

Didactic Scenario

1. Title

The shapes & bodies around us

2. Keywords

3d design, augmented and virtual reality, geometrical shapes/bodies, game-based learning

3. Basic Information

STEAM Subject: The shape of things!

Typical interaction time with the instructional scenario in teaching hours for in-school work: 1 hour

General description of the scenario:

<u>Phases</u>	<u>Stage</u>	<u>Time</u>
Shapes that we know!	preparation stage	20'
Let's play with shapes and bodies!	implementation stage	20'
Become shapes and bodies!	implementation stage	20'

Age group: 6-8 years old

Estimated difficulty level:

Very Easy	Easy	Moderate	Challenging	Very Challenging
	X			

Teaching resources

Material: phones, cards, sheets, pencils, notebooks

School infrastructure: video projector, laptop

Additional material from external sources/online tools:

<https://www.youtube.com/watch?v=NaNrzQUyuPQ&pp=ygUGU2hhcGVz>

<https://www.youtube.com/watch?v=R8rhcP28RfA>

<https://mrnussbaum.com/shapes-online-game>

www.arloopa.com

<https://www.twinkl.ro/resource/t2-m-241-3d-shape-matching-cards>

<https://www.quizizz.com/admin/quiz/57486b58980fcfc2147daec/geometric-shapes>

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

Developed by: Teacher Streba Alina

4. Educational Problem

Thanks to 3D design and game-based learning, students will experience STEAM while learning the subject of the shapes in the math curriculum. Students will learn the difference and similarities between geometric shapes and the real-life objects, information transmitted through visual, auditory and artistic language, using 3D bodies and ICT tools.

5. Learning Objective (-s)

1. To identify bodies and shapes in real life
2. To match the cards using properties of bodies and shapes
3. To create shapes on the floor using their own bodies

6. Phases of the Scenario

Phase 1

Title: Shapes that we know!

Indoor	Outdoor	Mixed
		X

Phase duration in minutes: 20'

Detailed description of the scenario phase:
Students will watch a video about shapes and important buildings from the city they live.
<https://www.youtube.com/watch?v=NaNrzQUyuPQ&pp=ygUGU2hhcGVz>
<https://www.youtube.com/watch?v=R8rhcP28RfA>

There will be discussions with the students about the characteristics of shapes as they understood from the video; they will present what they have retained from the watched material and try to connect with the shapes that have those buildings presented in the video. We can go in school yard for 5 minutes and identify buildings around our school and write about shapes and bodies they observe.

Activity sheets:

Name of the building	SHAPE	BODIES

Phase 2

Title: Let's play with shapes and bodies!

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 20'

Detailed description of the scenario phase:
With an app that is amazing for kids, named arloopa, teacher shows 3D bodies to the students.
www.arloopa.com
Students identify the proprieties of each geometrical bodies and write them.
Students will play a game with loop cards with 3D shape proprieties. They will play in small groups. They have to match cards. The first team is the winner.
The information will be read and discussed with the students after the game is finished.

Activity sheets: <https://www.twinkl.ro/resource/t2-m-241-3d-shape-matching-cards>

Phase 3

Title: Become shapes and bodies!

Indoor	Outdoor	Mixed
X		

Phase duration in minutes: 20'

Detailed description of the scenario phase:

The next session of the lesson can develop on a floor that contains carpeted, because students must create shapes with their bodies. For example, 3 students can create a triangle on the floor. Teacher discusses the properties must have the shape.

Then students will complete a live test on their phones with the help of the application to recall the information about shapes and bodies and to develop their digital skills.

Activity sheets: <https://www.quizizz.com/admin/quiz/57486b58980fcfc2147daec/geometric-shapes>

7. Evaluation Methodology

We can use a real-time feedback app –Mentimeter.com to open the lesson and discuss students' prior knowledge of geometrical shapes and bodies Or they can play a game like <https://mrnussbaum.com/shapes-online-game> and check easily if they know all about shapes and bodies.

8. Additional Resources for the teacher

N/A