



Hamble Primary School Maths Overview

Year 2

This maths overview shows the key statements for our maths curriculum from which teachers work through addressing specific statements each term. The maps are recursive and weighted, meaning that each half term children spend roughly 2 weeks on selected statements from each of the grey highlighted sections and a week on the white sections.

Term	Autumn 1 Spring 1 Summer 1	Autumn 2 Spring 2 Summer 2
Unit	Number and Place Value	Multiplication and Division
	Addition and Subtraction	Fractions
	Geometry (shape)	Geometry (position and direction)
	Measures	Measures
		Statistics

Progression

These statements are organised in a progressive manner and year teams select the statements, with guidance from their Learning Leader and / or the maths coordinator to be taught each half term. To inform this, teams use their assessment from prior teaching and links between areas and other curriculum subjects to ascertain the best and most purposeful structure for a given class. Some statements, such as time, are taught incidentally and more frequency in order to further embed learning. Children also have daily arithmetic time to ensure quick recall and fluency of key mathematical operations.

Children revisit statements outside the maths lessons during revisit and enrich sessions and evidence of maths can be seen in other subjects, including our theme topics and Science.

Fluency, Reasoning and Problem Solving

In the autumn term, there is a heavy focus on fluency based activities, with some reasoning and problem solving being introduced once the initial learning has taken place. As the year progresses, and children gain more knowledge, there is an increasing focus on reasoning and problem solving activities to consolidate and begin mastering the knowledge delivered within the year group. While our children are exposed to the same or similar problems, we scaffold their learning depending on individual needs and the levels of challenge required.

Number and Place Value

- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems.

Addition and Subtraction

Solve problems with addition and subtraction:

- using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- applying their increasing knowledge of mental and written methods
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:

- a two-digit number and ones
- a two-digit number and tens
- two two-digit numbers
- adding three one-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Geometry (properties of shapes)

- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- compare and sort common 2-D and 3-D shapes and everyday objects

Measures

- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$

Half Term

Multiplication and Division

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Fractions

- recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity
- write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

Geometry (position and direction)

- order and arrange combinations of mathematical objects in patterns and sequences
- use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

Measures (continued)

- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day.

Statistics

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totalling and comparing categorical data.