talk, ask friends in other groups or help themselves with picture books, reading materials or children's magazines that the teacher has prepared in the book corner on the theme of school. |
| **Feedback and support during the activity** | We noticed that you did a good job of agreeing on who should go first and who should go next. You were careful not to leave anyone out. How did you agree?<br>Did you know all the topics? If you do not know one of them, try to find it in the book.<br>Did you find out what material the objects are made of?<br>Try out the use of each object. |
| **Questions for reflection** | What was the most difficult thing you had to figure out?<br>What was easy to find out? How did you know it was a pencil, a notebook or a crayon?<br>What new things did you learn? Is there another item you would like to try?<br>Are you looking forward to school? Why (yes/no)? How is school different from kindergarten? |
| **Anticipated challenges and suggestions** | We can give the children clues when identifying objects (e.g. use these objects for writing, drawing, designing, etc.). The clues can be varied to further stimulate children's thinking and solution finding, and pictorial clues can be given to help children identify the use of certain objects. Remind them to make sure that they all take their turn and do not leave anyone out. |



*Appendix 1 – The child names and describes the object to be touched*



*Appendix 2 – Looking at and naming the object that has been pulled out*



*Appendix 3 – Looking at and naming the object pulled out*



*Appendix 4 – Describing objects and explaining what they are used for*



*Appendix 5 – Thinking about what all objects have in common*