



### Pascal's Triangle

| Name of the object and creator  | Pyramid and Pascal's Triangle                                                                                                                                                 |            |             |      |             |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|------|-------------|
| Recommended ages                | 9-12                                                                                                                                                                          |            |             |      |             |
| Thematic areas combined (STEAM) | Sciences                                                                                                                                                                      | Technology | Engineering | Arts | Mathematics |
|                                 | þ                                                                                                                                                                             | þ          | þ           | þ    | þ           |
| Materials needed                | <ul> <li>Cardboard, Block sheet</li> <li>Glue</li> <li>Tape</li> <li>Drawing pencil</li> <li>Ruler</li> <li>Scissors</li> <li>Video clip</li> <li>Transparent film</li> </ul> |            |             |      |             |
| Outline of the steps            | Creating a pyramid     Creating Pascal's triangle                                                                                                                             |            |             |      |             |
| References                      | https://youtu.be/VkIR1zMJcHo                                                                                                                                                  |            |             |      |             |





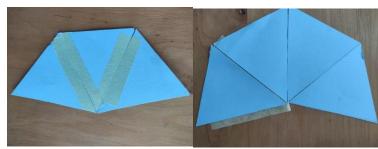
## STEP BY STEP: How to build a Pyramid and Pascal's Triangle like the Louvre.

#### Step 1: Creating a pyramid - 1

Estimated time: 12 min

- On a piece of cardboard or paper, draw 4 identical isosceles
   triangles with the side of the base 15 cm.
- Draw a square with side also 15 cm.
- Cut out the triangles and the square with the scissors.
- Take some tape and carefully stick the triangles together as shown.
- Attach the square, which is the base of the pyramid, in the same way..





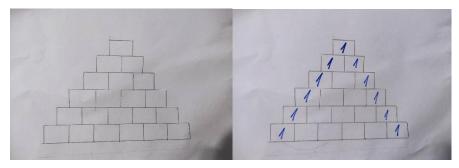






#### Step 2: Create Pascal's triangle

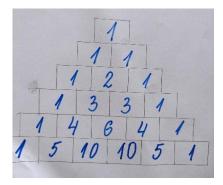
- Estimated time: 5 min
- Draw an isosceles triangle on a block.
- Divide it into six rows and draw checkered boxes as shown:



In the uppermost cell, write the number 1.

Put 1 twice in the cells of the second row.

Starting from the top, fill the cells with numbers so that the sum of the top two numbers equals the number below them.





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