



**Ministry of Education and Science of Ukraine  
Ivan Boberskyi Lviv State University of Physical Culture  
Department of Sports and Recreational Games**



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## **INSTRUCTIONS FOR GAMES AND RELAY RACES**

### **DOMAIN I OF THE METHOD**

#### **“MOVEMENT – COORDINATION – LEARNING”**

#### **SMART BALL**

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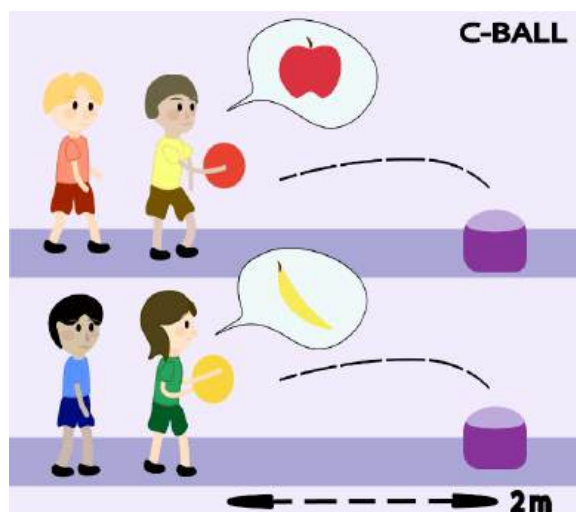


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## COLOURFUL BALL

**Objective:** to develop agility, reaction, and coordination; to develop speech and reinforce knowledge of colours; to train attention, thinking, and teamwork.

**Equipment:** two coloured balls (red and yellow), two large baskets (1 meter in diameter), and starting lines, flashcards, a timer and a portable sound system (optional).

**Expected learning outcomes:** children recognise and name colours and objects, enrich their vocabulary (focusing on vegetables, fruits, transport, animals, etc.),

learn to coordinate movements with speech activities, develop attentiveness, reaction time, and teamwork, and increase physical activity.

**Activity procedure.** Children are divided into two teams: “red” and “yellow”. Each team receives the corresponding balls. One participant from each team starts. Baskets are placed 2 meters from the start line. At the signal, players throw the ball into the basket and simultaneously name an object of the corresponding colour (for example, if the theme is fruits and vegetables: “tomato” for the red team, “banana” for the yellow team). If the word is not repeated, the team earns an extra point. After the throw, the player returns to the end of the line, and the next player takes the place at the start. Assistants from the teams stand near the baskets and return the balls. The game continues until all participants have made their throws. The team with the most points (for accurate throws and correct words) wins.

### Game variations:

“Colour associations”. Instead of just naming objects, children have to come up with a colour association (for example, red might be 'poppy' and yellow might be 'sun').

1. “Math ball”. Before throwing, players solve a simple math problem (e.g.,  $2+1$ ). When the answer is correct, they can throw the ball and name a word.
2. “Flash ball”. This is a speed game: the host names a category (fruit, vegetables, transport, clothing), and players must come up with items only from that category.
3. “Long word”. Players must name an object made up of more than one word (for example, “fire engine” for red or “bright sun” for yellow).
4. “Talking ball”. To develop foreign language skills, children can name objects of the corresponding colour in a foreign language.

To boost physical activity, you can add tasks before throwing. For example:

- “penguin” – walk to the ball while holding it between your knees;
- “crab” – walk backwards on your palms and feet;
- jump like a frog or bunny,



- spin around twice, and then throw;
- “secret combination” – a child draws a flashcard with a movement that must be performed before throwing (for example: “spin – jump – throw”).

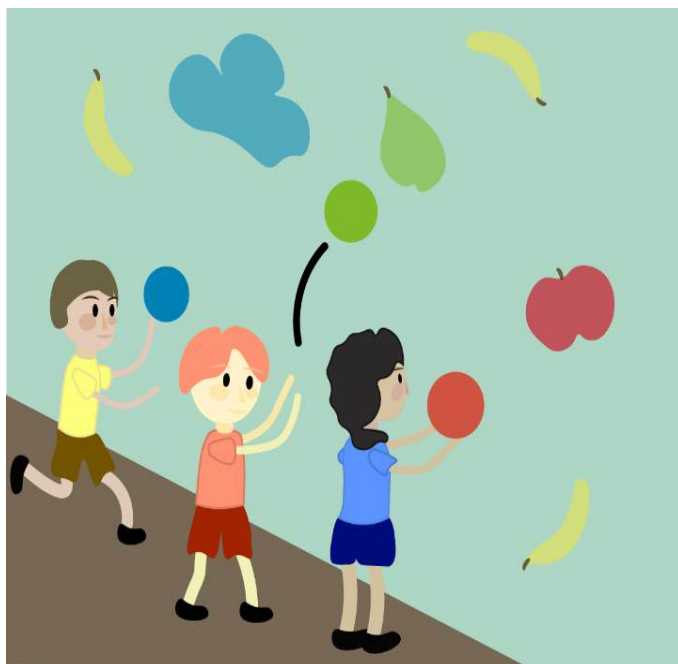
### Instructional guidelines:

1. Before the game, review the colours and examples of objects of the corresponding colours.
2. Explain the rules clearly and provide examples.
3. Encourage children to use unique words and avoid repeating those already mentioned.
4. Use positive acknowledgement: “Well done!”, “Great job!”, “Perfect!”
5. Alternate loading to avoid fatigue.
6. You may complicate the game:
  - thematic restrictions (name only fruits, animals, or clothing);
  - add flashcards (perform a movement before throwing);
  - use word combinations: name objects made up of two or more words (for example: “fire engine”, “merry-go-round”).

**After the game**, children can draw a picture based on the words they mentioned and make up a short story: 'What do you know that is red/yellow?' (orally or in written form).

**Additionally**, using balls of different textures, weights, or sizes can also improve sensory perception.

## MAGIC WALL



**Objective:** to develop physical skills (coordination, speed, agility); sensory perception (visual and auditory perception of colours, shapes, and sounds); cognitive development (memory, attention, recognition of shapes and colours, matching)

**Equipment:** The game requires an interactive wall that responds to ball contact. The proposed installation would comprise a wall with projections of colours, shapes, or images, whose appearance could change upon contact with objects. Shapes, numbers, or colours are projected onto the wall using a

projector. Balls of different colours with images of geometric shapes.

**Expected learning outcomes:** include children recognising colours, shapes, and sounds; responding promptly and precisely to visual and auditory stimuli; coordinating movements in accordance with the task; developing attention, spatial orientation, and collaboration; and actively engaging in cognitive and motor activities.

**Activity procedure.** Children are divided into teams or take turns playing. The leader explains the task: various images appear on the wall, which must be “caught” with a ball. Before each team or player, a task is set – for example, 'hit all the green images' or 'find all three triangles'. The player chooses the appropriate ball (for example, a circular one or a matching colour), follows the route (such as jumping or running), and then throws or rolls the ball against the wall. The more targets the ball “catches,” the more points the team or player earns. The game may have a time limit, during which children must finish, thus encouraging them to move vigorously and make quick decisions.

### Game variations:

“Colour explorers” - Objects or targets of different colours appear on the screen, and children must hit the “target” of the matching colour with the ball.

“Shape Hunters” - Circles, squares, triangles, and stars appear on the screen. Children must find a ball of the matching colour (or with the matching pattern) and “hit” the matching image.

“Sound Seeker” - When the ball touches the wall, a variety of sounds play (such as barking, rain noise, and mooing), and children are tasked with identifying the sound.

The „Magic Word” - a letter or a number appears on the wall – children are required to form a word or identify all numbers within a limited time.

### Instructional guidelines:





1. Gradual progression: begin with simple tasks - recognising colours or shapes. Then incorporate tasks involving movements and sounds.
  2. Various stimuli: the combination of various stimuli types can be employed to enhance the development of sensory skills. Specifically, one may integrate colour and shape, shape and sound, or all three elements simultaneously.
  3. Motor activity: encourage children to participate in various activities such as crawling, carrying a ball, hopping, jumping, and more.
  4. Team interaction: in team games, children can assist one another (one chooses the correct image, the other throws a ball).
  5. Positive acknowledgement: even if not all attempts were successful, “Well done!”, “Great job!”, “Perfect!”
  6. Using a timer: this develops self-control, attentiveness, and rapid decision-making.
- After the game: encourage the children to draw a figure or object they hit, or to create a short story: “What happened behind the wall?” (development of imagination). You may also revise the shapes/colours in a board or storytelling game.

## FUN MATHS



**Objective:** to develop speed, reaction, coordination, and cognitive abilities; to develop mathematical competencies, including computational skills and numerical operations; to foster attention, logic, visual perception, decision-making, cooperation, motivation, and initiative.

**Equipment:** Two sets of sports markers numbered from 1 to 10, coloured cones for each participant, flashcards with math problems involving addition, subtraction, and multiplication, and an interactive whiteboard.

**Expected learning outcomes:** accurately and rapidly solving basic

math problems, navigating number sequences, recognising digits, demonstrating rapid reactions, ensuring the accuracy of actions, collaborating effectively within a team, following the game rules, and increasing physical activity.

**Activity procedure.** Children are divided into two teams (for example, orange and white). Depending on the number of participants, white and orange cones are distributed. Sports markers numbered from 1 to 10 are placed in front of the teams in random order. The teacher reads aloud, shows a flashcard with math problems, then the first participant from each team must quickly place a cone on the number that is the answer to the problem and cross the starting line. If the student solves the problem correctly and is the first to return to the team, the team earns two points. If the student solves the problem correctly but is the second to return, the team earns one point. The tasks are then repeated for the next players.

### Game variations:

- “Time Math.” Calculate as many expressions as possible within 2 minutes. Each participant takes turns running out, calculating the expression, placing the cone, running back, and then the next participant begins. The team with the most correct answers wins.
- “Find a Pair” (adding numbers). The teacher names a number (for example, 9), and the child must find and cover two digits that add up to that number (for example, 4 and 5). You can make it more challenging by including multiplication or subtraction.
- “Equations.” The teacher presents an equation (for example,  $\_\_ + 3 = 7$ ), and the child must select the correct number.



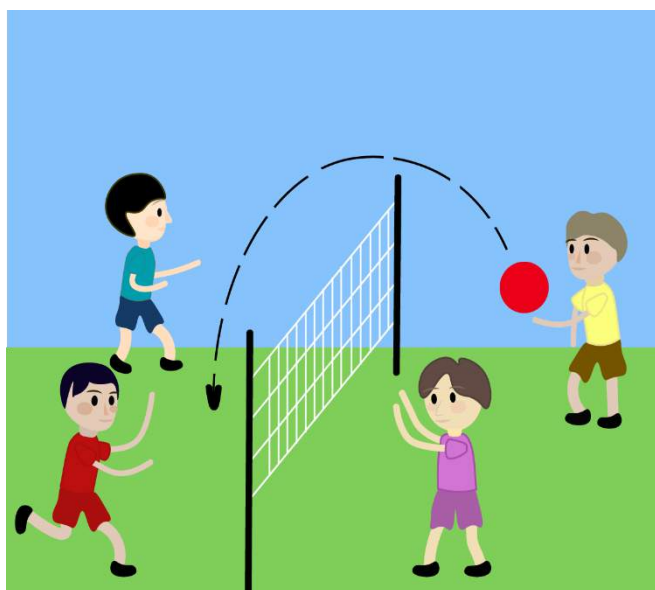
- “Math challenge”. Before starting, the child calculates the expression (for example:  $6 \times 2$ ), runs to the correct marker, touches it, then returns in a different way (such as jumping or crawling).

## **Instructional guidelines.**

1. Start with simple examples of addition/subtraction, and gradually introduce multiplication/division.
2. Ensure that all children participate and take turns.
3. Encourage children with praise regardless of the result: “Well done!”, “Great decision!”, “Try again!”
4. Monitor the correctness of motor actions and safe movement.
5. Vary the pace of the game: alternate dynamic tasks with calmer ones (for example, “Find a pair”).
6. If the group has different levels of knowledge, use individual examples adapted to the child.
7. To complicate the task, you can introduce time limits for execution or different ways of returning (jumping, sideways, squatting, etc.).

After the game, summarise the teams' results and invite the children to analyse which examples were the most interesting or most difficult. You can reinforce the game with a written task or drawing.

## THROW IT FASTER, KIDS!



**Objective:** to develop basic motor skills (throwing, catching, spatial orientation); to develop visual colour recognition and attention; to form basic teamwork skills; to encourage active movement through play.

**Equipment:** rope or ribbon (stretched at a height of 1 m or lower), soft balls of different colours (foam, fabric or rubber with a soft surface), baskets or boxes for balls, a playground.

**Expected learning outcomes:** children identify and name basic colours; can

throw a ball in a specified direction; follow simple instructions (throw, catch, wait for a signal); learn to play together as a team without engaging in competition.

**Activity procedure.** Children form two teams on either side of the rope. The teacher announces or shows the colour of the ball that can be thrown (for example, 'Only throw the yellow ball!'). One player from each team takes a ball of the corresponding colour and gently throws it over the rope. A player from the opposing team tries to catch or block the ball. If the ball drops, the child performs a fun task (for example, 'jump like a rabbit,' 'spin around once'). Then, it's the next player's turn. The game continues until everyone has thrown the balls.

### Game variations (simplified):

- 'Throw only red' – the children are required to identify the particular colour among several balls.
- 'Fun movement' – before throwing, the child performs one simple action (for example, clap their hands or take a step forward).
- 'Name the colour' – before throwing the ball, the player says its colour out loud.
- 'Catch and put' – after catching the ball, the player puts it in a coloured basket of the corresponding colour.

### Instructional guidelines:

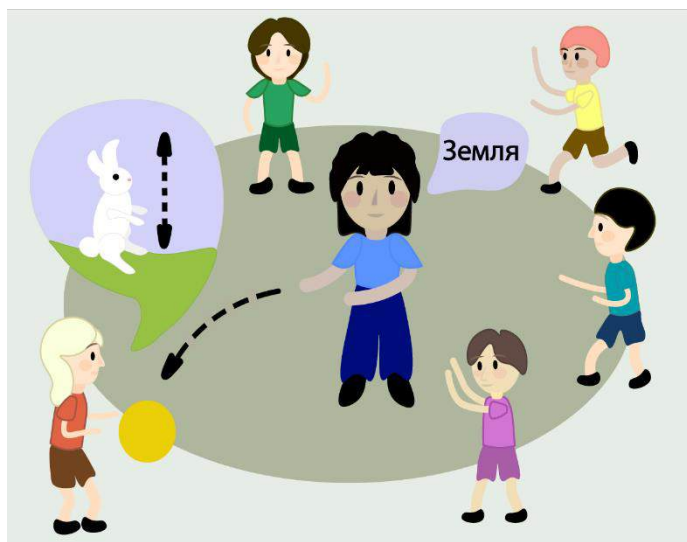
1. Start with a demonstration: show how to throw and catch the ball.
2. Choose light, bright balls: it is important that the balls are suitable for children.
3. Give clear, concise instructions: focus on one task at a time.
4. Support each child: praise the efforts, even for attempting: 'Good throw!', 'Well done, let's try again!'
5. Avoid turning the game into a competition: at this age, it is better to emphasise cooperation rather than winning.
6. Gradual complication: introduce new colours, movements, or tasks only after the children have mastered the previous ones.





Following the game, it is advisable to suggest that the children perform finger exercises or draw a ball in their preferred colour. Additionally, a brief discussion may be conducted with questions such as: ‘What ball did you throw?’ and ‘What was the most enjoyable?’





## NATURAL PHENOMENA

**Objective:** to develop reaction, speed, coordination and motor activity; to expand knowledge of the environment; to train attention, auditory memory, and the ability to act on a signal.

**Equipment:** a medium-sized soft ball; a playground; flashcards featuring animals and natural phenomena (optional).

**Expected learning outcomes:** children identify animals by their

natural habitat, follow instructions promptly, imitate simple animal movements and sounds, enhance overall motor activity, and interact in the game.

**Activity procedure:** children form a large circle, with the leader (either the teacher or a player) in the centre holding a ball. The leader says one of four words:

- “Earth!” – the child names an animal (for example, *a cat*) and imitates its movement.
- “Water!” – the child names a fish (e.g., *clownfish*) and imitates its swimming.
- “Air!” – the child names a bird (e.g., *an owl*) and imitates its flight.
- “Fire!” – all children run or walk in a circle, imitating escape.

Upon completing the task, the participant throws the ball back to the leader. The activity continues until all participants have had the opportunity to take part.

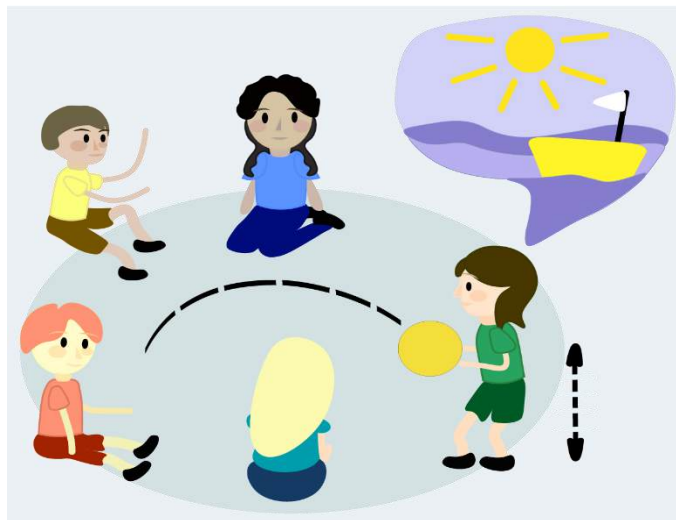
### Game variations

- “Natural movements” – no need to name the animal, just show the movement (*swimming, running, flying*).
- “Animal sound” – the child only makes the sound of the animal (for example, “*moo*,” “*meow*,” “*woof*,” “*hoo-hoo*”).
- “Colour Team” – the leader raises a coloured card (*blue for water, green for earth, white for air, red for fire*), and thus the children respond.

### Instructional guidelines:

1. Explain the rules and provide examples (for example, say “Water! – dolphin” and demonstrate the movement).
2. Don't complicate the game – let the children get used to the basic elements.
3. Foster an encouraging environment by acknowledging efforts, including unsuccessful attempts: “*Good idea! Try again!*”
4. Do not emphasise the accuracy of answers – the key is activity and participation.
5. Use vocabulary familiar to children (*cat, fish, bird, etc.*).
6. Vary the loading to prevent the children from becoming tired.

Following the game, a brief discussion may be conducted: “Let’s recall which animals were demonstrated?” “Where does a fox live? And a seagull? And a dolphin?” “What was your favourite one?”



## LANGUAGE BALL

**Objective:** to develop speech fluency (vocabulary, structure, use of language); to enhance coordination, balance, and accuracy; to develop cooperation and communication.

**Equipment:** Soft coloured balls (1–3) or featuring pictures such as fruit, animals, or transport; a playground; and flashcards illustrating animals, fruit, actions, locations, and seasons.

**Expected learning outcomes:** children name objects or concepts

based on a picture or topic; form a simple sentence or short story; coordinate movements during the game; follow the rules (listen, wait for their turn, cooperate).

**Activity procedure:** Children form a circle. The leader explains: when holding the ball, the participant responds to a question, then executes an exercise (e.g., jumping, hopping or rolling the ball) before passing it on.

The task can be assigned depending on the ball.

- Name the animal. Where does it live? How does it move?
- What kind of fruit is this? Where does it grow?
- Name three red things.
- What do you know about water/rain?

Following the response, the child executes a series of simple actions:

- Jumps three times;
- Raises the ball and turns around;
- Rolls the ball;
- Carries the ball on the head to a neighbouring participant.
- The game proceeds until all participants have engaged multiple times.

### Game variations

- Ball story – each child adds a sentence to a fictional story (for example: ‘Once upon a time, the lion woke up...’).
- Ball and movement – name a word and demonstrate the movement (for example, ‘a bird’ – flap the arms).
- Ball-Riddle’ – the leader tells a riddle, and the child who catches the ball must guess and name the word.
- Ball and Friend – the child who catches the ball wishes to a friend.

### Instructional guidelines:



1. Start with basic questions or topics such as names, colours, actions, and animals.
2. If children show reticence, encourage them to demonstrate the movement rather than say the word.
3. Acknowledge all responses positively, even if they are incorrect: 'Excellent! Well attempted!'
4. Prepare balls or flashcards in advance (you can attach pictures to the ball).
5. Conclude the activity with a brief discussion: 'Which ball was the most interesting? Which new insights did you gain?'

After the activity, it is essential to assist children in reflecting on their experience and to reinforce their outcomes. The conversation should be concise, friendly, and encouraging.

Questions for discussion:

- What did you enjoy most about the game?
- Which question did you find most interesting?
- Which movement did you find the most fun?
- What was new for you?
- Would you like to play again?

Ask the children to express their experience through movement or facial expressions, and then ask, "How do you feel after the game?" "Jump if you had fun", "Wave your hands if you learned something new".

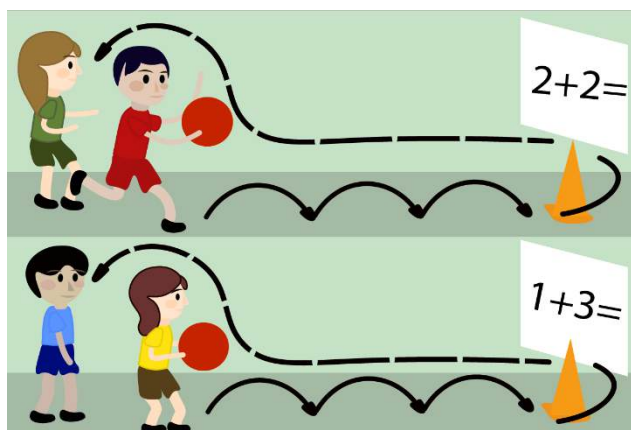
Please express gratitude to all participants, especially the shy children. Use concise phrases such as "Well done!" "Everyone was attentive!", "You came up with such a great word!" "I appreciated how you demonstrated the animal!"

Conclude with a cool-down activity (1–2 minutes):

- Stretch upwards – We are reaching for new knowledge!
- Shake your hands – Let's shake off our tiredness!
- Form a circle – We are a team!



## MATH DRIBBLING



**Objective:** to develop mathematical skills (addition, subtraction, comparison of numbers, numerical operations, numerical series); to improve coordination, agility, and ball handling accuracy; to strengthen attention, concentration, and decision-making; to promote responsibility, discipline, and mutual support.

**Equipment:** balls (one per participant or one per team); flashcards with math

problems (such as addition, subtraction, comparison, etc.); cones or markers to mark the trajectory, and a playground.

**Expected learning outcomes:** improvement in mental arithmetic skills (addition, subtraction, comparison); development of logic and attention; enhancement of ball handling (dribbling), coordination, agility, and motor skills; confidence and independence; increasing motivation to learn; fostering teamwork and interaction; following rules; developing responsibility; and experiencing positive emotions.

**Activity procedure:** Participants are divided into two or more teams. The teams line up in columns at the starting position. A cone or more are placed opposite each team. Flashcards with math problems are near the cones. The math problems correspond to the children's age and abilities.

At the signal, the first participant from each team dribbles the ball to the cone, stops carefully, takes a flashcard, reads the problem aloud, and provides the answer. If the answer is correct, the player dribbles the ball back to the starting line and passes it to the next player. If the answer is not correct, they perform a penalty task (for example, three squats or five hops), then pass the ball. The activity continues until all participants have completed a task.

The team finishing the relay first with the fewest mistakes wins.

Physical activity:

- dribbling in a straight line;
- stopping and controlling the ball;
- exercises for balance, accuracy, and self-regulation;
- extra exercises (squats, jumps, hops, etc.).

### Game variations.

1. Ball calculator: the problems on the flashcards with inequality signs (for example: “ $\_\_ < 7$ ”). The participant is required to identify the flashcard displaying the correct number (for instance, “5”) and continue the game.
2. Number relay: while dribbling, the player counts, e.g., from 1 to 10 forward and backwards, in steps of 2, etc.
3. Dribbling by the task: the player receives a problem (e.g., “ $3+2$ ”) and bounces the ball according to the result (i.e., 5 times), then returns.



4. Even and odd numbers: the leader announces a number. When the number is even, the ball is dribbled with the right hand; when it is odd, the ball is dribbled with the left hand.

5. Math maze: stops with tasks are along the path to the cone. The player must stop at each one, solve, and then move on.

**The end of the game** is reached when all team members have completed their tasks. This is followed by a brief reflection. Children are asked to share:

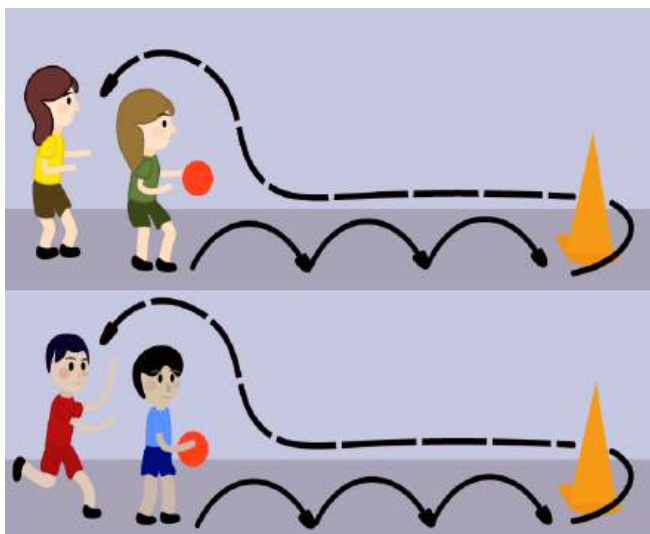
- which task they enjoyed the most;
- which task was the most challenging;
- what helped them answer faster.

It is also possible to have a cool-down or relaxation activities (for example, breathing and stretching exercises, dribbling imitating, etc.).

### **Instructional guidelines**

- All tasks should be appropriate for children's age and fitness level.
- The tasks should gradually increase in difficulty.
- Encourage every success in math and in physical activities
- All children should be involved and have equal opportunities.

## LIGHT BALL RHYTHM



**Objective:** to develop rhythmicity of movements, coordination, and agility; to improve dribbling in sync with rhythm; to train attention, reaction, and spatial orientation; to develop the ability to respond to musical and visual signals.

**Equipment:** balls (one per player or per team); portable sound system, rhythmic music with varying tempo (slow, fast, changing); light signals (coloured lights, LED panels, coloured flashcards); coloured cones or other

markers to mark the distance; a playground.

**Expected learning outcomes:** development of auditory and visual perception; improvement of coordination, rhythm and ball control; enhancement of concentration and response ability; formation of skills to adapt to changing conditions; development of emotional expressiveness and motor imagination through music and play.

**Activity procedure:** participants are divided into two teams and line up in a column at the start line. Each player takes turns dribbling the ball to the marked line, performing tasks that vary depending on the music and coloured light signals.

- green signal – dribbling;
- red signal – stop and hold the ball;
- blue signal – one-handed dribbling;
- yellow signal – one or two jumps and then dribbling;
- musical tempo – fast music indicates fast dribbling, slow music indicates slow dribbling.

After completing their turn, the player passes the ball to the next player. The game is over when everyone on the team has finished.

### Game variations:

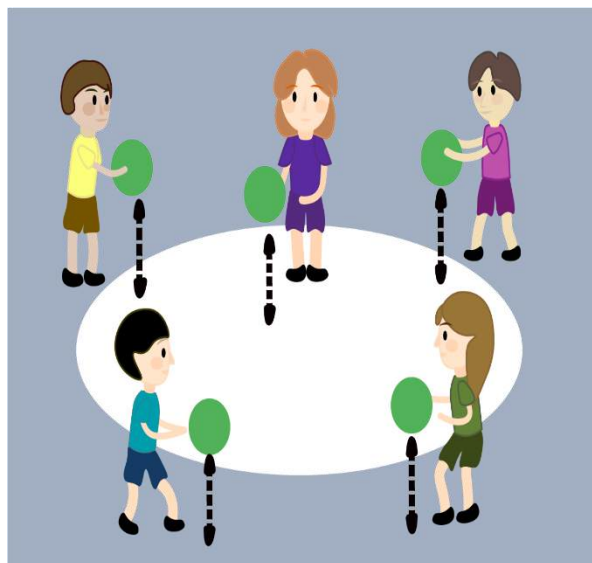
1. Musical rhythm: players are required to dribble in synchrony with the music, which varies during the game. Focusing on the tempo helps to develop a sense of rhythm and motor discipline.
2. Colour Maths: prior to returning, the child must count light signals (for example, yellow light flashes) and identify the corresponding number.
3. Dancing Ball: when the special music, such as the sound of bells or drums, is on, the child dances with the ball for five seconds.
4. Light Maze involves a set of coloured markers on a route, with each colour denoting a specific instruction, such as "red – turn right", "blue – stop", or "green – jump". Guided by the leader's signals, participants are required to follow the instructions.



### Instructional guidelines.

1. Prepare a safe place and balls, coloured cones, light signals (flashcards, flashlights), and different music. It is essential that the children are familiarised with the rules and meanings of the light signals, as well as the tempo changes in the music.
  2. Divide the children into teams. The leader sets the musical tempo and light signals that determine the children's actions with the ball. Ensure all participants perform the tasks, take turns dribbling the ball, and respond to the signals. Promote activity and follow the rules.
  3. Ensure a strict order of players and foster a positive atmosphere. Consider the individual abilities of the children and adjust the tasks or tempo if necessary. Use game variations to introduce variety and boost interest.
  4. Ensure safety by avoiding pushing, messy movements, and controlling the equipment. Take regular breaks when the participants exhibit signs of fatigue.
- The game is followed by a brief reflection, allowing the children to share their impressions. Emphasise the importance of attentiveness, teamwork, and coordination. Encourage regular exercise to improve skills.





## RHYTHM BALL

**Objective:** to develop rhythm, speech, attention and movement coordination; to form teamwork skills and auditory memory; to improve motor skills and sense of rhythm."

**Equipment:** balls (one per child or one per group/pair); rhyming chants (the teacher recites or provides text for synchronised repetition); portable sound system (optional), rhythmic audio track, drumbeat or metronome; a playground.

**Expected learning outcomes:** development of rhythm and auditory attention, enhancement of speech and memory, improvement of coordination, development of motor skills, the formation of teamwork skills, confidence and self-control, as well as stimulation of creativity and initiative.

**Activity procedure:** Children form a circle or column. The leader reads or recites a rhythmic chant (a recording can be used), and the children repeat the words in unison or in turn while performing the corresponding movements with the ball: dribbling, passing, tossing, catching, rolling, etc. The main idea is to stay in the rhythm and keep it during the game. If a child makes a mistake, such as losing the rhythm, forgetting the words, or losing ball control, an additional task must be performed (for example, toss the ball and catch it five times).

After the exercise, the player joins the others and continues the game. The leader gradually adjusts the pace and introduces new words or movements, maintaining participants' interest and focus.

### Game variations.

- 'Who is faster?' – The poem is recited at an accelerated pace, and the children are tasked with executing all movements accurately without losing the rhythm.
- 'Poetic quest' – After each line, the child is required to name an object, colour, number, or letter.
- 'Dance with the ball' – Movements with the ball are combined with simple dance elements, such as turns and side steps.
- 'Rhyming challenge' – The leader introduces unexpected changes to words or movements, requiring the children to adapt while maintaining proper rhythm and action accuracy.

### Instructional guidelines:

1. Select an appropriate poem or compose a text. Explain the rules to the children, demonstrate some movements, and practise together.
2. Pay attention to the coordination of movements and pronunciation. Gradually adjust the tempo to match the activity's complexity to the children's fitness level. Acknowledge successes and foster mutual support.



3. Organise the children in a manner that allows for comfortable movement for all participants. If required, divide the group into smaller subgroups or pairs. Ensure that prolonged waiting times are minimised, and that all children remain actively engaged.
4. Ensure that the balls do not go outside the playing area and that movements are safe. Avoid using heavy balls. Emphasise the importance of handling the equipment with care.
5. After finishing, hold a short discussion about what the children liked and who did well with the task. Emphasise the importance of teamwork, rhythm, attention and memory.
5. After the game, conduct a brief discussion regarding the children's preferences and identify those who excelled in the task. Emphasise the significance of teamwork, rhythm, concentration, and memory.

### Variant 1

#### The Dribbler's Dance

Forward we go, the ball at our feet, (*dribble the ball*)

Dribbling ahead in a flowing beat.

Quick and skilled, we move with grace – (*alternative dribbling*)

Never backwards, always face to face!

When my voice rings out, leap high, (*toss the ball up*)

Toss the ball up to the sky.

Then freeze in place, perfectly still – (*stop the ball*)

The ball stops now, we bend to will!

### Variant 2 (for throwing in pairs)

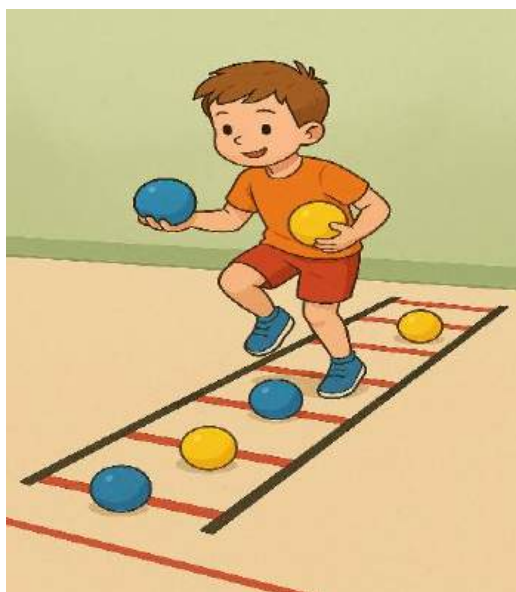
One – reach out and catch it clean (*catch the ball*)

Two – send it flying in between (*throw to your partner*)

Three – a quick toss to the sky so bright, (*toss up*)

Now again, with all your might! (*continue throwing*)

## LADDER BALL



**Objective:** to develop movement coordination, balance and agility; to enhance visual attention and colour discrimination abilities; to train fine motor skills and goal-directed movements; to foster spatial orientation skills and concentration; to develop autonomy and/or collaborative interaction.

**Equipment:** agility ladder (can be marked with chalk, tape, or specialised equipment); balls in two colours – yellow and blue (1-2 balls per participant, additional balls for the ladder cells); a playground; markers or cones to delineate movement pathways (if necessary).

**Expected learning outcomes:** improvement of movement coordination, attention and visual perception, fostering balance and motor control, developing spatial orientation, stimulating and increasing self-regulation, discipline, teamwork and self-confidence.

**Activity procedure:** Each child holds two balls – one yellow and one blue. A coordination ladder is placed on the floor, with one ball of a corresponding colour in each cell. The participant's task is to progress through the ladder sequentially, pausing in each section, carefully observing which ball is in the cell, and raising the ball of the matching colour from their hands (i.e., demonstrating correspondence). The player then advances to the next level. To increase complexity, additional motor challenges are introduced – traversing the ladder with two-foot jumps, one-foot hops, or alternating cells.

Upon completion, the participant returns to the starting position or transitions to the next player (in relay format). The winner is determined by the fastest and most accurate completion with correct ball matching and adherence to movement instructions.

### Game Variations:

- **"Colour Pathway"** – children not only pick up balls but must also place the correct colour ball in the matching colour cell and retrieve their own.
- **"One Ball – One Selection"** – children hold only one ball, and at each level quickly exchange it for the one in the ladder if the colours don't match.
- **"Timed Ladder"** – the task is performed against time, with errors (incorrect colour or skipped section) resulting in a penalty round.
- **"Partner Ladder"** – children complete the activity in pairs, assisting each other with correct ball selection, fostering cooperation and observational skills.
- **"Colour + Movement"** – colours match not only to balls but also to actions: for example, yellow – squatting, blue – jumping.

### Instructional guidelines:



1. Demonstrate the ladder setup, explain and model proper cell-to-cell progression while maintaining balance. Have children practice initially without balls, then with one colour, and finally with two balls.
2. Monitor that children execute the task attentively without rushing, ensuring proper comprehension of the game. Progressively introduce complexity variations (jumps, colour sequence changes, timed challenges).
3. Organise children as individual participants or in teams. To minimise wait time, arrange multiple parallel ladders or establish a rotation system where each child receives their attempt.
4. Ensure balls don't obstruct movement and the ladder remains secure. Avoid excessive pace during initial implementation stages.
5. Conduct a debriefing session to identify the most attentive participants and those who best integrated movement with observation. Provide positive reinforcement for attentiveness, accurate ball selection and coordination.



## QUICK BALL GRAB



**Objective:** to develop reaction, attention, movement coordination, and spatial orientation; to reinforce knowledge of body parts and colours; to develop agility and motor skills through active learning.

**Equipment:** hoops or markers (to mark the ball zone); multi-coloured balls (different colours for each pair); a playground; score sheet or tokens for point counting (optional).

**Expected learning outcomes:** development of reaction speed and decision-making; enhancement of attention, visual memory and auditory perception; improvement of movement

coordination and motor precision; improvement of knowledge of colours and body parts; formation of fair competition skills and friendly interaction.

**Activity procedure:** Children are organised in pairs or small groups, seated on the floor facing each other. In the centre, there is a hoop (or other marked circle) containing several multi-coloured balls. The leader remains nearby and gives commands.

The game begins with the leader sequentially naming different body parts: "nose," "ears," "knees," "shoulder," etc. Children must touch the corresponding body part as quickly as possible. Commands are given rapidly. At a certain moment, the leader suddenly calls out the colour, for example, "red ball!" So, children must instantly grab such a ball. Whoever does this first scores a point.

### Game Rules:

1. Children sit in pairs facing each other, with a hoop containing balls between them.
2. The leader gives commands naming body parts randomly.
3. On the command "[colour] ball!" players must instantly grab such a ball.
4. The winner is whoever grabs the ball first, so he/she scores one point.
5. The game lasts until a fixed number of points or a fixed time period.

### Game Variations:

- **"Quick Changes"** – the leader rapidly changes the rhythm and adds unexpected tasks (e.g., "touch the floor" or "clap your hands").
- **"False Command"** – sometimes the leader doesn't specify a colour, but something else (e.g., "happy nose"), and children should not take the ball.
- **"Team Challenge"** – play in teams; the point goes to the pair whose representative was fastest.
- **"False Colour"** – On the command "green," take a ball of a different colour – such confusion is designed to cultivate self-control and attentiveness.

### Instructional Guidelines:

1. Before starting the game, explain the rules and demonstrate an example action to avoid confusion.
2. Use varying tempos, gradually increasing task complexity.
3. Engage all children in the game. For a large group, divide into subgroups.
4. Monitor safety: ensure distance is enough to avoid injury during movements.
5. After the game, hold a debriefing session to identify what the children enjoyed, who was the fastest, which team worked well together, and whether everyone managed to avoid mistakes.

## REVERSE BALLS



**Objective:** to develop visual and motor coordination, accuracy and coordination of hand movements, attention and concentration, hand-eye coordination, and spatial orientation.

**Equipment:** 2 containers (boxes, baskets, bowls, etc.), balls of two colours (e.g., 5-8 blue and 5-8 red).

**Expected learning outcomes:** improvement of interhemispheric cerebellar interaction; development of skills for simultaneous control of both hands; improvement of movement accuracy and motor control; formation of quick reaction and orientation skills; activation of attention and self-control.

Number of participants: 1 child (individual task).

**Activity procedure:** place two containers in front of the child at a comfortable distance, such as 30-50 cm. All blue balls are in the left container, and all red balls are in the right container. The child sits facing the containers. At the adult's signal, the child simultaneously picks up one ball from each container with both hands. They then transfer the balls to the opposite containers: the blue ball to the red balls' container, and the red ball to the blue balls' container. The task is repeated until all the balls have been exchanged between the containers. Important: the transfer must be performed synchronously with both hands.

### Game rules:

- You cannot transfer balls from one container with both hands.
- Balls must be taken simultaneously, one from each container.
- The task is focused on precision.

### Game variations (optional):

1. Time: set a timer for 30 seconds or 1 minute to transfer as many balls as possible.
2. Place: place the containers at different heights or distances.

3. Movement: before transferring, lean forward, turn around, etc.
4. Cross-coordination: pass the balls from the right hand to the left and vice versa before transferring.

### Instructional guidelines:

1. Show how to perform the task.
2. Pay attention to the correctness of catching and transferring balls.
3. Support the child verbally: praise them for their concentration, accuracy, and skill.
4. Do not force the pace; first focus on quality, then on speed.

## BALLS AND RIBBONS



**Objective:** to enhance visual and motor coordination, reaction, attention, concentration, and pair interaction, to distinguish colours.

**Number of participants:** 2 children.

**Equipment:** 2 green hoops; 2 yellow hoops; 2-6 green balls; 2-6 yellow balls; 2 green ribbons; 2 yellow ribbons.

**Expected learning outcomes:** development of cooperation; improvement of movement accuracy and colour distinction; activation of mental processes: attention, memory,

perception; development of motor coordination and logic.

**Activity procedure:** children sit opposite each other at approximately 1.5–2 metres apart. Each child holds a ribbon: green in one hand and yellow in the other. The first child has two hoops (green and yellow) with balls of the matching colours. The second child also has two hoops (green and yellow), but without balls.

The first child chooses a ball (for example, a green one) and rolls it across the floor. The second child should pay attention to the ball's colour. They are to catch the ball with the hand that bears the ribbon of the same colour. Subsequently, place the ball into the matching-coloured hoop.

If the ball is caught correctly, the children switch roles. If the ball is not caught or is caught with the wrong hand, the ball is returned for another attempt.

### Rules of the game:

- The ball must be caught with the hand that has the matching-coloured ribbon.
- The ball must be placed in a matching-coloured hoop.
- After each successful attempt, the children switch roles.

**Duration:** The game lasts several rounds (5–10 minutes). The children alternate the colours and switch roles.

### Game variations:



- Change the speed of the rolling ball.
- Change the trajectories.
- Throw the ball (after basic level).
- Add other colours or attention tasks (e.g., an auditory signal).

### Instructional guidelines:

1. Show how to perform the task.
2. Explain the rules and pay attention to the colours of the ribbons and hoops.
3. Adjust the difficulty depending on the children's fitness level.
4. After the game, hold a debriefing session to identify what was difficult/interesting/amusing.

## COUNT AROUND



**Objective:** to promote physical activity, coordination, and teamwork; to train attentiveness and reaction; to develop mathematical competence; to develop the ability to respond to a signal.

Number of participants: 5-10 children (depending on the number of hoops).

**Equipment:** 20–30 small coloured balls; 5–7 hoops, flashcards with numbers or math tasks; music (a portable sound system).

**Expected learning outcomes:** Enhanced coordination and motor skills, development of attention, agility, and situational awareness, strengthening of mathematical competencies within practical settings, and the cultivation of teamwork abilities while following the rules.

**Activity procedure:** In the centre of the playground, there are balls and hoops with numbers, evenly spaced apart. The children form a circle around the hoops. Each hoop is marked with a flashcard displaying a number or a task (e.g., 3, 5–2, 2+1). The children stand in a circle around the balls. The leader turns on the music. The children begin to move, with the option to jump, walk on tiptoes, or perform other movements. When the music stops, the children quickly take the free hoop. Each child then picks up a flashcard, reads the number or solves the task, and takes the corresponding number of balls. The children place the balls inside their hoops. The process is repeated until all the balls have been distributed.

Final stage:

- counting the balls each child has got;





- determining the winner (by number of balls, speed, correctness of task solving, etc.);
- holding a debriefing session to identify what was difficult/interesting/amusing.

### **Game rules:**

- only take a free hoop;
- take the balls according to the number or task;
- do not push nor take more balls.
- listen to the music and react when it stops.

### **Game variations.**

Motor tasks: prior to collecting the balls, participants are required to complete specific activities such as jumping, walking on tiptoes, or hopping.

Complexity of counting: Use flashcards with math tasks such as '5-2' and '2+3' rather than numerical values to promote the development of logical thinking.

Colours: use the multicoloured flashcards; participants are to select only the balls of the indicated colour. For example: '3 blue', '2 red'.

### **Instructional guidelines.**

1. Choose a safe and spacious area (sports hall, playground, classroom).
2. Ensure you have enough equipment: hoops, balls, flashcards.
3. Adjust the tasks according to the age of participants.
4. Play music with a clear rhythm (you can use children's melodies or excerpts from classical music).
5. Have a briefing before the game begins, explaining the rules.
6. Observe the children's behaviour: maintain discipline and encourage shy children.
7. You can vary activities: one round – counting tasks; another – movement; the third – colour.
8. Follow a clear sequence: movement – stop – placement – task solving.
9. Encourage correct answers and fair play.
10. Children should move carefully and avoid pushing each other.