Earthworm journeys

1 Overall aims:

- Raising awareness of cultural diversity
- Developing logical algorithmic thinking, task-oriented approach to the problems posed and creativity
- Shaping the ability to work in teams, searching for compromises, optimal solutions
- Education to be sensitive to the beauty of nature
- Developing an attitude of responsibility for the natural environment
- Gradual and responsible introduction of children to the digital world (conscious, active and creative use of modern technologies)

2 Vocabulary - keywords

earthworm, coding

3 Sustainable abilities developed

- Collaboration competency
- Strategic competency

4 Pillars of sustainability included

- socio-cultural

5 STEAM domains

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6 Teaching methodologies/activity outline

Introduction

Indoor activity: The teacher presents books on earthworms available in different languages (in the case of lack of access to all publications, the teacher can demonstrate the covers only).

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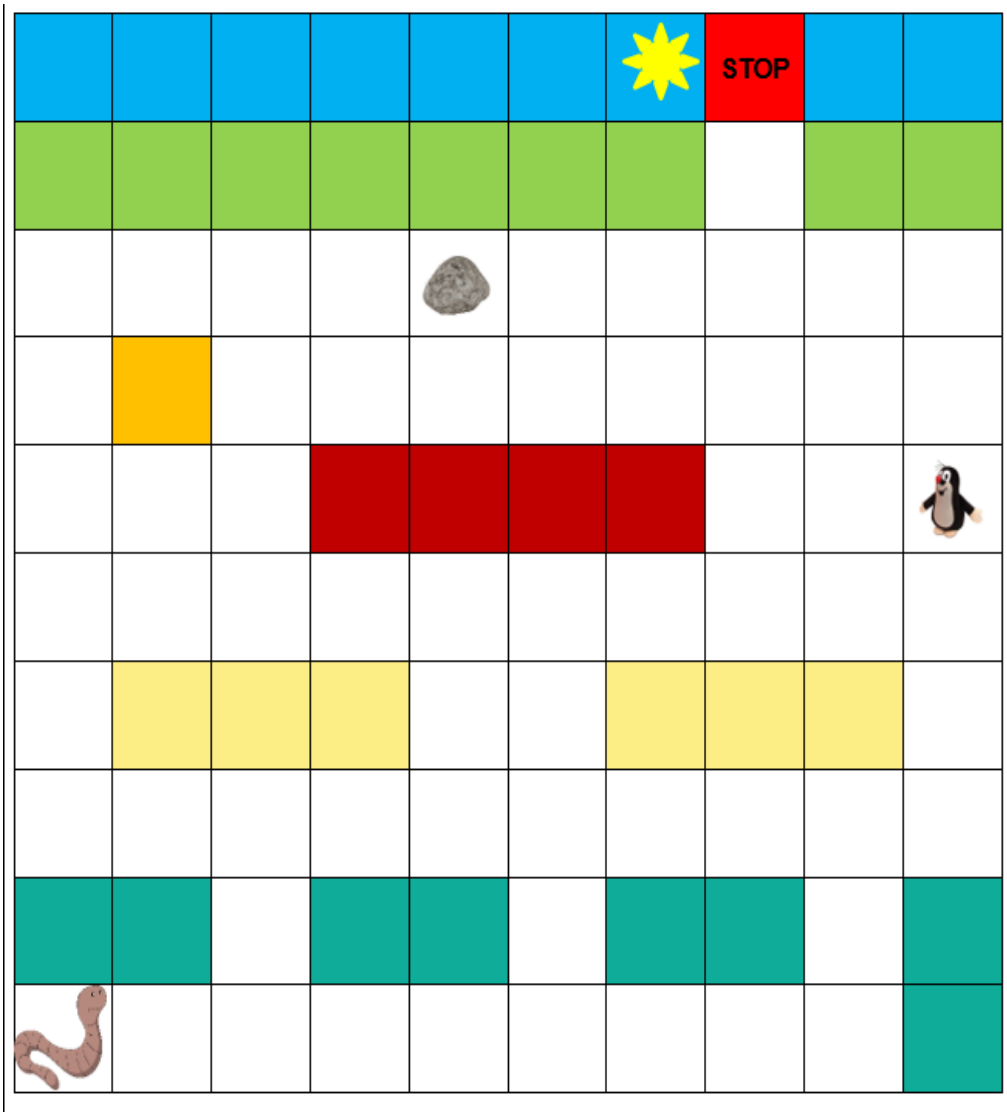
Main part:

1. The children are invited to take part in the game - "Which of the words do you think means earthworm (in different languages)?". It might be like the example: (https://view.genial.ly/6235e3d98862b20011c5918b/interactive-content-animated-sketch-quiz). Children guess by voting. The child who can guess the most words may be asked to play the role of an earthworm in the next task
2. Outdoor activity: using a coding mat or a board drawn on the sidewalk: the children are asked to help the earthworm reach the surface.



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	The first task is to find your way to the surface. Children work together to arrange arrows on the board and use arrows to code their path. In the following stages, other variants are possible: • By what routes can the earthworm reach the surface? • Which road is the longest? • Which is the shortest way? • How can I shorten the code? (repetitions) for older children. • Additional questions: • What underground animals can an earthworm meet on its way to the surface? • What layers of soil can the earthworm pass through on its way to the surface?
7	**Expected learning outcomes** **The child will be able to:** ● be eager to learn other languages ● cooperate in teams while creating a game ● build a maze passage algorithm
8	**Assessment** The child creates code with directional arrows The child explains the meaning of the arrow pictograms
9	**Equipment and materials to be used in learning unit (tools, ingredients etc)** ● Books about earthworm or presentation with book covers; ● interactive game "Which of the words do you think means earthworm (in different languages)?"; ● coding mat or a board drawn on the pavement, arrows
10	**Kind of setting - lab, kitchen, outdoor etc.** preschool garden, classroom
11	**References - source:** https://happybrownhouse.com/10-books-about-worms/

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