

Key Stage 3 Maths Coverage

Maths Area	Number of Weeks
Number	14
Geometry	10
Measurement	10
Statistics (sorting/grouping)	2

During key stages 1-3, learners begin more teacher led lessons with elements of the EYFS strategies still in place, ensuring that the discrete Maths lessons remain developmentally engaging and age appropriate. Mathematical concepts and mathematical language are introduced at appropriate stages matched to each learner's ability, particularly as the learner moves towards a more formal curriculum.

Teachers build on prior knowledge and ensure that skills are embedded in order to promote fluency across all the key maths areas.

This documents outlines the key areas to cover, teachers will also use pupils' 'Individual Scheme of Work' to plan appropriate lessons for their group of learners.



Maths Coverage – KS3

Autumn 1

<u>Week</u>	<u>Area of Maths</u>	<u>Strand of Maths</u>
1	Number and Place Value	Number, Addition and Subtraction
2	Number and Place Value	Number, Multiplication and Division
3	Measurement	Time
4	Measurement	Time
5	Measurement	Size – length, weight, volume
6	Measurement	Capacity and Temperature

Autumn 2

<u>Week</u>	<u>Area of Maths</u>	<u>Strand of Maths</u>
1	Number and Place Value	Number and Multiplication
2	Number and Place Value	Number and Division
3	Geometry	Properties of 2D Shapes
4	Geometry	Properties of 2D Shapes
5	Geometry	Position and Direction
6	Geometry	Position and Direction



Maths Coverage – KS3

Spring 1

<u>Week</u>	<u>Area of Maths</u>	<u>Strand of Maths</u>
1	Number and Place Value	Addition and Subtraction
2	Number and Place Value	Addition and Subtraction
3	Measurement	Length and Height
4	Measurement	Weight and Mass
5	Measurement	Volume and Capacity
6	Measurement	Temperature

Spring 2

<u>Week</u>	<u>Area of Maths</u>	<u>Strand of Maths</u>
1	Number and Place Value	Number
2	Number and Place Value	Number
3	Number and Place Value	Number
4	Measurement	Money
5	Measurement	Money
6	Statistics	Statistics



Maths Coverage – KS3

Summer 1

<u>Week</u>	<u>Area of Maths</u>	<u>Strand of Maths</u>
1	Number and Place Value	Addition and Subtraction
2	Number and Place Value	Addition and Subtraction
3	Number and Place Value	Addition and Subtraction
4	Geometry	2D Shape and Patterns
5	Geometry	2D Shape and Patterns
6	Statistics	Statistics

Summer 2

<u>Week</u>	<u>Area of Maths</u>	<u>Strand of Maths</u>
1	Number and Place Value	Multiplication/ division/ fractions
2	Number and Place Value	Multiplication/ division/ fractions
3	Geometry	Properties of Shape 3D
4	Geometry	Properties of Shape 3D
5	Geometry	Position and Direction
6	Geometry	Position and Direction

Number

Number and Place Value	Addition and Subtraction	Multiplication and Division
Taking part in finger rhymes using number	Making groups	Making groups
Counting real objects	Comparing amounts of items using 'one', 'lots' and 'more'	Sharing equally
Ordering/reciting/reading numbers in sequence	Counting how many altogether	Comparing amounts of items using 'one', 'lots' and 'more'
Comparing amounts of items using 'one', 'lots' and 'more'	Recounting when an amount changes	Recounting when an amount changes
Developing fast recognition of objects (subitising)	Making larger groups	Sharing into larger groups
Showing how many fingers	Solving real world mathematical problems	Solving real world mathematical problems
Linking numerals and amounts	Combining two groups	Understanding halving and doubling
Writing numerals	Understanding 1 more and 1 less	Using concrete objects to multiply and divide
Recounting when an amount changes	Recalling number bonds	Recognising, finding and naming simple fractions (whole, half, quarter)
Comparing quantities/groups using mathematical language	Reading, writing (where appropriate) and interpreting mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	Recalling and using multiplication and division facts for the 2, 5 and 10 multiplication tables.
Using ordinal numbers	Understanding, representing and using number bonds within 20	Writing and calculating times tables using the multiplication (\times), division (\div) and equals (=) signs

Number continued

Number and Place Value	Addition and Subtraction	Multiplication, Division and Fractions
Exploring composition of number	Adding and subtracting 1-2 digits within 20	Recognising, finding, naming and writing fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.
Understanding number within 100	Solving one-step problems using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.	Showing that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot.
Counting in multiples of 2s, 5s and 10s	Solving problems with addition and subtraction	Solving problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.
Counting in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward	Recalling and using addition and subtraction facts to 20 fluently, and deriving and using related facts up to 100	
Recognising the place value of each digit in a two-digit number (10s, 1s)	Adding and subtracting numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> • a two-digit number and 1s or 10s • 2 two digit numbers • adding 3 one-digit numbers 	
Identifying, representing and estimating numbers	Showing that addition of 2 numbers can be done in any order and subtraction can not	
Comparing and ordering numbers from 0 up to 100; use $<$ $>$ and $=$ signs	Recognising and using the inverse relationship between addition and subtraction and using this to check calculations and solve missing number problems.	

Geometry

Shape	Patterns	Position and Direction
Building towers	Noticing and arranging things in patterns.	Describing the position of an object
Exploring 2D and 3D shapes	Describing and commenting on patterns in the environment	Following instructions using key positional vocabulary.
Using pliable material to make 3D shapes	Copying and continuing patterns	Completing puzzles
Identifying 2D and 3D shapes and shapes in the environment	Noticing errors in patterns	Following physical positional instructions.
Using Mathematical language to describe 2D and 3D shapes	Sequencing using 'first', 'then' etc.	Describing position, direction and movement, including whole, half, quarter and three quarter turns, left and right.
Using shapes to make patterns and pictures	Continuing, copying and creating more complex repeating patterns	Describing the position of a feature on a simple map
Making models using shapes	Ordering and arranging combinations of mathematical objects in patterns and sequences	Using 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)

Geometry

Shape

Combining shapes to make new ones.

Recognising that some 2D shapes can have different shapes within them

Using blocks and interlocking shapes to build

Identifying and describing the properties of 2-D and 3D shapes.

Recognising and naming common 3-D shapes, including: cuboids, cubes, pyramids and spheres

Identifying 2-D shapes on the surface of 3-D shapes

Comparing and sorting common 2D and 3-D shapes and everyday objects.

Measurement

Weight/Mass	Volume/Capacity	Size	Temperature	Time	Money
Describing weight	Experimenting with water play	Describing the size of objects	Feeling different temperatures	Following a simple, familiar routine	Understanding the concept of transaction during role play
Comparing two objects relating to weight	Following directions to fill or empty a container	Compare two objects relating to size and length	Comment on hot/cold using symbols or speech	Understanding that events happen in the day and night	Sorting coins by a given criteria
Using scales with assistance to compare objects	Identifying and describing 'full' and 'empty' containers	Comparing more than two objects relating to size and length	Explore melting/freezing	Describing a familiar routine	Beginning to count 1p coins
Comparing more than two objects relating to weight	Identifying and describing 'half full' containers	Ordering objects by size and length	Using the terms hot/cold to describe something	Following simple instructions in the correct order.	Completing simple addition and subtraction of coins
Using scales to balance and weigh objects	Comparing the capacity of two or more containers	Comparing, describing and solving practical problems using the terms long/short/longer/shorter/tall/short/double/half	Beginning to use a thermometer	Understanding and using key time vocab	Giving amounts of coins

Measurement

Weight/Mass	Volume/Capacity	Size	Temperature	Time	Money
Comparing, describing and solving practical problems using the terms heavy/light/heavier than/lighter than	Comparing, describing and solving practical problems using terms full/empty/more than/less than/half/half full/quarter full	Measuring and beginning to record lengths and heights	Understanding melting and heat	Understanding and commenting on quick/slow	Recognising different coins and notes
Measuring and beginning to record mass and weight.	Measuring and beginning to record volume and capacity	Choosing and using appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit using a ruler.	Comparing temperatures	Comparing, describing and solving practical time problems (speech, writing or symbols) using terms quicker/slower/earlier/later/	Understanding the value of different coins and notes
Choosing and using appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit using scales.	Choosing and using appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit using measuring vessels	Comparing and ordering lengths and record the results using >, < and =	Choosing and using thermometers	Beginning to record the time in hours, minutes and seconds	Recognising and using symbols for pounds (£) and pence (p)

Measurement

Weight/Mass	Volume/Capacity	Temperature	Time	Money
Comparing and ordering mass and record the results using $>$, $<$ and $=$	Comparing and ordering volume/capacity and recording the results using $>$, $<$ and $=$	Comparing temperatures	Sequencing events in chronological order.	Combining amounts to make a particular value.
		Explaining and recording temperatures appropriately	Recognising and using language relating to dates, including days of the week, weeks, months and years	Finding different combinations of coins that equal the same amounts of money.
			Telling the time to the hour and half past the hour and drawing the hands on a clock face to show these times.	Solving simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
			Comparing and sequencing intervals of time	
			Telling and writing the time to five minutes, including quarter past/to the hour and draw the hands on a clock face	
			Knowing the number of minutes in an hour and the number of hours in a day	

Statistics

Sort into groups of a given criteria

Sort into groups of a chosen criteria

Record, present and interpret data by experimenting with symbols and marks, as well as numerals

Interpret and construct simple pictograms

Interpret and construct simple tally charts

Interpret and construct simple block graphs

Interpret and construct 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.