



“E-STEAMSEL”
Preparing Youth for the Future Labor
Market with STEAM and SEL
PROIECT DE PARTENERIAT STRATEGIC ERASMUS +
Nr. de referință proiect: **2021-1-NO01-KA220-SCH-000032511**

3 D SHAPES

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Lesson: Math

Subject: 3D Shapes

Grade: 4th grade

Duration: 1 hour

1. Target Outcomes:

Cognitive Process Outcomes:

The outcomes of the center discipline:

- Obj1. To name the characteristics of the 3d shapes;
- Obj2. To establish similarities and differences, using the Venn diagram;
- Obj3. To recognize, in architectural constructions, the geometric shapes used;
- Obj4. To reproduce, with given materials, the studied geometric bodies.

Outcomes of other STEAM disciplines:

Art

- To build different types of buildings using given materials.

Communications

- To use the specific terms in order to analyze and describe plants,
- To communicate with the colleagues in order to fulfill the tasks,

Personal development

- To collaborate with the colleagues,
- To take part actively during lessons.



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1.2. Social Product Outcomes:

- Working in a team,
- Communicating,
- Being able to share problem and solution-oriented ideas,
- Fulfilling their duties and responsibilities,
- Presenting the product effectively,
- Understanding the importance of cooperation and collaboration.

2. Materials Used:

Paper, cardboard, duck tape

3. Resources

Laptop, video projector,

4. Learning Methods and Techniques

Argumentation Based Learning Method, collaborative work

5. Groups Considered to be Formed During the Activity:

Mixed groups

6. Implementation Phase;

6.1 Preparation Phase:

Children are being presented images with up-side-down buildings

6.2: Presenting the problem situation to the student:

Each building is associated with a geometrical shape.

6.3: Obtaining Information (Leading Questions)

Students are being asked how was possible to build and how can people live there.

6.4: Idea Development



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Working in groups, students describe the given shapes. They compare the shapes, two by two, completing the Venn diagram.

6.5: Product Development:

Using GeoGebra app, students apply the knowledge about shapes, inserting different elements to embellish the work.

6.6 Making the Prototype:

Using cardboard and duck tape, students build shapes necessary to reproduce the buildings in a town.

6.7. Sharing and Mirroring

Children reproduce the model of a city using the cardboard buildings.

6.8 Evaluation:

Students have to fulfill the “The book of shapes”, a worksheet that evaluates the lesson.

Bibliography:

- <https://weburbanist.com/2010/02/07/flip-this-home-10-unbelievable-upside-down-houses/>
- <https://www.geogebra.org/geometry?lang=ro>
- <https://jenga.com/>
- <https://cdn.thisreadingmama.com/wp-content/uploads/2019/01/F3DSB-TRM.pdf>