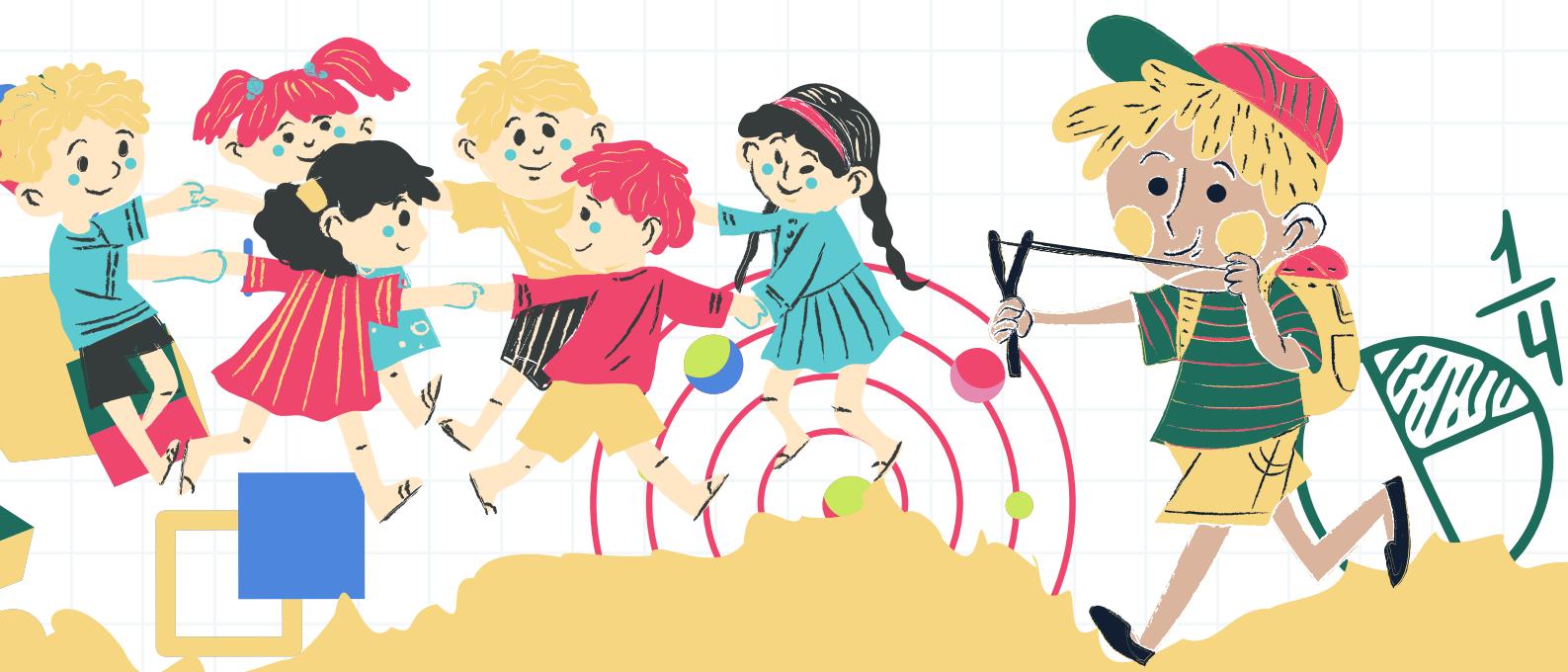




MATH&MOVE

PRACTICE SHEET

Sides and edges of shapes



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TOPIC:**Geometry**
(sides and edges of shapes)**DURATION:** 20-30 mins**LEVEL:**

2 (ages 8-9)

PARTICIPANTS:Whole class divided into
2 groups**Required
material for
this activity****1****1 empty space for pupils to move and conduct the activity**

1 part of the learning area should be clear and at least 2m x 2m, with a rectangular START sign placed in the centre, to represent where the construction of the new complex geometric shape will begin.

2**4 boxes filled with geometric shapes and directional cues**

- Fill 2 boxes with circles, triangles, squares and rectangles. The number of shapes should correspond to the number of pupils in each group.
- Fill 2 boxes with placement cues – left, right, up, down. The number of directional cues should also correspond to the number of pupils in each group.

3**Pieces of paper/cardboard with the outlines of geometric shapes and scissors**

- The geometric shapes should be cut out by the pupils and placed in the boxes.

INSTRUCTION AND DESCRIPTION OF THE ACTIVITY

Instruction

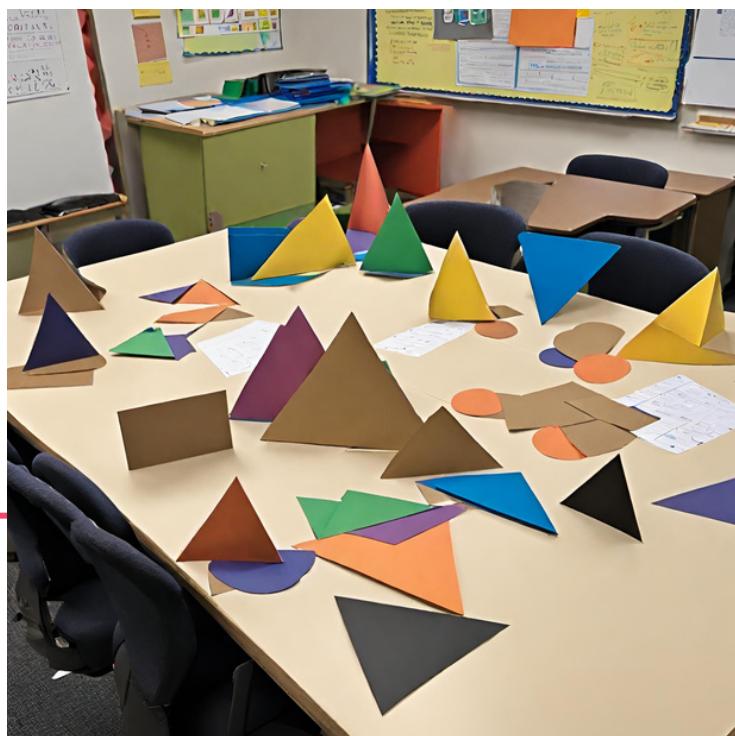
Practice identifying the sides and edges of geometric shapes. Geometric shapes are cut out from cardboard or pieces of paper for you to then use them to make a more complex geometric figure on the floor. You will work in a team, but you will need to be coordinated together to create the new geometric figure with the help of the cut-out shapes and placement cues. After assembling your new figure as a team, you will observe your creation and calculate the number of sides and edges of the shape.



Activity



First, draw geometric shapes on cardboard and cut them out with scissors. The shapes to be made are: triangle, rectangle, square and circle. Discuss how many sides and edges each shape has. These shapes once cut out will go in two boxes, while two other boxes will be filled with placement cues – left, right, up and down.





Activity

**2**

Form two columns, standing behind the pupil in front of you in your assembled columns. The first pupil from each column comes to the desk in front of them where they can see two boxes for their team – one with the cut-out shapes and the other with the placement cues. The pupil should draw both a geometric shape and a placement cue from the boxes. Call out the two items, to be remembered by the pupil after you, as they will add on to the previous pupil's work (ie. TRIANGLE – DOWN).

Then, add your shape to the canvas according to the placement cue that was drawn from the box – the first pupil adds their shape in position to the START sign on the canvas and all other pupils add their shapes to the shape of the pupil that came before them.

**3**

Take turns constructing a more complex geometric shape together. All pupils from both groups finish with the coordination of movements when they have all added their geometric shapes to the canvas according to their placement cues.

**FINAL STEP**

Once you have constructed the complex shape with your group, calculate together:

- The number of sides of their new shape
- The number of edges of their new shape

Pay attention to only calculate the sides/edges seen from the outer lines (the outline of the shape), and not the inner ones within the complex shape.