

***Scenario title/name of the game:*** Mouse and Cheese

***Children’s age (primary school students):*** 7-8 years old

***Time needed:*** 15 minutes

***Content/Subject:*** Spatial Orientations and Numbers

***Aim of the activity:*** Plan, write down and complete a 3-5 step algorithm to move around the playing area using the words "right"/"left"/"up"/"down". Explains how to move differently, what changes if the steps are different. Determines the number of objects and counts forwards, backwards within 10; Check the result of the steps

# Introduction

This game aims to develop Spatial Orientation skills by educational robot. The story of the game, appropriated for the students age, will take them in a scenario where they can help mouse to get a piece of cheese by using their knowledge!

## Resources:

***Learning Resources Code & programmable robot***

***Cheese toy, arrow cards***

# A detailed description of the scenario

All day long, the little mouse dreams of a delicious piece of cheese. She went looking for it. On the way, the mouse spotted a magic field with a big piece of cheese. To get to the cheese, the mouse had to solve a problem: figure out the best direction to go and figure out how many steps to walk to get to the piece of cheese. Help the mouse get the cheese and bite into it!

# Steps

1. Decide together what arrows do you need to get a cheese
2. Decide together how many steps do you need to get a cheese as a goal of path
3. Make a mental map of the path to collect the first piece of cheese
4. Programme the robot (or put the arrows in the right order). Press start!
5. Collect the cheese.
6. Feed the mouse!

# Tips and tricks for the teacher

Create play board for Mouse Robot together!

Encourage children to speak out loudly when they think!

Change the starting place of collecting the cheese, if you wish to add challenge for each participant!

Let children make mistakes. Trying again and discovering the error is part of the game

Start with the pallet and the path created!

It is important to plan the goal ''cheese''.

Both barriers and cards should be used.

In each situation, the mouse path to the goal should be programmed.

Play out situations predicting how the mouse will go if there is a barrier in front of it.

# Variants of the scenario/the game

Students can work out task form textbook (see Figure 1)

|  | **Pay attention and watch! Count! Answer the questions!**  ***A hobby of mice is to ride trains!***  How many coaches in total?  How many mice in total?  How many coaches have 2 mice? Which ones?  How many carriages have 3 mice? Which ones?  How many mice are in odd-numbered carriages?  Figure out 3 more questions! Answer them! |
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| ***Figure 1 Task*** (Anspoka, Birzgale, Dzērve, Helmane, Leite, 2011) | |

**Literature:**

Anspoka, Z., Birzgale, E., Dzērve, I., Helmane, I., Leite, I. (2011). Sākam mācīties! Otrā grāmata. Lielvārds (in Latvian).