



Year 4: Summer term 2

Topics studied this half term:

Properties of shape
Position and direction

Within properties of shape, your children will be learning to:

- Identify angles
- Compare and order angles
- Triangles
- Quadrilaterals
- Lines of symmetry
- Complete a symmetric figure

Within position and direction, your children will be learning to:

- Describe position
- Draw on a grid
- Move on a grid
- Describe a movement on a grid

Tips for good homework habits:

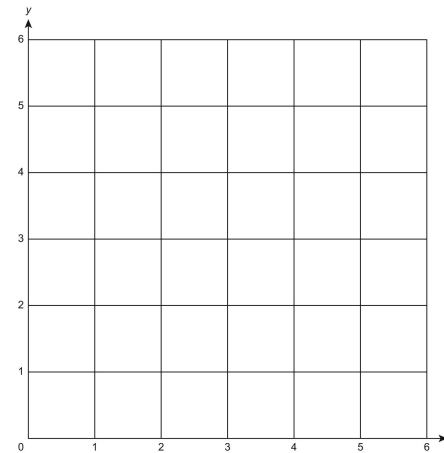
If your child is struggling, don't give them the answer in order to finish the homework quickly. Instead, talk through the task together and help them to arrive at the solution themselves.

Position and direction

HERE'S THE MATHS

Coordinates are a pair of numbers that give the exact position of the intersection (the point where lines cross) of two lines in a grid of squares. The mnemonic 'along the corridor and up the stairs' helps remember the correct order of coordinates.

ACTIVITY



You will need:
1–6 dice
pencil, paper and
rubber

What to do

- Roll the dice twice to give a set of coordinates, e.g. rolling 3 and 4 gives (3, 4).
- Plot the point. Repeat twice to give the coordinates of a triangle.
- Score 20 points for an isosceles triangle, 10 points for a right-angled triangle and 5 points for a scalene triangle. A right-angled isosceles triangle scores 30. Rub out the triangle to reuse the grid.
- Take turns and play for 10 minutes. The winner has the higher score.
- Discuss whether it is possible to draw an equilateral triangle on a square grid.

Variation

- Plot 4 points and make up scores for different quadrilaterals.

QUESTIONS TO ASK

How can you remember the correct order to read and write coordinates?

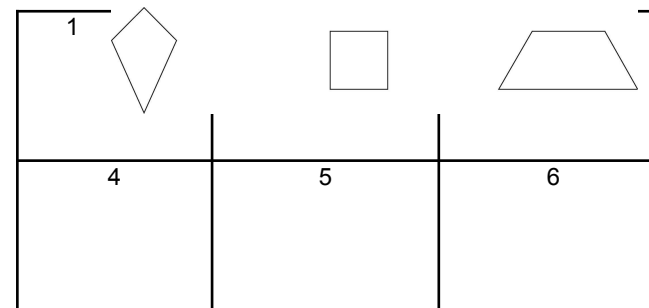
If you move (2, 2) three squares right and two squares up, what are the new coordinates?
Describe the line that joins the points (0, 0), (1, 1), (2, 2).

Properties of shapes

HERE'S THE MATHS

Your child is learning to compare and classify geometric shapes, including quadrilaterals (square, rectangle, parallelogram, rhombus, trapezium and kite) and triangles (equilateral, isosceles and scalene). They consider side, angle and symmetry properties. This unit has a large amount of mathematical vocabulary and practise with the game will help your child consolidate these specialist words.

ACTIVITY



You will need:
1-6 dice



What to do

- One person rolls the dice but doesn't let their partner see the result.
- The other person has to ask yes/no questions to work out which quadrilateral it is.
- Their score is the number of questions needed to identify the quadrilateral.
- Swap roles.
- Play for 10 minutes.
- The person with the lowest score is the winner.

Variation

- Design a new grid with different shapes (different triangles and polygons).

Use your fingers to show me perpendicular (parallel) lines.

QUESTIONS TO ASK

Describe the different types
of triangles.
Which quadrilaterals can have at least one right angle?
Which quadrilaterals have two pairs of parallel sides?