

**Erasmus+ Cultural connections : Enhancing EU heritage, Social
Inclusion and Digital Literacy through our Pupils' hearts**
Scientific and Creative Thinking Workshop
7-12 December 2025, Ukmerges, Lithuania



Co-funded by
the European Union

ACTIVITY 6.6

Divergent tasks: Maths

A. Unexpected Task: “Hidden Pattern”

Groups are given a geometric pattern or a table with “incomplete” values.

Task:

Identify the rule or pattern and complete the table.

Example:

Number sequence: 2, 4, 8, ?, ?, ? → find the logic and fill in the missing terms.

Autonomy:

Choose a solution approach – draw a diagram, use symbols, or collaborate within the group.

Possible Valid Solutions

Because the task is open, **multiple rules are acceptable**, provided they are logically justified.

Solution A: Multiplication Pattern

Each number is multiplied by 2.

2, 4, 8, 16, 32, 64

Solution B: Add Increasing Powers of 2

Add 2, then 4, then 8, then 16...

2, 4, 8, 16, 32, 64

(Same result, different reasoning.)

Solution C: Exponential Interpretation

$$2^1, 2^2, 2^3, 2^4, 2^5, 2^6$$

Key Teaching Point

The value lies in **explaining the rule**, not merely finding numbers.

B. Creative Exercise: “Creative Numbers”

Groups are given a simple number or shape.

Task:

Generate as many different interpretations or solutions as possible.

Example:

Number 12 → divide it, add it, represent it in diagrams, stories, or geometric shapes.

Task:

Given the number **12**, generate as many interpretations as possible.

Example Solutions

Arithmetic:

- $12 = 3 \times 4$
- $12 = 2^2 \times 3$
- $12 \div 3 = 4$

Geometry:

- Area of a rectangle: 3×4
- 12 unit squares forming multiple rectangles
- Regular clock face with 12 hours

Data / Representation:

- Bar chart with total value 12
- Fraction representations: $12/1$, $6/1/2$

Story Context: 12 students split into equal teams or 12 eggs in a carton