Curriculum Map- Maths Year 2

Subject - Maths				
		Learning Objectives	**Knowledge Expectations**	**Vocabulary Expectations**	**Links to prior/post learning**
Y2	**Chapter 1- Numbers to 100**	To count numbers up to 100 using concrete objects: counting up by ones and tens. To understand each digit in a number has its own value. To be able to compare numbers using place-value knowledge gained from previous lessons. To use the number bond strategy to deepen understanding of place value. To count in ones and tens; to introduce boundary crossing using tens and ones. To recognise and describe patterns with more complex numbers, in particular 3 and 5	To know 2 sets of objects can be compared using <>= To know 'whole' in the entire number To know how to read and write numbers to 100 To know that numbers can be partition into different 'parts' To know there is a set counting sequence for numbers beyond 20 To know objects can be counted by making groups of 10 To know each number on the number line has a unique position To know each two-digit number can be partitioned into a 10s part and a ones part To understand the 10s and ones structure of 2 digit numbers can be used to support addition To know that counting in 10's can be easier than counting in 1's To know that number bonds to 20 follow a similar pattern to number bonds to 10	Number numeral zero one, two, three … twenty teens numbers, eleven, twelve … twenty twenty-one, twenty-two … one hundred, two hundred … one thousand none how many …? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours and so on equal to equivalent to is the same as more, less most, least tally many odd, even multiple of sequence continue predict few pattern pair, rule > greater than < less than ones tens, hundreds digit one-, two- or three-digit number place, place value stands for, represents exchange the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less equal to compare order size first, second, third … twentieth twenty-first, twenty-second … last, last but one before, after next between halfway between above, below	Year 1: To count in sequences of 10 followed by counting ones; to increase confidence with number lines and Base 10 materials in order to count numbers to 100. To understand the value of the tens and ones digits in a number; to use multiple methods of representing and constructing a number. To review and extend skills and strategies related to number comparison; to place numbers in order from smallest to greatest and vice versa. To see patterns of numbers when increasing or decreasing by 1, 2 or 5; to use a number line, a 100-chart and Base 10 materials to represent numbers. Year 3: To learn to count in hundreds and understand the place value. To compose and decompose numbers consisting of hundreds, tens and ones. To understand the value of each digit in a 3-digit number.

			To know that 0-9 can be used when writing one digit and two digit numbers		To be able to compare and order numbers.
			To know that numbers can be partitioned in different ways e.g. 53- 5 tens and 3 ones, 4 tons and 13 ones		To be able to count in fifties.
					To recognise, describe and continue a number pattern.
			To know that numbers can be represented in different ways and using different manipulatives		To be able to recognise, describe and complete more complicated number patterns.
					To be able to count in fours and eights.
	Chapter 2- Addition and Subtraction	To be able to add a 1-digit number to a 2-digit number without regrouping the ones.

To add tens by recognising its relationship to adding ones.

To add 2-digit numbers where one is a multiple of 10.

To add with tens and ones where the ones are both more than zero.

To add 1-digit numbers to a 2-digit number resulting in renaming of ones.

To add two 2-digit numbers where renaming is expected.

To subtract ones from a 2-digit number. | To know = means the same as

To know + means that you are combining two or more numbers to find a total

To know that – is the inverse of +

To know that + is the inverse of -

To know that you can find the total by counting on

To understand that the total will be the largest number.

To know that addition can be done in any order

To know to subtract from the largest number | addition add, more, and make, sum, total altogether double near double half, halve one more, two more … ten more … one hundred more how many more to make …? How many more is … than …? How much more is …? Subtract take away how many are left/left over? How many have gone? One less, two less, ten less … one hundred less how many fewer is … than …? How much less is …? difference between equals is the same as number bonds/pairs/facts tens boundary, equal, same as | Year 1

To learn to add by counting on from the largest number.

To add to numbers by first making 10 and then adding on the remainder.

To add by separating the ones and ten. This enables pupils to add the sum of the ones to the ten.

To subtract a certain amount of ones from 10 rather than from the ones, as there are not enough ones.

To go through number facts derived from addition and subtraction sentences.

Year 3

To understand the commutative law of addition and the corresponding addition and subtraction facts. |

		To subtract 2-digit multiples of 10 from 2-digit multiples of 10. To subtract tens from a 2-digit number with the ones being more than zero. To subtract a 2-digit number by another 2-digit number. To subtract a 2-digit number by a 1-digit number with renaming. To subtract a 2-digit number by another 2-digit number where renaming has to occur. To add three one-digit numbers	To know - means that you are finding the difference between two amounts To know that you can find the difference by counting back To know that subtraction always starts with the whole number To understand that the answer will be fewer than the whole number To know that if there is more than 9 in a column that needs to be renamed e.g. 11 ones becomes 1 ten and 1 one To know that when adding multiples of 10, the ones digit stays the same To know that you will need to rename one ten into 10 ones when subtracting if the digit is smaller To know that you can add/subtract more than two numbers To know when adding/subtracting more than two numbers, use number bond facts to help. To know to add the ones before tens when adding a two digit number		To add a 3-digit number to a 1-digit number with no regrouping or renaming. To add a 3-digit number to a multiple of 10 (2-digit number) without regrouping or renaming. To add multiples of 100 to a 3-digit number. without regrouping or renaming. To add two 3-digit numbers without regrouping or renaming; introduction of the column method of addition. To add a 3-digit number to a 1-digit number, with renaming. To add with renaming in tens. To add two 3-digit numbers with renaming the ones. To add two 3-digit numbers with renaming the tens. To add with renaming in ones and tens. To do simple subtraction by taking away a 1-digit number from a 2-digit number without renaming. To do simple subtraction by taking away a 1-digit number from a 3-digit number without renaming. To subtract multiples of 10, up to 90, from a 3-digit number. To subtract hundreds from a 3-digit number and to subtract multiples of 1 and 10 from a 3-digit number.

					To understand simple subtraction of a 3-digit number by another 3-digit number using the column method

To subtract with renaming in tens and ones.

To subtract with renaming hundreds.

To subtract with regrouping tens and hundreds.

To subtract a 3-digit number with zeros.

To solve addition and subtraction problems using the bar model.

To use the bar model to solve problems.

To solve complicated problems involving addition and subtraction using a comparative bar model heuristic.

To solve more complicated problems involving addition and subtraction using a comparative bar model heuristic. |
| | **Chapter 3-**

Multiplication of 2, 5 and 10 | To realise that multiplication is the same as repeated addition with equal groups

To focus on understanding and learning the 2 times table.

To use concrete materials and pictorial | To know that objects can be shared into equal groups

To know that the groups can look different, but still have the same amount

To know that groups can be counted in 2's, 5's and 10's

To know that doubling is the same as saying two groups of the same amount | multiplication multiply multiplied by multiple groups of times once, twice, three times … ten times repeated addition division dividing, divide, divided by, divided into grouping sharing, share, share equally left, left over one each, two each, three each … ten each group in pairs, threes … tens equal groups of doubling halving array row, column number patterns | Year 1:

To identify equal groupings as the first step in multiplying; to reinforce the idea that the arrangement of objects does not impact on the number of objects.

To understand we can count groups of the same quantity more efficiently; to find multiple ways of counting groups of the same quantity. |

		representations to multiply by 2.

To cover the basics of the 5 times table and to highlight multiplication visually as equal groups.

To recall and use the 5 times table.

To introduce the 10 times table by focusing on the numbers found in the 10 times table.

To look at the 10 times table in more detail by looking at patterns and relationships.

To investigate links between the 2, 5 and 10 times tables.

To understand commutative law.

To use knowledge of the 2, 5 and 10 times tables to further investigate commutative law. | To know that equal groups can be counted to find the total

To know that multiplication is repeated addition and you add the same number multiple times

To know multiplication can be done in any order

To know that objects can be shared into equal groups

To know that the groups can look different, but still have the same amount

To know that groups can be counted in 2's, 5's and 10's

To know that doubling is the same as saying two groups of the same amount

To know that equal groups can be counted

To know that even numbers can be shared into equal groups

To know that objects can be shared equally to find the total in each group

To know that division will always start with whole number

To know that groups need to be equal and any amount left is called the remainder | multiplication table multiplication fact, division fact | To organise objects into equal rows in order to begin counting equal numbers efficiently.

To understand that doubling is creating an id entice number to the one you started with; to understand that doubling is the same as saying two groups of the same amount.

To solve word problems using equal groupings as the basis for multiplication

Year 3:

To multiply by 3.

To multiply by 3 using relational properties.

To multiply by 4.

To multiply by 4.

To multiply by 4 and 8.

To multiply by 8; to use commutative law to multiply.

To multiply by 8.

To find relationships between multiplication and division.

To solve word problems with multiplication. |

		To use the 2, 5 and 10 times tables to solve word problems.	To know that odd numbers can be shared into equal groups but there will be a remainder To know when you multiply by 10 you make the number 10 times bigger To know when you divide by 10, you make the number 10 times smaller To know that when multiplying whole by 2 it will end in 0, 2, 4, 6 or 8 To know that when multiply a whole number by 5 it will end in 0 or 5 To know when multiply a whole number by 10 it will end in a 0 To know that the answer in the 2 times table will always be an even number		To solve more word problems involving multiplication and division using the bar model heuristic
	Chapter 4- Multiplication and Division of 2, 5 and 10	To understand that grouping is a way of dividing. To be able to divide by sharing an amount. To be able to divide by 2. The two strategies used here are splitting into	To know that objects can be shared into equal groups To know that the groups can look different, but still have the same amount To know that groups can be counted in 2's, 5's and 10's To know that doubling is the same as saying two groups of the same amount	multiplication multiply multiplied by multiple groups of times once, twice, three times … ten times repeated addition division dividing, divide, divided by, divided into grouping sharing, share, share equally left, left over one each, two each, three each … ten each group in pairs, threes … tens equal groups of doubling halving array row, column number patterns	Year 1: To identify equal groupings as the first step in multiplying; to reinforce the idea that the arrangement of objects does not impact on the number of objects. To understand we can count groups of the same quantity more efficiently; to find multiple ways of counting groups of the same quantity.

		groups of x and splitting into equal groups of many. To be able to divide by 5 and identify links with multiplying by 5. To be able to divide by 10 and identify links with multiplying by 10. To use multiplication and division skills to identify family facts in a number sentence. To understand and solve word problems which require the use of the multiplication and division skills covered in this chapter. To be able to link whether odd or even numbers can be divisible by 2, 5 or 10	To know that equal groups can be counted to find the total To know that multiplication is repeated addition and you add the same number multiple times To know multiplication can be done in any order To know that objects can be shared into equal groups To know that the groups can look different, but still have the same amount To know that groups can be counted in 2's, 5's and 10's To know that doubling is the same as saying two groups of the same amount To know that equal groups can be counted To know that even numbers can be shared into equal groups To know that objects can be shared equally to find the total in each group To know that division will always start with whole number To know that groups need to be equal and any amount left is called the remainder	multiplication table multiplication fact, division fact	To organise objects into equal rows in order to begin counting equal numbers efficiently. To understand that doubling is creating an id entice number to the one you started with; to understand that doubling is the same as saying two groups of the same amount. To solve word problems using equal groupings as the basis for multiplication To understand how to divide even numbers into equal groups using concrete materials; to determine how many groups will be created from sharing equally. To understand how to divide even numbers equally into groups; to determine how many objects will be included in each group in order to share equally. Year 3: To multiply by 3. To multiply by 3 using relational properties. To multiply by 4. To multiply by 4. To multiply by 4 and 8.

Curriculum Map- Maths Year 2

			To know that odd numbers can be shared into equal groups but there will be a remainder		To multiply by 8; to use commutative law to multiply.
					To multiply by 8.
			To know when you multiply by 10 you make the number 10 times bigger		To divide by 3.
			To know when you divide by 10, you make the number 10 times smaller		To divide by 4.
					To find relationships between multiplication and division.
			To know that when multiplying whole by 2 it will end in 0, 2, 4, 6 or 8		To divide by 4 and 8.
			To know that when multiply a whole number by 5 it will end in 0 or 5		To solve word problems with multiplication.
			To know when multiply a whole number by 10 it will end in a 0		To solve word problems that involve division.
					To solve more word problems involving multiplication and division using the bar model heuristic
					To solve problems using a variety of strategies.
	1-digit				To multiply multiples of 10 by a 1-digit number.
					To multiply any 2-digit number by a 1-digit number.
					To multiply more 2-digit numbers.
					To multiply with regrouping.
					To multiply with regrouping.

					To understand simple division of a 2-digit number by a 1-digit number.
					To divide where there is a need to regroup.
					To use long division to divide.
					To solve word problems that involve multiplication.
					To solve word problems involving division.
					To solve more challenging word problems.
	Chapter 5- Length	To measure length in metres. To measure length in centimetres. To be able to compare length for objects using 'greater than' and 'less than' symbols. To be able to compare different lengths using centimetres as the unit of measure. To be able to compare and measure various line	To know that length is measured from end to end To know that length can be measured by different objects To know that rulers can be used to measure how long/ tall an object is To know that objects can be ordered from shortest to tallest To know that length can be measure in cm and m To know 2 or more sets of objects can be compared using <>= To know that the most effective way of measuring a line, is to make it straight	measure measurement size compare measuring scale guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as roughly just over, just under centimetre, metre length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close ruler metre stick, tape	Year 1: To compare height and length by using key terminology. To be able to measure objects using other items, such as pencils or books. To be able to measure items using other things - parts of the body in particular. To introduce the concept of using rulers for measuring. Year 3: To use metres and centimetres to measure objects.

		lengths: both straight and curvy. To be able to solve problems involving measurement in the context of word problems. To be able to solve addition and multiplication word problems involving measurement. To be able to solve addition and division word problems involving measurement.			To write length in centimetres only by converting metres to centimetres. To convert kilometres to metres. To convert length from metres to kilometres and metres. To compare two lengths. Solve measurement-related word problems. To solve other word problems. To solve word problems further, involving multiplication To solve word problems associated with length using division. To solve more challenging word problems.
	Chapter 6- **Mass**	To understand that mass is measured in kilograms and by using weighing scales. To be able to measure mass in grams and to understand that it is a smaller unit of measure than a kilogram. To be able to measure mass accurately in grams using weighing scales.	To know that mass is the quantity of matter in an object To know that some objects are heavier/lighter than others To know that objects can be ordered based on their weight To know that scales can be used to measure the weight of an object To know that mass can be measure in g and kg To know 2 or more sets of objects can be compared using <>=	measure, kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales	Year 1: To compare the mass of objects using the terms 'heavy' and 'light', 'heavier than', 'lighter than' and 'as heavy as'. To find the mass of an object using non-standard ones; to use visualisation skills to estimate the number of ones Year 3: To measure mass using weighing scales and compare the mass of objects using grams and kilograms.

		To be able to compare the mass of two different objects accurately.

To be able to compare the mass of three objects and use the appropriate vocabulary.

To solve word problems in the context of mass.

To solve word problems involving mass. | | | To use weighing scales to measure mass when the mass is between multiples of 100 g.

To read values on a scale which are 1 kg or more.

To weigh heavier items where the markers in the scales represent 200 g each.

To solve word problems relating to mass with addition and subtraction.

To solve word problems relating to mass using multiplication.

To solve word problems relating to mass using division |
| | **Chapter 7-**

Temperature | To be able to accurately read temperature in Celsius.

To be able to estimate temperature and to read thermometers to confirm the estimate. | To know that a thermometer is sued to measure temperature

To know that temperature tells us how hot/cold something is

To know that temperature can be measured in Celsius

To know that temperatures can be compared

To know that temperatures can be compared using the degree Celsius symbol | Thermometer, degrees celcious

Hotter, colder | |

	Chapter 8- **Picture Graphs**	To be able to read a picture graph with confidence. To be able to read and interpret a picture graph with confidence. To be able to read and interpret a picture graph where the value of the picture can represent more than 1.	To know that graphs are used to show data To know the scales can be set in different intervals To know that graphs can be read to find out an amount	count, tally, sort, vote graph, block graph, pictogram represent group, set list, table, chart, bar chart,	Year 3: To construct picture graphs from a set of data; to present data with pictures that represent more than one item. To construct bar graphs from a set of data; to use proportion to reflect precise difference in quantity. To read and interpret information from a bar graph; to use and understand vocabulary related to bar graphs. To read bar graphs where the scale is not a multiple of all quantities measured. To read bar graphs where the scale is made up of larger increments.
	Chapter 9- **More Word Problems**	To decide when it is appropriate to add and/or subtract when solving word problems; to improve the use of bar modelling and decision making based on visual representations. To use the bar model method to solve word problems looking at the difference between two amounts. To solve multi-step word problems using bar modelling; to use more	To know that a bar model can be used to help to solve a problem To know that problems can have more than one step To know that the bars represent amounts		Year 1: To use the making 10 strategy to count numbers above 10; to represent numbers on a number line. To use the ten-frame method of organisation and place-value cards to assist pupils in writing numbers to 40; to encourage multiple ways of counting, including counting by 2, 5 and 10 To understand that digits represent tens and ones; to represent numbers using Base 10 materials and numbers. To use place value to compare two or three numbers and determine which

		than one bar model in a problem to work out the answer. To use bar modelling to solve multi-step word problems involving unknown quantities.			number is bigger/smaller; to arrange three numbers in order of size. To compare numbers using number bonds, 100-squares and number lines to determine how much more/less. To observe and use number patterns; to see number lines in conjunction with number squares in order to create visual proportionality. Year 3: To solve word problems with multiplication. To solve word problems that involve division.
	Chapter 10- Money	To identify standard UK coins and notes and write their names. To count notes in sequences of 5 and 10; to recognise the value of notes by appearance. To count coins in sequences of their value; to recognise the value of coins by appearance.	To know each coin/note has a different value To know that money is used to buy items To know that items cost different amounts To know that coins/notes look different To know that coins and notes can be combined to make an amount To know the £ represent a pound	money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much …? How many …? total	To decide whether addition or subtraction is the most appropriate operation; to use and apply number bonds and visual representations to solve word problems. To use and apply concepts of how many more and how many fewer/less; to apply number bonds and the guess-and-check method to solve word problems. To develop number sentences based on word problems; to improve the use of number bonds and one-to-one bar model representations to suit the question.

Curriculum Map- Maths Year 2

		To represent amounts of money using coins and notes; to count coins and notes using their denominations. To create equal amounts of money using different coins. To exchange denominations of money for different coins. To compare different amounts of money using coins. To add money together to determine the total amount. To calculate change from £100 or less; to use the bar model approach to represent amounts of money. To solve more complex word problems using bar modelling as a primary method.	To know that different coins can make the same amount To know 2 or more amounts can be compared using <>= To know that change can be given when buying something To know there are 100p in £1 To know that coins can be different values To know that 5p is less than £5 To know that 10p is less than £10 To know that 20p is less than £20 To know that 50p is less than £50		To use pictorial representations to help solve word problems; to choose the correct operation to solve a word problem. To use visual representations and patterns to solve word problems; to develop precision in model drawing to recognise similarities and differences. To apply addition and subtraction to multi-step word problems; to use number bonds to make 10 when adding Year 3: To consolidate previous learning about denominations of both notes and coins; to use simple addition to count amounts of money. To name amounts of money including coins above 100p; to regroup and rename 100p as £1 as a key strategy. To find multiple ways of showing an amount of money. To add money by adding together the pounds and pence separately. To add amounts of money together using different methods; to consolidate the addition of pounds and pence separately. To consolidate 'making a pound' as a strategy for adding amounts of money where the coins equal more than 99p

					To learn the 'make a pound' strategy with number bond diagrams; to consolidate the strategies associated with the addition of money.
					To use multiple methods for subtracting amounts of money, including concrete materials and the column method.
					To use visual comparison to subtract amounts of money; to consolidate column subtraction where there is no regrouping of pence required.
					To use number bonds to subtract amounts of money; to develop number sense through decision making.
					To use number bonds as the primary strategy for subtracting amounts of money; to split pounds and pence simultaneously when subtracting amounts of money.
					To learn the 'counting on' strategy for calculating change; to consolidate the number bonds strategy for calculating change.
					To solve word problems involving money using bar modelling as the key strategy; to learn how to use comparative models where pupils are solving by seeing the smaller amount inside of the larger amount.
					To use part-whole bar models to represent word problems; to apply addition and subtraction strategies to solve word problems.

	Chapter 11- 2D Shapes	To identify the number of sides on basic 2-D shapes. To identify and count the vertices in regular polygons. To identify lines of symmetry in basic 2-D shapes. To construct shapes using pattern blocks that have lines of symmetry. To sort shapes based on number of sides, vertices and other factors. To draw shapes using square grid and dot grid paper; to copy shapes from sight using grid paper. To recognise patterns of familiar shapes and colours of up to three objects. To describe patterns using ordinal numbers and shape names. To move shapes on a square grid from one	To know the name of 2d shapes- circle, square, rectangle, triangle To know that 2d means two-dimensional To know that more than 2 shapes/objects can make a pattern To know that shapes can be grouped by the number of sides/corners To know that 2d shapes are flat To know that a vertices is where two sides meet To know vertices is another word for corner To know shapes are still the same shape, even after they are rotated To know a line of symmetry is an imaginary line where you could fold the shape and both halves match equally	shape, pattern flat curved, straight round hollow, solid sort make, build, draw surface size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry pattern, repeating pattern match, corner, side point, pointed rectangle (including square), rectangular circle, circular triangle, triangular pentagon hexagon octagon, face, edge, vertex, vertices cube, cuboid pyramid sphere cone cylinder	Year 1: To recognise 2-D shapes in the everyday environment. To be able to group shapes using different criteria. To make patterns using common 2-D shapes. Year 3: To identify, define and create perpendicular lines; to find perpendicular lines in everyday objects. To identify, define and create parallel lines; to find parallel lines in everyday objects. To define and identify vertical and horizontal lines; to find vertical and horizontal lines in everyday life. To describe 2-D shapes using familiar vocabulary about lines and angles. To draw 2-D shapes in proportion to their size; to identify how big a shape is. To create 3-D shapes out of nets; to use vocabulary related to 3-D shapes and their properties. To construct 3-D shapes out of clay and discuss their properties.

	3-D	position to another using common language. To turn objects using quarter, half and three-quarter turns both clockwise and anticlockwise on a square grid.			To describe 3-D shapes using familiar terms; to identify properties of 3-D shapes.

Curriculum Map- Maths Year 2

	Chapter 12- **3D Shapes**	To recognise 3-D shapes by identifying their properties. To describe 3-D shapes and classify them using faces, vertices and edges. To describe 3-D shapes based on the number of faces and the 2-D shapes of these faces; to construct nets of shapes into 3-D shapes. To group 3-D shapes by similar properties. To form 3-D structures using multiple 3-D objects. To make and recognise patterns using 3-D shapes.	To know the name of 3d shapes- spheres, cubes, cuboids and pyramids To know that 3d means three-dimensional To know that more than 2 shapes/objects can make a pattern To know that shapes can be grouped by the number of vertices/edges To know that 3d shapes are solid and can be picked up To know 3d shapes faces are 2d shapes To know 3d shapes can be combined to make a structure To know that the edge of a 3d shape is where the faces of a shape meet	shape, pattern flat curved, straight round hollow, solid sort make, build, draw surface size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry pattern, repeating pattern match, corner, side point, pointed rectangle (including square), rectangular circle, circular triangle, triangular pentagon hexagon octagon, face, edge, vertex, vertices cube, cuboid pyramid sphere cone cylinder	Year 1: To recognise four basic 3-D solid shapes: spheres, cubes, cuboids and pyramids. To be able to group shapes using different criteria. Year 3: To identify, define and create perpendicular lines; to find perpendicular lines in everyday objects. To identify, define and create parallel lines; to find parallel lines in everyday objects. To define and identify vertical and horizontal lines; to find vertical and horizontal lines in everyday life. To describe 2-D shapes using familiar vocabulary about lines and angles. To draw 2-D shapes in proportion to their size; to identify how big a shape is. To create 3-D shapes out of nets; to use vocabulary related to 3-D shapes and their properties. To construct 3-D shapes out of clay and discuss their properties. To describe 3-D shapes using familiar terms; to identify properties of 3-D shapes.

Curriculum Map- Maths Year 2

	Chapter 13- Fractions	To make equal parts from a whole using simple and complex methods. To show and recognise halves and quarters. To show and identify more than one quarter using materials and pictures. To show and identify thirds in shapes; to use the vocabulary 'numerator' and 'denominator' when referring to fractions. To identify and name fractions by looking at the number of pieces and how many are shaded in. To recognise equivalent fractions in quarters, thirds and halves. To compare and order similar fractions by looking at the size of the pieces shaded.	To know that objects can be shared into equal groups To know that 'half' means two equal parts To know that 'whole' means one part To know that 'quarter' means 4 equal parts To know that 'third' means 3 equal parts To know that all parts needs to be equal To know that doubling is the same as saying two groups of the same amount To know that halving is sharing in to two equal groups To know that fractions can be ordered To know that the numerator is the number above the line in a fraction To know that the denominator is the number below the line in a fraction To know that the numerator tells us how many part of the whole To know the denominator tells us how many pieces the whole is made up of. To know that you can find fractions of a quantity or a shape	fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts	Year 1: To split an object (shape) into two equal parts; to identify shapes that have been split into two equal parts. To split an object (shape) into four equal parts; to identify shapes that have been split into four equal parts. To share and group objects into halves and quarters; to determine half of a number and a quarter of a number. Year 3: To count in tenths; to recognise tenths and be able to determine how many tenths are shaded. To make number pairs to create 1; to combine fractions to make 1. To add fractions with the same denominator. To consolidate adding fractions with the same name; to learn how fractions can add to 1. To subtract fractions with the same name. To find equivalent fractions through paper folding and shading. To find equivalent fractions using paper folding and shading.

		To compare and order fractions with different denominators. To count the number of wholes and parts to form mixed numbers. To count in halves and place halves onto a number line using pictures. To count in quarters and place quarters onto a number line using pictures. To count in thirds and place thirds onto a number line using pictures. To find fractions (half) of whole numbers. To find a fraction (third) of a whole number. Find a fraction (quarter) of a number. To find a fraction (half, third, quarter) of a quantity (length).		To find equivalent fractions; to place fractions on a number line. To find fractions equivalent to 1 /2; to use pictorial representations and multiplication to show equivalence. To find equivalent fractions using concrete objects and pictorial representations. To find equivalent fractions using pictorial representations and multiplication. To find the simplest fraction using visualisation and concrete materials. To find the simplest fraction using pictorial representations and division. To find equivalent fractions using multiplication and division; to determine whether or not a fraction is equivalent.

Curriculum Map- Maths Year 2

	Chapter 14- Time	To tell and write time to 5-minute intervals. To tell time to 5-minute intervals and to the hour. To sequence events of the day by looking at analogue clocks and pictures. To draw hands on an analogue clock to show the correct time. To find the duration of time using an analogue clock in 30- and 60-minute intervals. To find the duration of time to 5-minute intervals. To find the ending of a duration of time from different 5-minute starting points. To find the ending time in intervals of 5 minutes from delayed starts.	To know that the days of the weeks/months of the year remains in the same order To know there are 60 seconds in a minute To know ther are 60 minutes in 1 hour To know that events can be ordered To know that when the minute hand is at 12 it is o'clock To know that when the minute hand is at 12 and the hour hand is pointing at a number it is _ o'clock To know that when the minute hand is at 6 it is half past To know that quicker means something is faster To know that later means that is hasn't happened yet To know the minute hand is longer than the hour hand To know there are 5 minutes between each number on the clock To know events can be timed To know you can tell the time on a digital or analogue clock To know that clockwise means the rotation of the clock to the right from 12 to 12	days of the week, Monday, Tuesday … months of the year (January, February …) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year birthday, holiday morning, afternoon, evening, night bedtime, dinnertime, playtime today, yesterday, tomorrow before, after earlier, later next, first, last midnight date now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago? How long will it be to …? How long will it take to …? How often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 … minutes past, clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds	**Year 1:** To develop familiarity with the analogue clock, including the minute and hour hands; to tell time to the hour on an analogue clock. To improve familiarity with the analogue clock; to tell time to the half hour using the term 'half past.' To sequence events in order of time; to use the terms 'next', 'before' and 'after' to describe the order of events. To estimate an amount of time using seconds, minutes and hours. To use the terms 'quicker', 'slower', 'earlier' and 'later' when comparing time. To learn the days of the week and the months of the year and to be able to put them in the correct order. **Year 3:** To use the terms 'a.m.' and 'p.m.' correctly to identify morning or afternoon/evening. To learn to tell time to the minute; to understand the relationship between the minute hand and hour hand. To consolidate and apply a variety of vocabulary used to express the time.

		To find the starting time from 30-minute and 1-hour interval durations. To find the start of multiple durations of time using a common end time. To compare durations of time from the least amount to the most amount of time and vice versa.		To compare analogue and digital time; to represent time using both analogue and digital methods. To tell time before the hour using the hour and minute hands. To learn to tell time using 24-hour notation; to use analogue time and 24-hour notation interchangeably. To tell the time on an analogue clock using Roman numerals. To measure time in seconds and milliseconds. To measure time in seconds using a stopwatch; to consolidate previous learning about seconds. To consolidate measuring time in seconds; to conduct a time experiment using seconds. To measure time in hours using an analogue clock. To consolidate the measurement of time in hours. To measure time in hours using analogue clocks and timelines; to count backwards in time by the hour. To measure the passage of time in minutes using an analogue clock and a timeline. To measure time to the minute when it crosses into the next hour; to use number bonds to calculate the passage of time. To measure time in minutes, counting backwards to determine the starting point;

					to use number bonds and timelines to calculate the passage of time.
					To determine how many seconds are in a minute; to use multiplication to calculate the number of seconds in a number of minutes.
					To convert seconds into minutes using number bonds.
					To calculate the number of days in a month; to learn which months have 31, 30 and 28/29 days.
					To find the duration of days for different activities.

Curriculum Map- Maths Year 2

Chapter 15- Volume	To compare volume in different-sized containers using the terms 'greater than,' 'less than,' 'greatest' and 'least.' To compare the volume of different containers using non-standard units. To measure volume using litres and determine whether an amount is 'more than,' 'less than' or 'equal to' a litre. To measure volume using millilitres and litres; to determine how many ml there are in 1 l. To solve word problems involving bar models with litres as the standard unit. To solve word problems using ml and l, including problems involving difference. To solve word problems involving volume and multiplication.	To know that containers can be full, half full etc. To know that capacity is the amount something can hold To know containers can have the same/different capacity but different volumes To know that objects can be ordered based on their capacity To know that volume is the space covered by an object To know that volume is measured in ml and l To know 2 or more sets of objects can be compared using <>=	litre, half litre, millilitre capacity volume full empty more than less than half full, quarter full holds, contains container,	**Year 1:** To compare volume and capacity using the terms 'more than' and 'less than', 'full' and 'empty'. To find the volume and capacity of a container using non-standard ones. To describe volume using the terms 'half' and 'quarter' **Year 3:** To measure volume in millilitres. To measure capacity in millilitres. To measure volume using millilitres and litres. To measure volume in millilitres and litres from a 'homemade' bottle with markings. To measure volume using millilitres and litres in comparison to 1 l. To measure larger capacity in litres and millilitres. To solve basic word problems related to volume. To solve more word problems. To solve word problems through division.

Curriculum Map- Maths Year 2

					To solve two-step word problems.