Special Education Teaching Kit

The kit is suitable for teaching in pre-school, early elementary, and grades 4-6. Therapists can freely adjust the exercises to the needs of a given student, focusing on developing skills and strengthening the areas they consider key.

What's in the Kit:

- 1x Photon robot
- 50x lesson scenarios
- Flashcards (5 sets)
- 1x Educational mat (storytelling)
- 1x Educational mat (grid)

Why Special Education Kit?

The Kit was designed in cooperation with a team of seasoned experts who work closely with students who have their own unique learning needs. In this set, the robot plays the role of a student's companion in the world of confusing social norms and other everyday challenges. The robot is patient and can repeat the same activities many times over, but it can also surprise, entertain and motivate students to give their best.

With 50 fully developed lesson plans, teachers can:

Support students' emotional development
by enabling students to identify their own motions and helping them understand how they affect their behavior.
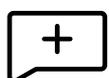
Help develop communication skills
with the included AAC communication system cards.

Increase focus and engagement
using Photon Robot and engaging educational games.

Support balanced development
with activities and methods adapted to their individual needs, abilities, and limitations.

Title and Competency	Activity Type	Learning Outcomes
Segmentation Autism Spectrum Disorder - communication	individual	• To develop the ability to understand speech • To expand the vocabulary (through passive listening) • To recognize and name objects
Guess What I'm Looking at Autism Spectrum Disorder - communication	individual	• To improve attention and concentration • To learn recognizing non-verbal communication • To learn recognizing selected objects, fruits, or vegetables
Guess What It Is Autism Spectrum Disorder - communication	individual	• To develop the ability to respond to others • To improve the ability to listen with understanding • To guess objects by their description
How Does It End? Autism Spectrum Disorder - communication	individual group	• To improve auditory memory • To develop imagination • To develop capabilities associated with the Theory of Mind (ToM)
Guess What I'm Thinking Autism Spectrum Disorder - communication / cognitive development	individual	• To improve communication skills • To develop capabilities associated with the Theory of Mind (ToM)
Guess What I'm Thinking (V2) Autism Spectrum Disorder - communication / cognitive development	individual	• To improve communication skills • To develop capabilities associated with the Theory of Mind (ToM)
Storytelling Autism Spectrum Disorder - communication	individual group	• To improve auditory memory • To develop imagination • To develop storytelling ability
Programming and Storytelling Autism Spectrum Disorder - communication	individual	• To develop programming skills • To learn how to build a narrative • To develop imagination
Robot's Adventures Autism Spectrum Disorder - communication	individual	• To improve memory • To learn how to create a narrative • To develop programming skills
Hide the Robot Autism Spectrum Disorder - communication / cognitive development	individual	• To improve the ability to listen and follow directions • To learn spatial orientation • To understand the names of spatial concepts and their relativity to others/objects

Title and Competency	Activity Type	Learning Outcomes
What Do You See? Autism Spectrum Disorder - cognitive development	individual	• To develop skills related to central coherence • To improve visual perception • To improve analytical skills and visual synthesis
Self-orientation Autism Spectrum Disorder - cognitive development	individual	• To improve visual memory • To develop self-orientation • To determine the location of objects
What Does the Robot See? Autism Spectrum Disorder - cognitive development	individual	• To improve the ability to see from the perspective of another person • To start using the terms: I see, I don't see
Do What I Do Autism Spectrum Disorder - cognitive development	individual group	• To improve auditory memory • To improve visual memory • To correctly reproduce sound sequences
Color and Shape Autism Spectrum Disorder - cognitive development	individual group	• To identify and name colors • To identify and name geometric shapes • To develop the ability to sort objects by their properties
What Does Not Fit? Autism Spectrum Disorder - cognitive development	individual group	• To develop the ability to exclude extra objects from a set • To improve the ability to understand and respond correctly to instructions • To improve perception and visual memory
Do What You Have Just Read Autism Spectrum Disorder - cognitive development	individual group	• To improve reading skills • To improve reading comprehension • To improve the ability to imitate
Do What You Have Just Read (V2) Autism Spectrum Disorder - cognitive development	group	• To improve reading skills • To improve reading comprehension • To improve the ability to imitate
Coded Words Autism Spectrum Disorder - cognitive development	individual	• To recognize letters • To improve reading skills • To develop programming skills
Coded Words (V2) Autism Spectrum Disorder - cognitive development	individual	• To improve analytical skills and auditory synthesis • To develop programming skills • To identify letters

Title and Competency	Activity Type	Learning Outcomes
Counting Autism Spectrum Disorder - cognitive development	individual / group	• To improve active listening skills • To develop the ability to respond to others • To recognize numbers
Counting (V2) Autism Spectrum Disorder - cognitive development	individual / group	• To improve active listening skills • To develop the ability to respond to others • To recognize numbers
Follow the Robot Autism Spectrum Disorder - cognitive development	individual	• To improve the ability to imitate • To develop perceptiveness • To improve reaction time to various visual stimuli
Repeat After Me Autism Spectrum Disorder - cognitive development	individual / group	• To improve visual memory • To develop the ability to repeat sequences • To develop programming skills
A Trip to the Countryside Autism Spectrum Disorder - social development	individual	• To improve active listening skills • To develop the ability to sort objects by their properties • To develop programming skills
At the Clothes Shop Autism Spectrum Disorder - social development	individual	• To improve the ability to respond correctly to others • To develop the ability to describe objects • To improve the ability to ask questions
Do What I Do Autism Spectrum Disorder - social development	individual / group	• To improve visual memory • To develop the ability to imitate • To develop the ability to notice others
Daily Activities Autism Spectrum Disorder - social development	individual	• To imitate daily activities • To improve attention and concentration • To develop self-care skills
Alternation Autism Spectrum Disorder - social development / communication	individual	• To develop understanding and promote usage of the pronouns "I" and "you" • To develop self-awareness
Racing with the Robots Autism Spectrum Disorder - social development	group	• To develop the ability to notice others • To improve the ability to follow instructions • To learn how to show joy upon task completion

Title and Competency	Activity Type	Learning Outcomes
Let Me Introduce Myself Social and emotional development	individual	• To develop the ability to notice others • To develop auditory and visual memory • To improve self-introduction skills
The Color Game Social and emotional development	individual group	• To develop the ability to notice others • To learn colors • To learn how to play in a group
My Emotions Social and emotional development	group	• To recognize and name basic emotions • To develop the ability to notice others • To correctly read the gestures and facial expressions of others
My Emotions (V2) Social and emotional development	individual	• To recognize and name basic emotions • To develop the ability to talk about emotions • To develop self-awareness through understanding own emotions
A Happy Horse and a Sad Frog Social and emotional development	group	• To develop the ability to imitate basic emotions • To develop the ability to imitate animal sounds and behaviors • To develop the ability to notice others
Name That Emotion Social and emotional development	individual	• To memorize names of basic emotions • To develop the ability to recognize emotions on flashcards • To develop the ability to recognize symbols representing emotions
Game Planning Social and emotional development	individual	• To develop planning skills • To develop the ability to follow a plan • To practice role-playing skills
Stations Social and emotional development	group	• To develop teamwork skills • To develop planning skills • To improve short term memory
How Well Do We Knoweach Other Social and emotional development	group	• To develop the ability to notice others • To improve memory • To develop an interest in peers
How Well Do We Know Each Other (V2) Social and emotional development	group	• To develop the ability to notice others • To improve memory • To get to know classmates better

Title and Competency	Activity Type	Learning Outcomes
I Like It / Don't Like It Social and emotional development	individual group	• To develop an awareness of individual preferences • To develop the ability to notice others • To improve the ability to talk about individual preferences
The Lazy 8 Social and emotional development	individual	• To develop the ability to imitate • To improve visual perceptiveness • To improve the ability to follow moving objects with eyes
Playing Shop Social and emotional development	individual	• To imitate daily activities • To name fruits, vegetables and recognize numbers • To mark a position in the coordinate system
When Do You Feel This Way? Social and emotional development	individual	• To recognize and name basic emotions • To develop the ability to talk about emotions • To develop self-awareness through understanding own emotions
Making Friends Social and emotional development	group	• To develop teamwork skills • To learn the names of classmates • To develop the ability of cooperation
Talking About Emotions Social and emotional development	individual group	• To improve the ability to recognize and name emotions • To develop programming skills • To relate emotions with specific behaviors
My Feelings Social and emotional development	individual group	• To recognize experienced feelings • To understand the inseparability of feelings and behavior • To develop the ability to notice others
What Do I See? Social and emotional development	individual group	• To develop decision-making skills • To develop an awareness of individual preferences
Giving and Receiving Compliments Social and emotional development	individual	• To develop the ability to notice others • To develop the ability to pay and accept compliments
A Journey to the Land of Anger, Sorrow, and Joy Social and emotional development	individual group	• To improve the ability to recognize basic emotions • To name basic emotions

How to work with the Kit

We always recommend buying one Kit for 5-6 students. The more Kits in class, the more possibilities you get to conduct engaging classes.

The materials in the Kit allow teachers to conduct group and individual classes. The Kit also allows special education teachers to carry out cognitive and social communication lessons. Each activity is supplemented with detailed guidelines for implementation and hints on which elements the teacher should pay special attention to. The teacher receives a box containing one robot, a set of 50 activities, and other accessories. The activities consist of programming the robot's movement, the color of its feelers, and the sounds it makes in a particular situation. Like with every other Kit, the programming part is easy and intuitive and requires no previous experience.

Activities for children with autism spectrum disorder — communication

Target group: Kindergarten   **Activity type:** individual

Scenario: Segmentation

Goals (child):

- To develop the ability to understand speech
- To expand the vocabulary (through passive listening)
- To recognize and name objects

Programming interface:

- Photon Joystick
- Required items:
- The Photon Robot
- Flashcards – the Emotions, Objects, and Activities set

Activity preparation:

Sit down in front of the child. Place the flashcards depicting various objects or activities in front of the child. If you are only starting to work with that child or the child has significant difficulties understanding speech, then lay down only two flashcards (you can increase their number at a later stage).

Activity:

Ask a question, e.g., Do you see shoes? Or simply say "Shoes". The child's task is to drive the Photon Robot onto the appropriate flashcard. Repeat asking questions several times and change flashcards each time. Remember to return to flashcards shown in previous turns.

Scenario: Guess what I'm thinking (v2)

Goals (child):

- To improve communication skills
- To develop capabilities associated with the Theory of Mind (ToM)

Programming interface:

- Photon Badge

Required items:

- The Photon Robot
- Flashcards (the Emotions, Objects, and Activities set)
- Educational mat (of any type)

Activity preparation:

- Place flashcards of your chosen category on the mat. Make sure that there is one flashcard in each field.
- Leave the center (middle) square empty to place the Photon robot there.
- Program the Photon Robot together, i.e., the code should take into account responses to "yes" and "no" answers:
    - yes = green light / sound: Awesome,
    - no = violet / sound: a frog.

Activity:

- You need to think of an object, and the child has to guess what you are thinking of.
- The child can only ask yes/no questions using the Photon Robot you have
- pre-programmed together.
- Take turns.
- If the child is unable to ask such questions or does not know what to ask, take a sheet of paper and draw a suggestion/hint about various objects, e.g., a color palette, object outlines, etc. In other words, prepare the child to play.

Activities for children with autism spectrum disorder – cognitive development

Target group: Kindergarten, Grade 1–3   **Activity type:** individual / group

Scenario: Do what I do

Goals (child):

- To improve auditory memory
- To improve visual memory
- To correctly reproduce sound sequences

Programming interface:

- Photon Badge

Required items:

- The Photon Robot (one or two)
- Flashcards – sounds (the Symbols used in our application set)

Activity preparation:

- Put the color educational mat on the floor.
- Place the Photon Robot on any field on the mat. You will use this field to start building your narrative.

Activity:

- Start by arranging different elements (sounds/actions) into a sequence in the Photon Badge interface, e.g., cat meowing, dog barking, eyes/ears color change, etc. Put flashcards representing your code in the same order on the mat. Present it to the child, then launch it on your interface.
- The child has to reproduce the presented sequence of sounds and actions on his/her tablet.