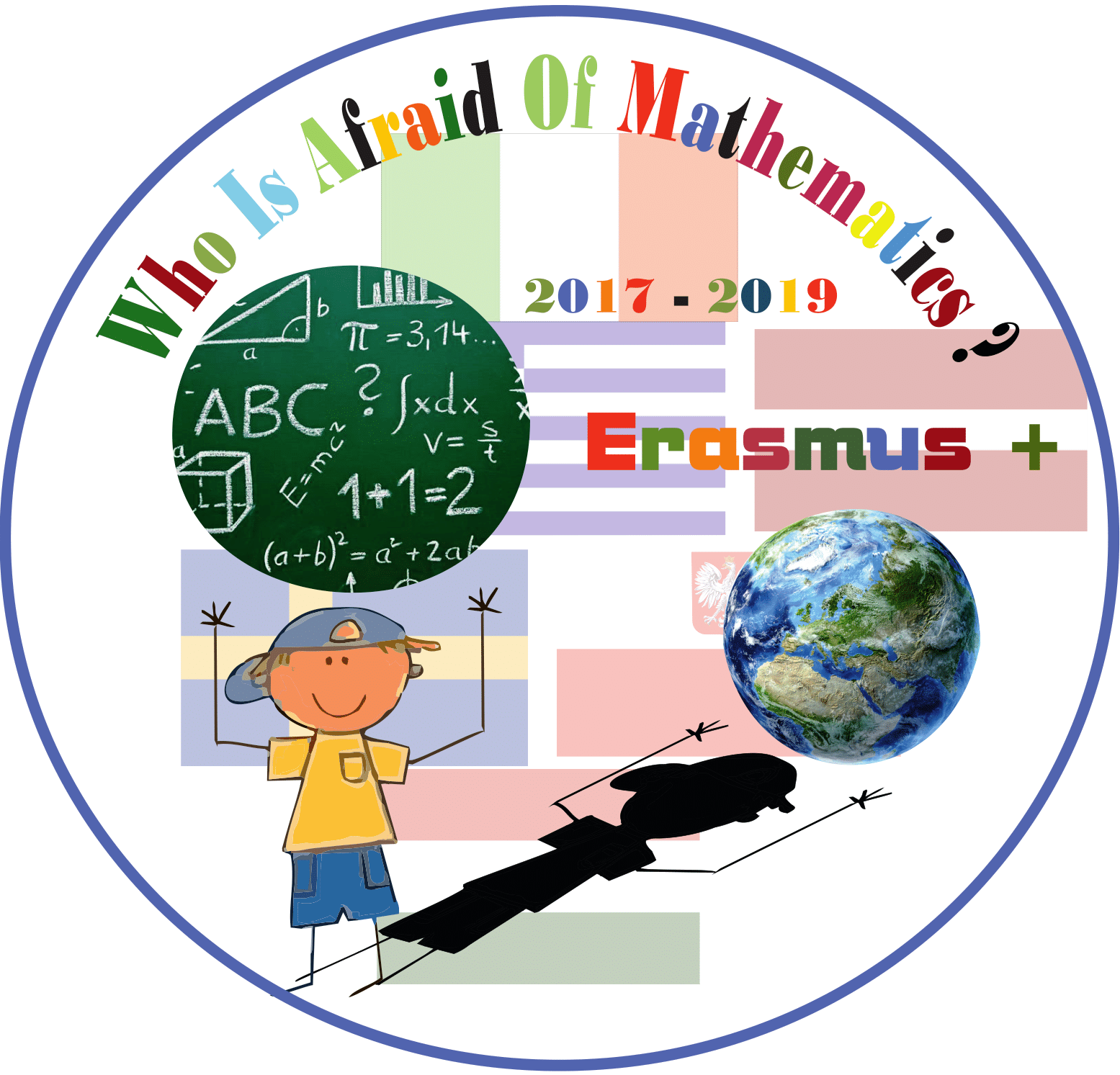
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**Category : MATHS IN HISTORY**

**Title of the activity: Math in the archaeological museum**

**Year Group: Grade 4 (9 years old)**

**Learning Objective:**

Pupils to

* detect mathematical data in the exhibits of the museum

**Success Criteria:**

* Get insight about the importance of mathematics in ancient Greek civilization
* Know the use of mathematics in construction of objects used in ancient Greeks everyday life
* Apply their knowledge to spot patterns, symmetry geometrical shapes and solids on the museum findings
* Work in mixed groups
* Take care of archaeological treasures and discover their importance for Greek history
* Learning with an enjoyable and successful way

**Resources:**

Measures

tape measure

White pages

markers

worksheets

calliper

**Lesson Description (including context) :**

Prior the realization of this activity pupils prepared collecting information and elements regarding to the place and the exhibits of the museum.

The activity takes place in the archaeological museum of Pella and the outdoor setting of the city of the ancient Pella. The students will measure perimeters and areas of the buildings , the length of the streets, investigate patterns , the symmetry and the geometrical shapes decorating the findings.

**Introduction:**

We show photos from the location we are going to visit and ask from our students to find math elements using their prior knowledge in ancient Greek history and mathematics.

**Differentiation**

The students will work in mix groups

**Main Lesson**

The students of grade 4 visited the Archaeological Museum of Pella in order to explore the mathematical elements of its findings. Using their prior math knowledge they tried to find out and get insight in the remains and the math data used by the ancient Greeks when building their houses and constructing the objects of their daily life. The pupils are getting informed about the architecture used by ancient Greeks.

Steps:

They watch the ground plan of the ancient city

They study ancient coins and measurement units

They calculate the height and width of the wall

They estimate and measure the pebbles used in the mosaic construction

They measure the dimensions and estimate their area

They observe and copy the pattern to the mosaic

They calculate the area of the ancient store

They observe and measure the patterns and shapes that decorate the jewellery and the weapons

They build and paint a vase in its real dimensions

In the city of ancient Pella

They measure the width of the roads

They measure the width of the walls

They measure the width of the entrance to the ancient residence

They measure the diameter of the pipe

They measure the diameter of the column

The length and width of the house

**Plenary**

The pupils share their observations within each group. Discuss the results of the activity, organize their notes and prepare a presentation not only for the students of the school but for the whole local school community.

Teachers : Bounatsou Voula & Nopi Foulidou







