

Didactic Scenario

1. Title

Geometry shapes

2. Keywords

cube, sphere, cylinder, pyramid

3. Basic Information

STEAM Subject: Math, English, Technology, Art

Typical interaction time with the instructional scenario in teaching hours for in-school work:
Math (1 hour), Technology (1 hour), English (1 hour), Art (1 hour)

General description of the scenario:

<u>Phases</u>	<u>Stage</u>	<u>Time</u>
Warm-up activity, introduction to the topic	preparation stage	5'
Explanation of work ahead and what is expected of them	preparation stage	5'
Presentation of the instructional-educational content	implementation stage	35'
Evaluation	conclusion-evaluation stage	5'

Age group: 9-10 years

Estimated difficulty level:

Very Easy	Easy	Moderate	Challenging	Very Challenging
			X	

Teaching resources

Material: Models of geometric shapes

School infrastructure: Smart board, devices connected to the Internet

Additional material from external sources/online tools:

- <https://www.youtube.com/watch?v=C-84mZwATbw>
- <https://www.tinkercad.com/things/6fP48oSHUgX-copy-of-geometry-project/edit>
- <https://wordwall.net/resource/9377193/math/3d-shapes>

Differentiated Instruction for students of differing abilities and learning styles in the same class: N/A

Developed by: Otilia Ezaru

4. Educational Problem

Geometry allows students to connect mapping objects in the classroom to real-world contexts regarding direction and place. Understanding of spatial relationships is also considered important in the role of problem solving and higher-order thinking skills.

5. Learning Objective (-s)

1. Students will discover the interesting world of math;
2. Students will learn the characteristics of geometric shapes;
3. Students will learn to use geometric shapes to build a castle;
4. Students will develop their digital skills.

6. Phases of the Scenario

Phase 1

Title: Warm-up activity, introduction to the topic

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 5'

Detailed description of the scenario phase:
Students will follow a video with information about plane shapes and geometric shapes.

Activity sheets:
<https://www.youtube.com/watch?v=C-84mZwATbw>

Phase 2

Title: Explanation of work ahead and what is expected of them

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 5'

Detailed description of the scenario phase:
It will be explained to the students that the difference between figure and geometric shape is that the geometric figure is in the plane, and the geometric shape is in space.
Students will observe and manipulate plastic geometric figures and shapes. They will discover and name the characteristics of the observed objects.
The activity will take place in the classroom or in the computer lab. The students will answer the questions orally.

Activity sheets:

Phase 3

Title: Presentation of the instructional-educational content

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 35'

Detailed description of the scenario phase:
Students will open the application tinkercad.com and discover it together with the teacher. They will pay attention to the teacher's explanations on the smart board and discover how the platform works.

Students will work with the geometric shapes, they will arrange them so as to build a castle. Each child will use their imagination to create an original construction.

Activity sheets:

<https://www.tinkercad.com/things/6fP48oSHUgX-copy-of-geometry-project/edit>

7. Evaluation Methodology

Students will complete a test with the help of the application to remember information about geometric shapes and to develop their digital skills.

<https://wordwall.net/resource/9377193/math/3d-shapes>

8. Additional Resources for the teacher

N/A