

TITLE: micro:bit – output Smiley
LEARNING SCENARIO

School:	Duration (minutes):	90
Teacher:	Students age:	11

Essential Idea:
micro:bit – output Smiley accompanied by sound
Topics:

- Pupils begin to understand how code is always a mathematical problem-solving exercise and how it can possibly lead to ethical issues.

Aims:

- Pupils design and program software that prints values which includes numbers, icons or texts.

Outcomes:

- Pupils check the correctness of the code, and detect and correct errors.
- Pupils learn to predict outcomes, test and explain existing programs.

Work forms:

- individual work
- work in pairs
- group work

Methods:

- presentation
- discussion
- interactive exercise

ARTICULATION

Course of action (duration, minutes)

INTRODUCTION

Teacher explains and starts discussion with pupils:

What is a micro: bit?

What can we do with the micro: bit?

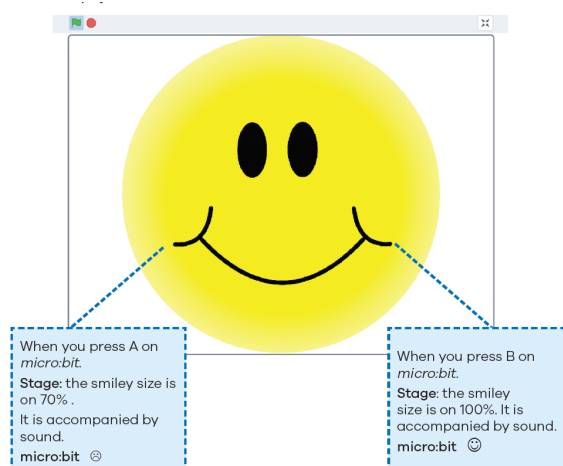
How can we create a program for the micro: bit?

How do we transfer a program from the computer to the micro: bit?

MAIN PART

Topics for discussion

How we can solve a following task:



Task

1. Load a sprite from your computer (beware of copyright).
2. Drag the when button pressed block and choose A.
3. Drag the display block and click on the areas in the drop-down menu to show the sad smiley.
4. Drag the start sound block and choose Drum Boing. Drag the sdt size to block and type 70%
5. Connect the blocks in the correct order so that by pressing B you can see a smiley on the micro:bit playing the Cheer sound and set its size on the stage to 100%..

Exercise

Design and create a program for micro: bit.

When you press the A button, it happens the first set of commands.

When you press button B, it happens the second set of commands.

Teacher explains and give instructions how to solve tasks.

Pupils solve tasks and present their solutions.

Pupils and teacher discuss and evaluate the presented solutions.

CONCLUSION

Button A and button B are two different triggers for executing commands.

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:

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Literature

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PERSONAL OBSERVATIONS, COMMENTS AND NOTES

