

The National Curriculum is split into three main areas for mathematics. These are fluency, problem solving and reasoning. Every maths lesson will encompass all or part of these three main areas.

Key Objectives

These are not all the objectives children will cover during their time in Year 6; however, these are considered the key objectives for the year.

Use negative numbers to calculate intervals across zero

Divide numbers using long division, interpreting the remainders as appropriate

Use order of operations to carry out calculations

Use common factors to simplify fractions

Compare and order fractions of any size

Add and subtract fractions with different denominators and mixed numbers

Multiply simple pairs of proper fractions

Divide proper fractions by whole numbers

Calculate decimal fraction equivalents for simple fractions

Multiply a number with up to two decimal places by whole numbers

Use written division with answers of up to two decimal places

Solve problems involving the calculation of percentages

Recall and use equivalences between fractions, decimals and percentages

Solve problems using ratio using multiplication and division facts

Solve problems involving similar shapes where the scale factor is known

Solve problems involving proportion, using knowledge of fractions and multiples

Use simple formulae

Generate and describe linear number sequences

Express missing number problems algebraically

Convert units of measure between smaller and larger units

Convert between miles and kilometres

Calculate the area of parallelograms and triangles

Calculate and compare volume of cubes and cuboids

Illustrate and name parts of a circle

Finding missing angles in triangles, quadrilaterals and regular polygons

Recognise vertically opposite angles and find missing angles

Describe positions on the full co-ordinate grid

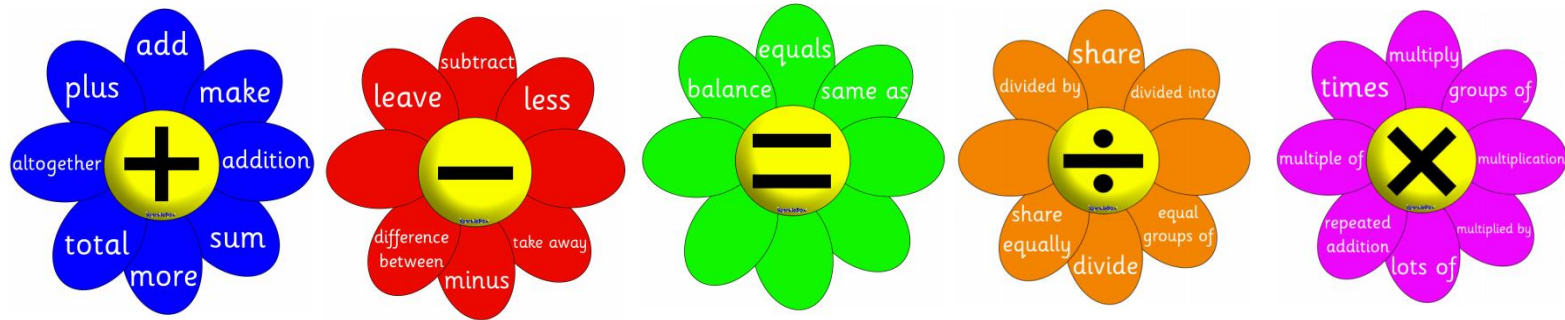
Translate shapes on a co-ordinate grid and reflect in the axes

Construct and interpret pie charts

Calculate the mean as an average

Key Vocabulary

Children are exposed to a range of vocabulary during maths lessons which we encourage you to use at home when completing maths activities.



How you can help at home!

Multiplication and division facts:

- Chant or recite times table facts and division facts, whilst walking or driving to or from school.

Numbers and patterns:

- Count forwards and backwards in steps of 4, 8, 50 and 100.
- Do simple addition and subtraction problems in their heads using:
 - three-digit numbers and ones, (eg $136 + 3$, $160 - 5$)
 - three-digit numbers and tens, (eg $156 + 20$, $187 - 30$)
 - three-digit numbers and hundreds, (eg $345 + 200$, $528 - 400$).

Number walks:

- Look at the numbers all around you. (Eg on car registration plates. Multiply the numbers by 10, 100 or 1000 - can your child guess the car you were looking at?)
- Get your child to add up a few shopping items and work out how much change they would get from a note.
- Ask for your child to help at the supermarket –
 - o ask them to get specific items (eg medium-sized tin of red beans, 2 litres of milk, 250g of mince)
 - o ask them to choose items to weigh. How many apples/bananas weigh a kilogram?
 - o back at home, ask them to pick 6 items with weight written on. Put them in order. Is the largest number the heaviest?

Shapes:

- Look for 2D and 3D shapes in the environment and then discuss their properties.
- Do a shape and number search when you are reading a book or looking at art.
- Do jigsaw puzzles together.
- Build different shapes with Lego and label or discuss their properties.

Measures:

- Learn to tell the time. Look at the 12 hour and 24-hour clock.
- Feel objects and compare their weight.
- Bake together, measuring out ingredients carefully.
- Grow seeds or sprouts – measure the growth each week.
- Discuss and compare the volume and capacity of items at home.

We are always here to help. Please speak to your class teacher if you have any questions or queries on how you can support your child at home.

