

“GEOMETRY OF MONUMENTS”

How the Geometry can be found in the most important European Monuments

1st teaching period

1st Activity: Introduction

Time: 30’

Type of activity: Discussion about the aim of the project

Class organisation: Discussion in class

Actions/Tasks: The teacher presents the project and the different steps needed to accomplish the mission.

2nd Activity: The Geometric Shapes

Time: 30’

Type of activity: Web research, video projection and use of interactive tools

Class organisation: Discussion in class

Actions/Tasks: Teacher and students use the Internet Connection to make researches about the basics of Geometry, such as triangle, rectangle, square, circle.

Links:

- 1) <https://7esl.com/shapes-vocabulary/>
- 2) <https://myenglishtutors.org/shapes-names/>
- 3) [https://7esl.com/mathematical-terms/#List of Mathematics Vocabulary Words](https://7esl.com/mathematical-terms/#List_of_Mathematics_Vocabulary_Words)

As homework students have to write a brief description of the possible representations of the above-mentioned shapes in our daily life.

2nd teaching period

1stActivity: Geometry in real life

Time: 30’

Type of activity: Discussion on web researches and creation of a list

Class organisation: Class work

Actions/Tasks: Students work on the results of the researches they have done at home.

Links:

- 1) <https://www.makemytrip.com/blog/most-famous-landmarks-europe>
- 2) <https://www.easyvoyage.co.uk/news/where-to-go-top-landmarks-monuments-europe-74618>

They make a connection between the shapes and the most iconic monuments in Europe and create a list picking 4 of them.

The monuments are:

- 1) Colosseum in Rome.
- 2) The Louvre in Paris
- 3) The Parthenon in Athens
- 4) Brandenburg Gate in Berlin

2ndActivity: Creation of Groups

Time: 30'

Type of activity: Creation of Groups

Class organisation: Project work in groups

Actions/Tasks: Students are divided into 4 working groups; They are chosen randomly by the teacher; Each group is assigned one European monument.

3rd teaching period

From this teaching period on the students work on digital platforms, using e-learning methods because of Covid-19 outbreak and the world wide lockdowns, in line with the direction of national healthcare authorities and the World Health Organization.

Once a week the teachers plan videoconference and giving students the proper input in order to work efficiently.

1st Activity: Creation of pattern of the European Monument

Time: 60'

Type of activity: Drawing and creation of patterns through online platforms

Class organisation: Project work in groups

Actions/Tasks: Each group of students create a pattern of the European Monument chosen, based on the geometric figures.

4th teaching period

1st Activity: Paper Craft Model

Time: 60'

Type of activity: Creation of paper craft model

Class organisation: Project work in groups online

Actions/Tasks: Students cut the patterns they have previously drawn and create a paper craft model of the European monument chosen.

5th Teaching period

1st Activity: Video editing

Time: 60'

Type of activity: Video Making

Class organisation: Project work in groups online

Actions/Tasks: Students discuss about the tools and the techniques used to create the paper craft models and they make photos and video of their activities. They use the program <https://filmora.wondershare.com/it/> to collect and edit the videos.

Differentiation

- 1) Searching critically on the web and through digital tools;
- 2) Summarize a digital text by creating mind maps and underline the keywords;
- 3) Developing the ability to find, evaluate and summarize the materials found online;
- 4) Encouraging student autonomy;