

ma
+hs

is everywhere

Posters

/ Instructions

The goal of the Maths Is Everywhere poster series is to encourage students to notice maths in everyday situations. The professions shown in the posters: chef, athlete, fashion designer or architect, are not often automatically associated with maths, even though they require mathematical competences. Measures, proportions and time are of key importance in the kitchen. In sports, we use speed, strength, and analysis. Being a fashion designer requires knowledge of geometry and scale. Regardless of the career they choose, the future of every student is linked to maths - because maths is everywhere.

The series consists of **9 posters**. Every poster encourages the students to interact. Some offer a riddle to solve, others a manual task, the rest requires interaction in order to find hidden information. Every poster also contains a task marked with an icon 🧐 and a brief description that explains the link between a profession and maths.

Two posters in the series – chef and architect – **require previous preparation** cutting out and gluing on some parts.

Have fun!



Maths is everywhere!

The poster series and instructions have been elaborated as a part of the "Added value" project implemented by the School with Class Foundation (Poland) in cooperation with Asociación Smileundo (Spain), NHL Stenden (The Netherlands) and Universal Learning Systems (Ireland) and funded by the European Commission as a part of the ERASMUS+ programme.

For more information visit:
www.mathsiseverywhere.eu

Discover a scientist in you.

Break the code!

The poster contains a riddle. The missing letters of the alphabet form a hidden message.

Answer: **STAY CURIOUS**

A B C D E F G H I J K L M N O P Q R **S** T U V W X Y Z

A B C D E F G H I J K L M N O P Q R **S** **T** U V W X Y Z

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A B C D E F G H I J K L M N O P Q R S T U V W X **Y** Z

A B **C** D E F G H I J K L M N O P Q R S T U V W X Y Z

A B C D E F G H I J K L M N O P Q R S T **U** V W X Y Z

A B C D E F G H I J K L M N O P Q **R** S T U V W X Y Z

A B C D E F G H **I** J K L M N O P Q R S T U V W X Y Z

A B C D E F G H I J K L M N **O** P Q R S T U V W X Y Z

A B C D E F G H I J K L M N O P Q R S T **U** V W X Y Z

A B C D E F G H I J K L M N O P Q R **S** T U V W X Y Z

Want to be a chef?

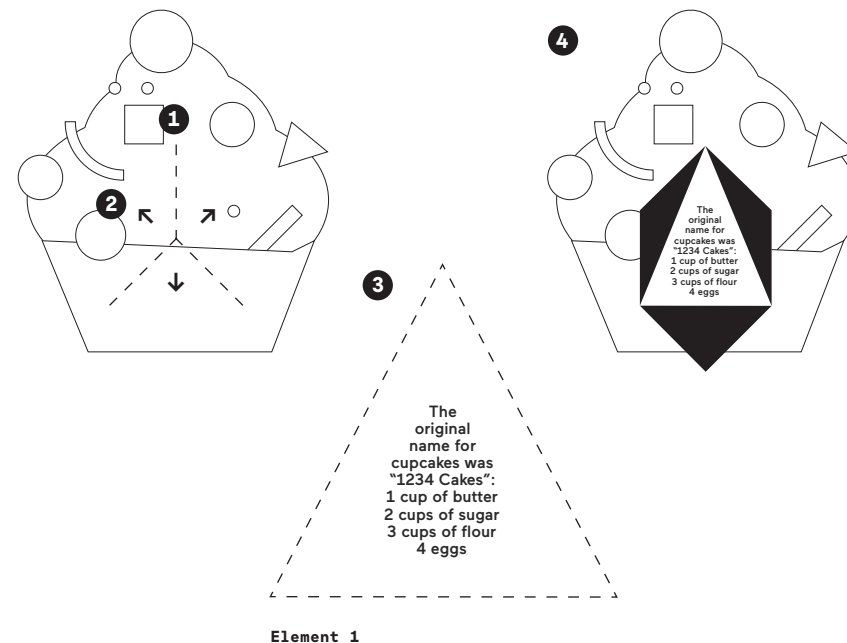
The proof is in the cupcake!

The poster presents a mathematical curiosity.

CAUTION: the poster requires previous preparation!

You will need: **a paper knife, a ruler** and some **duct tape**.

- 1** Cut the poster along the dotted lines, using a ruler and a paper knife.
- 2** Next, using a ruler, fold out the three triangles you have just cut out (in the direction shown by the arrows).
- 3** Cut Part 1 (triangle) out from the Appendix.
- 4** Using duct tape, glue the triangle with text to the bottom of the poster. Try to place it evenly and symmetrically.



Become an architect.

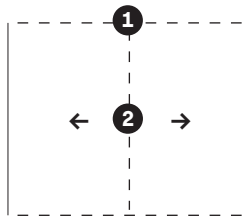
🧭🧭 Open the windows and meet the neighbours!

The poster shows how architecture influences the quality of life. After opening the windows, the students will get acquainted with the inhabitants' opinions about the building.

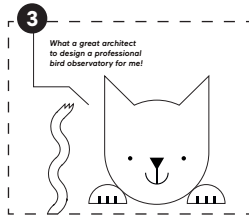
CAUTION: the poster requires previous preparation! You will need: **a paper knife, a ruler** and some **duct tape**.

The poster contains four squares (4 windows of the building). Two of them should be cut open and pictures should be glued inside them.

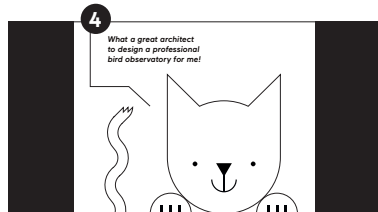
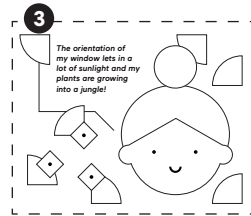
- 1 Cut the poster using a ruler and a paper knife.
- 2 Next, using a ruler fold the four rectangles you have just cut out in the direction shown by the arrows, that is, out (you will form two windows).
- 3 Cut the Parts 2 and 3 (illustrations) out from the Appendix along the dotted lines.
- 4 Using duct tape, glue the pictures with text to the poster. Place Part 2 (cat) in the upper window and Part 3 (character) in the lower window.



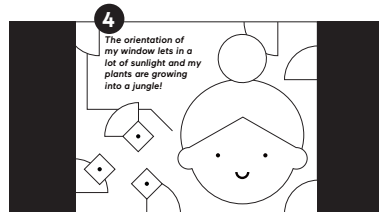
Element 2



Element 3



Element 2



Element 3

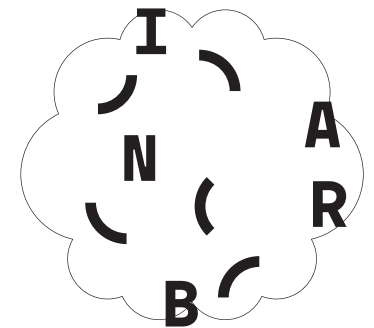
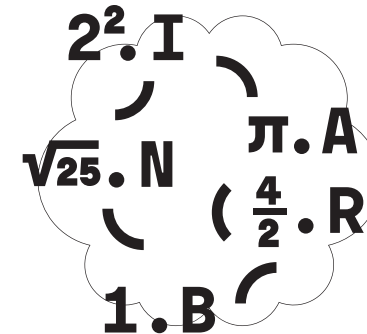
Become a doctor.

🧭🧭 What human organ is capable of 1,016 processes per second far more than any computer? Use the value of each number to find the answer!

The poster contains a riddle. The answer can be found by ordering the letters according to the numbers next to them.

Answer: **BRAIN**

1	=	1	_____	→	B
$\frac{4}{2}$	=	2	_____	→	R
π	=	3,14	_____	→	A
2^2	=	4	_____	→	I
$\sqrt{25}$	=	5	_____	→	N



Want to make music?

🧭🧭 Figure out the piece of music!

The poster contains a task that consists of changing fractions into notes and recognizing the musical piece.

Answer: **Ode to joy, L.v. Beethoven**



Be an artist.

👁️👁️ This is the starting point for your expression.
Be creative. Draw!

The poster contains a manual task. The students can draw anything on the poster if they want to.

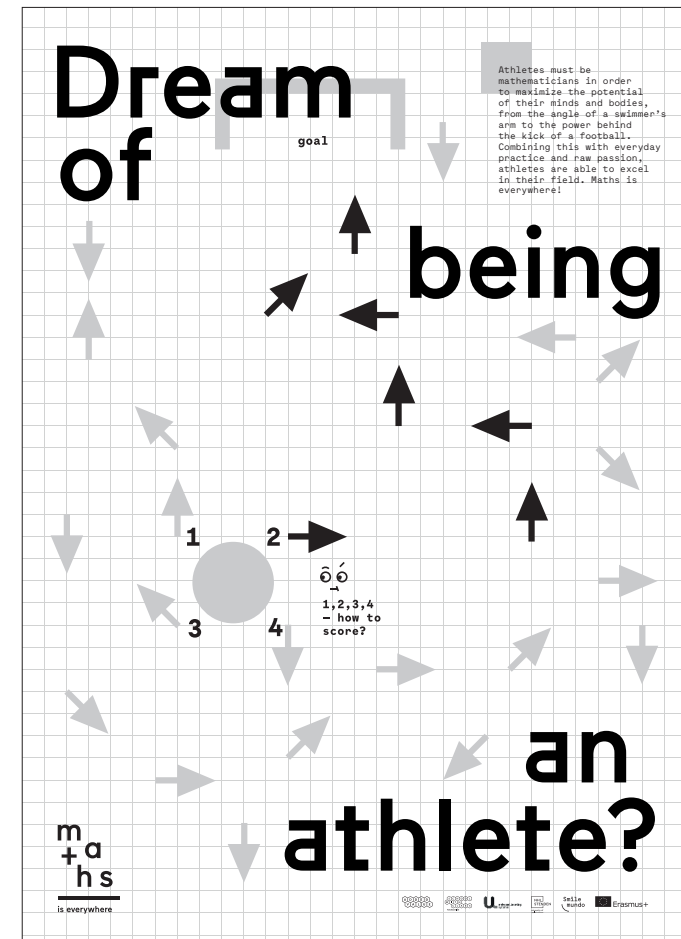


Dream of being an athlete?

👁️👁️ 1,2,3,4 – how to score?

The poster contains a game in which the students decide which vector will put the ball in the net.

Answer: 2




Have passion for fashion?

 **Create an outfit for the creature.
Use recycled materials!**

The poster contains a manual task. Students can create a tailored piece of clothing for the character using recycled materials (paper, foil, aluminum etc.)



Be a pilot.

 **Follow the numbers to make your own plane!**

The poster contains steps of making a paper plane. If the visual directions are not enough for all students, you will find a text version below.

- 1** Fold the paper along line 1.
- 2** Unfold the paper and fold its upper corners inside along line 2 so that they touch line 1; this gives you figure A.
- 3** Fold the upper parts of the paper again along line 3 to make them touch line 1; this gives you figure B.
- 4** Fold the paper in two along line 4.
- 5** Then, fold every side parallel to line 5; this gives you figure C and the wings. Unfold the folds and the plane is ready (figure D)!

