

# MATHEMATICS



## Basic Arithmetic

### HOW TO CREATE YOUR ELEMENTS

**Disclaimer:** these crafting instructions have been created for a small group of 6 participants maximum. If you want to craft these elements for a bigger group, check the part "Alternatives" below.

### STORAGE

This activity can be built only with cardboard, sticks, paper sheets and one (or a few) dice. Storing the elements would be better in a small box, such as a shoebox.

### CRAFT THE ELEMENTS

#### A. Create the character's figures

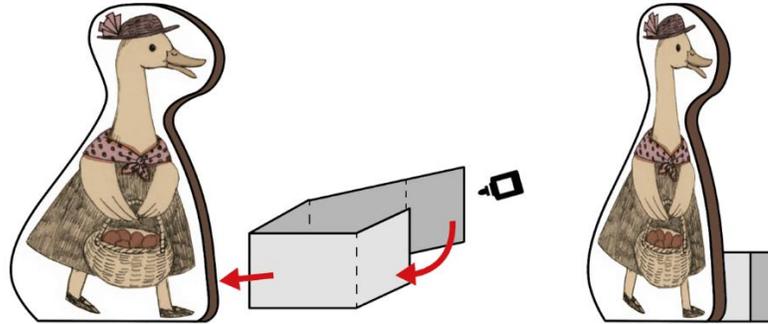
You can use the pictures provided in this activity folder or use your own

1. Print the picture of the characters you have chosen on an A4 paper sheet.
2. Glue the A4 paper sheet to a cardboard.
3. Once it is dried, cut the cardboard to isolate each figure.



# MATHEMATICS

4. To stabilise the figure, you can pierce its base with a stick at  $90^\circ$  or glue the cube behind it.



## B. Create the Math symbols

We recommend drawing the math symbols on a disc so they can be easily recognised.

1. Draw as many circles on cardboard as you want Math symbols token.
2. Cut the circles to create a disc.
3. Draw the symbols on the discs with a marker (on both faces).

## C. Draw the number lines

If you don't have a lot of space and your group is small, you can draw the number line on a A3 paper and bend it to store it.

## POTENTIAL ISSUES

If your characters have trouble staying upright, you may print them on 200g paper. You may create a larger base for the different figures to stabilise them; think about glueing the figures to cardboard, for example.



# MATHEMATICS

## Alternatives

### A. Big groups

Instead of using A4 paper, you can print the character's figures on A3 paper or even print 1 figure on each paper sheet.

Just be aware of the picture resolution: the bigger you are printing it, the higher the resolution of your file has to be to avoid bad-quality results.

### B. Large space

The number line is like a ruler, so you can basically draw it anywhere:

- If you have an outdoor floor or wall available, you can draw the number line with chalk.
- If you have a board in your class, you can also draw on it.
- Finally, if the options above are not possible, you can write each number on a separate A4 paper sheet and put them on the floor to symbolise the number line.

### C. More sustainable material

Anything can be used as a figure. If you have figures of animals, toys... they can fit perfectly into that activity. We do not recommend asking your pupils to provide their own toys/figures, as it could be problematic in terms of economic inclusion.

If you have access to a 3D printer, you can also use a free access models bank to print original figures.

