

TITLE: Algorithms are all around us

LEARNING SCENARIO	
<i>School:</i>	<i>Duration (minutes):</i> 90
<i>Teacher:</i>	<i>Students age:</i> 8

<i>Essential Idea:</i>	In some tasks, you will come across repetitive actions. Consider them while trying to get the correct solution.
------------------------	--

Topics:

- Pupils explore, design and create step-by-step and creative instructions to solve a specific challenge or problem.

Aims:

- Pupils create a series of instructions in which they use repetition.
- Pupils analyze a series of instructions that perform a simple task and if necessary, correct the wrong sequence.

Outcomes:

- With the help of the teacher, pupils can discover, display and analyze the steps of solving a simple task that contains a sequence of steps and repetition.

Work forms:

- individual work
- work in pairs

Methods:

- presentation
- discussion
- graphic work

ARTICULATION**Course of action (duration, minutes)****INTRODUCTION**

We begin a conversation on how to build a kite.

What actions do we need to take?

In what order do we perform actions?

Can we create a kite if we mix the order of actions?

Explain your answer.

Announcement of the goal of the lesson:

Today in computer science class we will learn the exact sequence of executing commands in Scratch. We've practiced brain teasers with similar tasks in previous hours, and now we'll see how the sequence of commands is performed in Scratch.

MAIN PART

The teacher explains the tasks.

Pupils solve tasks and present their solutions.

Pupils and teachers discuss and evaluate the presented solutions.

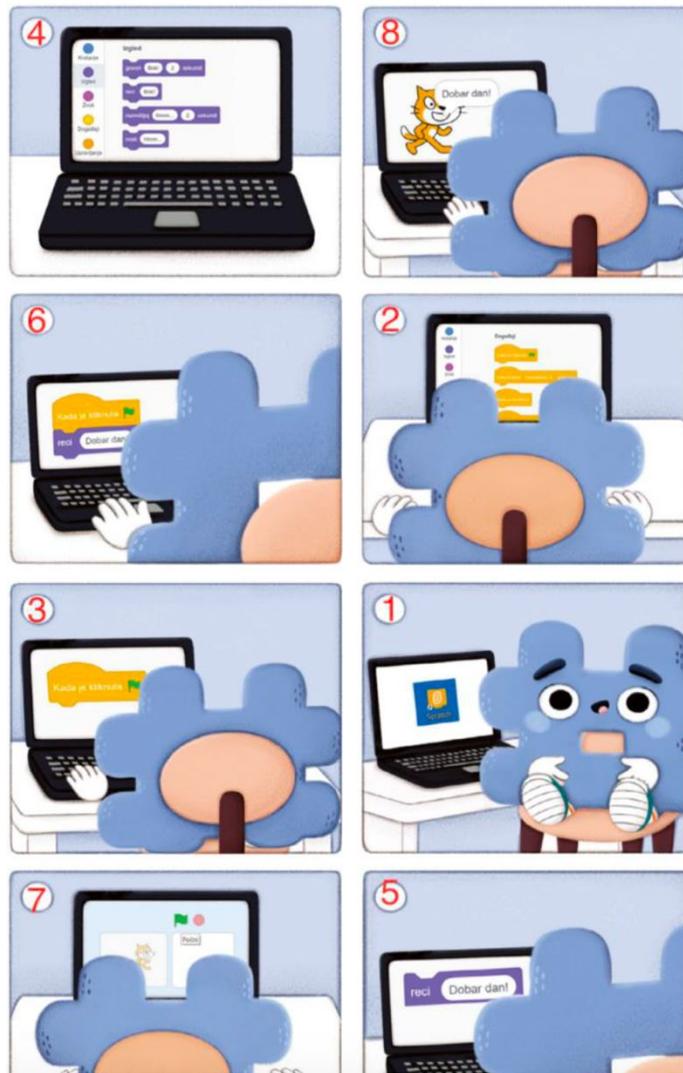
1. Peter and the fruit

solution:

```
when clicked
say apple for 2 seconds
say kiwi for 2 seconds
say orange for 2 seconds
say blueberry for 2 seconds
say banana for 2 seconds
say strawberry for 2 seconds
```

2. The comic book

solution:



3. The pancakes

Create a program in Scratch on how to prepare pancakes.

Introduce the program to students in the classroom.

4. The house

Create a program in Scratch on how to build the house.

Introduce the program to pupils in the classroom.

CONCLUSION

In programming, it is important to create an exact sequence of commands so that the program works in the sequence we envisioned.

The teacher checks the pupils' solutions to the tasks.

Together they repeat the strategy they had used in solving today's tasks.

Methods

presentation
discussion
work on the text
graphic work
interactive exercise /simulation on the computer

interview
demonstration
role playing

Work forms

individual work
work in pairs
group work
frontal work

Material:

- textbook, notebook
- computer, Scratch/Scratch Online

Literature

-

PERSONAL OBSERVATIONS, COMMENTS AND NOTES