



Math Box – The Ugly Duckling

Activity sheet

- **Target group:** 6+ years old
- **Duration:** 30–45 minutes
- **Material needed:**
 - Cards with numbers and images from the story,
 - a communication board with mathematical concepts (more/less, bigger/smaller, first/last),
 - manipulative materials (duckling figurines),
 - spatial relationship pictograms, interactive math applications (ICT-AAC)
- **Key competence:** numeracy

GENERAL OBJECTIVES

This activity encourages early mathematical thinking through a story that children know and love. By connecting numbers, shapes, and spatial relationships with elements from the story, basic pre-mathematical skills are developed in an engaging way. With the use of AAC tools, equal participation is made possible for children with communication difficulties.

IMPLEMENTATION

- **Counting the characters in the story**

Children count the ducklings that appear at the beginning and throughout the story. Questions such as: “How many were there at the beginning?”, “How many are left?”, “Which group has more?” are asked. Children use number cards and AAC boards with concepts such as “more” and “less.”

- **Sorting and comparing**

Children sort story-related items (pictures, objects, figurines) by size, colour, or type. Through this activity, they learn concepts such as “bigger,” “smaller,” “same,” and “different.”

- **Spatial orientation**

Using duckling and swan figurines, children place them in various spatial positions: above, below, between. The activity helps them understand spatial concepts with the support of communication tools that include symbols for orientation.

POTENTIALS FOR AAC SKILLS DEVELOPMENT

The activity enables children who use AAC systems to develop mathematical language, follow simple instructions, and participate in mathematical discussions. Using symbols for numbers, quantities, shapes, and spatial relationships facilitates understanding and expressing mathematical concepts. The activities are visually and practically supported, ensuring inclusive learning.



TO GO FURTHER

Mathematical skills can be further developed through other story-related activities, such as measuring distances (how far did the duckling travel?) and creating their own counting rhymes based on the story. The combination of math and storytelling makes learning meaningful and motivating for all students.



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