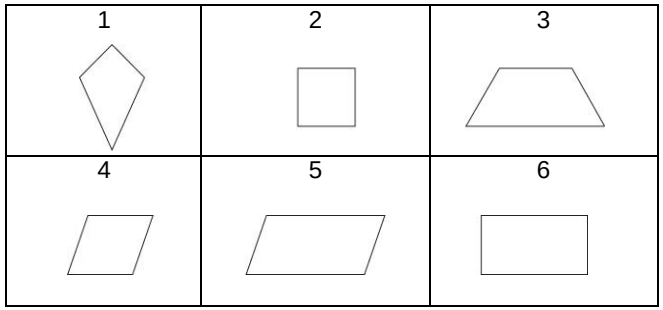
Properties of shapes

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).

QUESTIONS TO ASK

Describe the different types of triangles.

Which quadrilaterals have two pairs of parallel sides?

Which quadrilaterals can have at least one right angle?

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

Year 4 Maths Newsletter 9

Date: _____ **Name:** _____

MATHS TOPICS

These are the maths topics your child will be working on during the next three weeks:
- Number and place value
- Addition and subtraction (money)
- Properties of shapes

KEY MATHEMATICAL IDEAS

During these three weeks your child will be learning to:
- count backwards through 0 to include negative numbers
- use the formal written method to solve addition problems
- use properties to describe and identify quadrilaterals (square, rectangle, parallelogram, rhombus, trapezium and kite).

TIPS FOR GOOD HOMEWORK HABITS

Talk to your child about maths and use a wide range of vocabulary, e.g. in this unit, the names of different triangles and quadrilaterals.

Number and place value

HERE'S THE MATHS

This week your child is reviewing negative numbers, counting backwards and forwards through zero. They are using negative numbers in the context of temperature.

ACTIVITY

What to do

- Choose one of the papers.
- Draw three different number lines showing a positive and a negative number with this difference, e.g. if you pick 5, you could draw a number line from –1 to 4.
- Check each other's answers.
- Play for 10 minutes.

Variation

- Change the numbers.

You will need:

- five pieces of paper with 4, 5, 6, 7, 8 and 9 written on them

QUESTIONS TO ASK

When do we use negative numbers in everyday life?

The temperature is 3° and drops by 10°. What is the temperature now?

The temperature is –6° and rises by 8°. What is the temperature now?

What is the temperature of a home freezer?

- Ask more questions liked these and ask your child to make up questions to ask you.

Addition and subtraction (money)

HERE'S THE MATHS

Your child is continuing to consolidate the formal written method of addition, using carrying digits. They need to take care to line the figures up neatly at the right-hand side and ensure that digits are written under digits of the same place value.

ACTIVITY

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£ □□. □□
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£1 0 0. 0 0

You will need:

- 1–6 dice
- pencil and paper

What to do

- Both draw this grid.
- Roll the dice and agree a place to put the number.
- Repeat twice more so that a total of three numbers have been placed in the same positions on both your and your child's grids.
- Take a few minutes to find as many solutions as possible that give a total of £100.
- Check each another's answers. Discuss strategies.
- Repeat with new numbers.

Variations

- To make it easier, make the total £10 and put two numbers on the grid.
- To increase the challenge, make the target total £1000.

QUESTIONS TO ASK

How many ways can you make £1000 using two numbers that are multiples of £100?

What is the function of the zero in 4086?

What is 6000 + 300 + 70 + 2?

What is the total of 1999 + 1999?