



Key Learning in Mathematics – Year 2

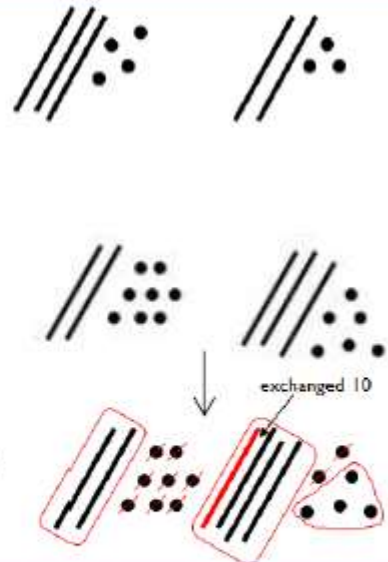
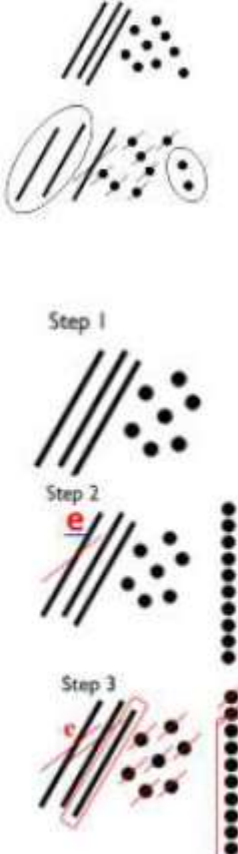
Number – number and place value	Number – addition and subtraction	Number – multiplication and division
<ul style="list-style-type: none"> Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward Read and write numbers to at least 100 in numerals and in words Recognise the place value of each digit in a two-digit number (tens, ones) Identify, represent and estimate numbers using different representations, including the number line Partition numbers in different ways (e.g. $23 = 20 + 3$ and $23 = 10 + 13$) Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs Find 1 or 10 more or less than a given number Round numbers to at least 100 to the nearest 10 Understand the connection between the 10 multiplication table and place value Describe and extend simple sequences involving counting on or back in different steps Use place value and number facts to solve problems 	<ul style="list-style-type: none"> Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting) Select a mental strategy appropriate for the numbers involved in the calculation Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Understand subtraction as take away and difference (how many more, how many less/fewer) Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Recall and use number bonds for multiples of 5 totalling 60 (to support telling time to nearest 5 minutes) Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems Solve problems with addition and subtraction including with missing numbers: <ul style="list-style-type: none"> using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods 	<ul style="list-style-type: none"> Understand multiplication as repeated addition Understand division as sharing and grouping and that a division calculation can have a remainder Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Derive and use doubles of simple two-digit numbers (numbers in which the ones total less than 10) Derive and use halves of simple two-digit even numbers (numbers in which the tens are even) Calculate mathematical statements for multiplication using repeated addition) and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs Solve problems involving multiplication and division (including those with remainders), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts
Number – fractions <ul style="list-style-type: none"> Understand and use the terms numerator and denominator Understand that a fraction can describe part of a set Understand that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be 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 $\frac{1}{2}$ Count on and back in steps of $\frac{1}{2}$ and $\frac{1}{4}$ 	Geometry – properties of shapes <ul style="list-style-type: none"> 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] 	Measurement <ul style="list-style-type: none"> Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}$C); capacity and volume (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 $=$ 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 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 Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change and measures (including time)
	Geometry – position and direction <ul style="list-style-type: none"> Order/arrange combinations of mathematical objects in patterns/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) 	
	Statistics <ul style="list-style-type: none"> Compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects 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 	




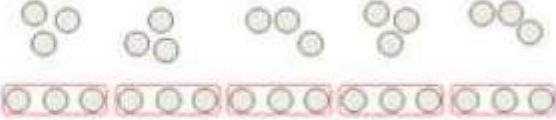

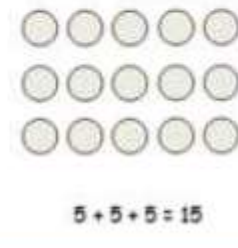


Arithmetic Expectations – Year 2

Skills	Examples
Counting	
Count in multiples of 2, 3 and 5 from 0. (Counting in 2s and 5s from 0 is continuation of Year 1 expectations).	Count from 0 in: twos; fives; threes. Complete these counting sequences: 0, 5, 10, 15, 20, __, __, __ 0, 2, 4, 6, 8, __, __, __ 0, 3, 6, 9, __, __, __ What number is missing from this counting sequence? 0, 3, 6, 9, 12, 15, 18, 24, 27
Count forwards or backwards in steps of 1 or 10 from any one- or two-digit number	Count forwards in ones from 75 to 92 Count back in ones from 54 to 38 Continue these sequences: 24, 34, 44, __, __, __ 89, 79, 69, __, __, __ 44, 34, 24, __, __
Count on and back in steps of $\frac{1}{2}$ and $\frac{1}{4}$	Count from 0 in steps of $\frac{1}{2}$ When counting from 0 in steps of $\frac{1}{4}$ what comes immediately after $\frac{3}{4}$? Answer could be $\frac{4}{4}$ or 1 Count back in steps of $\frac{1}{2}$ from $\frac{6}{2}$ Count back in steps of $\frac{1}{2}$ from $2\frac{1}{2}$
Number Facts	
Recall number bonds and related subtraction facts for all numbers to 20	$16 + 4 = \underline{\quad}$ $2 + \underline{\quad} = 20$ $20 = \underline{\quad} + 5$ $20 - 13 = \underline{\quad}$ $20 - \underline{\quad} = 1$ $6 = 20 - \underline{\quad}$ $3 + 14 = \underline{\quad}$ $5 + \underline{\quad} = 14$ $14 = \underline{\quad} + 6$ $14 - 2 = \underline{\quad}$ $14 - \underline{\quad} = 3$ $5 = 14 - \underline{\quad}$
Derive and use related facts to 100	$60 + 40 = \underline{\quad}$ $70 + \underline{\quad} = 100$ $100 = 20 + \underline{\quad}$ $100 - 40 = \underline{\quad}$ $100 - \underline{\quad} = 70$ $20 = 100 - \underline{\quad}$
Partition numbers into tens and ones.	46 is 40 and 6 46 is 40 and $\underline{\quad}$ 46 is 6 and $\underline{\quad}$ $40 + \underline{\quad} = 46$ $6 + 40 = \underline{\quad}$
Recall and use number bonds to 5 totalling 60 (to support time).	$40 + 20 = \underline{\quad}$ $25 + \underline{\quad} = 60$ $60 = \underline{\quad} + 15$ $60 - 10 = \underline{\quad}$ $60 - \underline{\quad} = 30$ $35 = 60 - \underline{\quad}$
Recall and use multiplication and division facts for 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	$6 \times 2 = \underline{\quad}$ $2 \times \underline{\quad} = 16$ $\underline{\quad} \times 5 = 15$ $\underline{\quad} = 5 \times 7$ $110 \div 10 = \underline{\quad}$ $\underline{\quad} = 80 \div 10$ Which of these numbers are odd? 32, 44, 18, 40, 55, 23, 100
Mental Calculation Strategies – Addition and Subtraction	
Count on or back in ones and tens from any given number, e.g. $(36 + 40 =)$ <i>Concrete – Diennes equipment, place value counters, beadstring</i> <i>Pictorial – Diennes jottings, number line</i>	$36 + 40 = \underline{\quad}$ $30 + 48 = \underline{\quad}$ $89 - 50 = \underline{\quad}$ $76 - \underline{\quad} = 46$
Partition and combine multiples of tens and ones. <i>Concrete – Diennes equipment, place value counters, beadstring</i> <i>Pictorial – Diennes jottings, number line</i>	$40 + 37$ 40 add 30 and 7 = 40 add 30 add 7 $15 + 14$ 10 and 5 add 10 and 4 = 10 add 10 add 5 add 4 or 15 add 10 add 4 $37 + 12$ 37 add 10 and 2 = 37 add 10 add 2 $78 - 42$ 78 take away 40 and 2 = 78 take away 40 take away 2 $80 - 35$ 80 take away 30 and 5 = 80 take away 30 take away 5



Progression Towards Written Calculation Strategies – Addition	
<p>Add two, two-digit numbers <i>Concrete – Diennes equipment, place value counters</i> <i>Pictorial – Diennes jottings</i></p>	<p>$34 + 23 = ?$ The units/ones are added first $4 + 3 = 7$ The tens are added next $30 + 20 = 50$ Both answers are put together $50 + 7 = 57$</p> <p>$28 + 36 = ?$ The units/ones are added first $8 + 6 = 14$ with ten units/ones exchanged for 1 ten. A ring is put around the units/ones not exchanged – this is the units part of the answer. The tens are then added, including the exchanged ten, to complete the sum.</p> 
Progression Towards Written Calculation Strategies – Subtraction	
<p>Subtract a two digit number from a two digit number <i>Concrete – Diennes equipment, place value counters</i> <i>Pictorial – tens and ones jottings</i></p>	<p>$39 - 17 = ?$ 39 is drawn 17 is crossed out A ring is drawn around what is left to give the answer of 22</p> <p>$37 - 19$ 37 is drawn 9 units/ones cannot be crossed out, so one ten is crossed out and exchanged for 10 ones which are in a line. e is written next to the exchanged ten. 19 is crossed out A ring is drawn around what is left to give the answer of 18</p> 



Progression Towards Written Calculation Strategies – Multiplication	
<p>Recognise multiplication as real arrays and understand that multiplication is repeated addition and the total can be found by counting in equal steps/groups.</p> <p><i>Concrete – real arrays e.g. baking trays, ice cube trays, egg boxes, cubes, counters</i></p> <p><i>Pictorial – images of real arrays, rectangles drawn on squared paper</i></p>	<p>How many eggs are needed to fill the box? How many eggs would fill two boxes?</p>  <p>Children arrange items into equal groups and count to find the total.</p>  <p>Children understand how arrays can show repeated addition of rows and/or columns and that multiplication is commutative i.e. that 3×5 gives the same answer as 5×3</p>  
Progression Towards Written Calculation Strategies – Division	
<p>Represent division calculations as grouping (repeated subtraction) and use jottings to support their calculation. Introduce simple remainders as the items are shared into equal parts, but some may be left over.</p> <p><i>Concrete – real sets of items, cubes, counters</i></p> <p><i>Pictorial – images real items, rectangles drawn on squared paper</i></p>	<p>$12 \div 3 = ?$</p> <p>Children begin to read this calculation as, 'How many groups of 3 are there in 12?' </p> <p>At this stage, children will also be introduced to division calculations that result in remainders.</p> <p>$13 \div 4 = 3$ remainder 1 </p>
Decision Making	
<p>When calculating, children should ask themselves:</p> <ul style="list-style-type: none"> - do I know the answer because it is a fact I have learnt? - can I work it out easily in my head? - can I use some equipment or a jotting? 	

The strategies used within this document are taken from the Lancashire Mathematics Team Progression in Mental Calculation Strategies Policies and the Progression Towards Written Methods Policies.

See www.lancsngfl.ac.uk/curriculum/primarymaths for the full policies.



Year 2 Mathematics Yearly Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Week 1	Unit 1 Place Value	Unit 5 Counting, Multiplication and Sorting	Unit 11 Place Value	Unit 16 Length	Unit 21 Place Value and Statistics	Unit 28 Addition and Subtraction
Week 2		Unit 6 Statistics	Unit 12 Mass and Volume and Capacity	Unit 17 Addition and Subtraction	Unit 22 Addition and Subtraction	Unit 29 Multiplication and Division
Week 3	Unit 2 Length and Mass	Unit 7 Fractions	Unit 13 Addition and Subtraction	Unit 18 2-D and 3-D Shape	Unit 23 Capacity and Volume Unit 24 Temperature	Unit 30 Statistics and Calculation
Week 4	Unit 3 Addition and Subtraction	Unit 8 Capacity and Volume	Unit 14 Money	Unit 19 Fractions and Position & Direction	Unit 25 Fractions	Unit 31 Measurement
Week 5		Unit 9 Money				
Week 6		Unit 10 Time	Unit 15 Multiplication and Division	Unit 20 Time	Unit 26 Position & Direction and Time	
Week 6	Unit 4 2-D and 3-D Shape	Assess and review week		Assess and review week	Unit 27 2-D and 3-D Shape	Assess and review then address significant gaps



YEAR 2	AUTUMN	
	Topic	Sequence of Learning
	Number and place value	<ul style="list-style-type: none"> Identify and make a two-digit number up to 50 using concrete materials (straws, base 10, arrow cards) – straightforward representations Identify and make a two-digit number up to 100 using concrete materials (straws, base 10, arrow cards) – straightforward representations Exchange 10 ones for 1 ten and vice versa Exchange 10 tens for 1 hundred and vice versa Identify and make a two-digit number up to 100 using concrete materials (straws, base 10, arrow cards) Greater variation built in – 2 tens and 3 ones, 3 ones and 2 tens, 1 ten a 13 ones mixed positions of items Different and same Identify and make a two-digit number up to 100 using concrete materials (PV counters, abacus, arrow cards) Greater variation built in – 2 tens and 3 ones, 3 ones and 2 tens, 1 ten a 13 ones mixed positions of items Different and same Partition a two-digit number in different ways where one group is a multiple of 10 Different and same 1 more and 1 less/fewer with bridging 10 more and 10 less/fewer with bridging Compare two numbers Include numbers represented in block graphs and tables Identify most/least, greatest/least value from a selection Include numbers represented in block graphs and tables Identify the multiple of 10 either side of a number and which is closest
	Length and mass Application of number and place value	<ul style="list-style-type: none"> Measure and record length and height using standard units (cm, m) Measure and record mass using standard units (g, kg) Compare the values of two lengths or masses
	Addition and subtraction	<ul style="list-style-type: none"> Add a one-digit number to a two-digit number (no bridging) – concrete and pictorial Part – part – whole Subtract a one-digit number from a two-digit number (no bridging) – concrete and pictorial Part – part – whole Solve missing number problems using inverse and part – part – whole Add a multiple of 10 to a two-digit number (two strategies: add tens and combine ones; conserve number and count on in tens) Subtract a multiple of 10 from a two-digit number (two strategies: subtract tens and combine ones; conserve number and count back in tens) Derive and reason about bonds to numbers within 10 If I know that $5 + 2 = 7$ then what is $15 + 2$ Add TU + TU no bridging concrete and pictorial Subtract TU - TU no bridging concrete and pictorial Derive and reason about bonds totalling 20 $1U + U$ with bridging using 10 frames Add three single digit numbers
	Geometry 2D and 3D Shape	<ul style="list-style-type: none"> Identify and make (circles), triangles, square rectangles, oblong rectangles and introduce quadrilaterals by counting their sides and vertices – different sizes, orientations, colours, examples and non-examples Different and same Identify and make pentagons, hexagons and octagons by counting their sides and vertices – different sizes, orientations, colours, examples and non-examples Different and same Know face, edge and vertex Identify and name 3-D shapes with faces (flat surfaces): cube, cuboid, pyramid, triangular prism by counting their faces and vertices and recognising the shape of their faces - different sizes, orientations, colours, examples and non-examples Different and same Know face, edge and vertex Identify and name 3-D shapes with faces and curved surfaces: sphere, cylinder, cone by counting their surfaces and vertices and recognising the shape of their faces - different sizes, orientations, colours, examples and non-examples Different and same
	Counting, multiplication and sorting	<ul style="list-style-type: none"> Represent adding the same number two or more times using concrete materials in equal groups and then as an array. Identify multiplication sentences from a given array (and vice versa), repeated addition number sentence and understand the commutativity of multiplication. Explore and reason about patterns and sequences counting in 2s, 5s and 10s – include sorting
	Statistics	<ul style="list-style-type: none"> Interpret simple tables and answer questions which ask how many..., most/least common/popular Interpret simple block graphs and answer questions which ask how many..., most/least common/popular, how many more/fewer..., how many altogether (use strategies covered earlier in +/-) Interpret simple pictograms (each symbol worth 1) and answer questions which ask how many..., most/least common/popular, how many more/fewer..., how many altogether (use strategies covered earlier in +/-) Collect data using a tally chart and interpret tally charts Transfer data from one form to another: table, block graph, pictogram, tally chart (matching representations?)
	Fractions	<ul style="list-style-type: none"> Recap what one half means. Model one half using shapes and objects. Relate to one quarter to understand denominator, numerator and what a fraction is Split the same shape or object into different numbers of equal parts and compare the sizes of the denominators e.g. a half and a quarter. Use language of whole and part accurately Split the same set of objects into different numbers of equal parts and compare the sizes of the answers Use equations to represent the fractions of amounts being calculated $\frac{1}{4}$ of $8 = 2$ Use language of whole and part accurately Find a quarter of a set of objects Use equations to represent the fractions of amounts being calculated $\frac{1}{4}$ of $8 = 2$ Use language of whole and part accurately Recognise that $\frac{2}{4}$ is the same as one half Use equations to represent the fractions of amounts being calculated $\frac{1}{4}$ of $8 = 2$ Use language of whole and part accurately



	<ul style="list-style-type: none"> Find fractions of amounts, match images to calculations, include non-examples, different and same
Capacity and volume	<ul style="list-style-type: none"> Measure and record volume/capacity using standard units (ml, l) Measure, record and compare volume/capacity using standard units (ml, l)
Money	<ul style="list-style-type: none"> Exchange the correct number of 1p coins for 2p, 5p, 10p and 20p Exchange the correct number of 10p coins for 20p, 50p, £1 and £2 Add two prices together to find the total cost – addition strategies without bridging Add two prices together to find the total cost – addition strategies with bridging
Time	<ul style="list-style-type: none"> Recap telling the time to the hour and half past Tell the time to quarter past the hour and draw hands on the clock to show the time (hour hand will be slightly past) Tell the time to quarter to the hour and draw hands on the clock to show the time (hour hand will be slightly before) Solve simple problems involving time

YEAR 2	SPRING	
	Topic	Sequence of Learning
	Number and place value	<ul style="list-style-type: none"> Identify what changes and stays the same when 10 is added to or removed from a two-digit number Describe the rule in a number sequence that counts on or back in tens Order three or more two-digit numbers when represented using the same equipment Identify numbers on a beadstring and link to the number line Correctly place a two-digit number on a number line with multiples of 10 labelled Round a two-digit number to the nearest 10, including understanding that exactly half-way, the number rounds up
	Mass, volume and capacity	<ul style="list-style-type: none"> Choose and use the correct equipment to measure mass e.g. balance scales, kitchen scales (with appropriate scale) Order the values of three or more masses Choose and use the correct equipment to measure volume/capacity e.g. measuring cylinders / jugs with appropriate scales Order the values of three or more volumes / capacities Solve simple problems in a practical context involving addition and subtraction of measures
	Addition and subtraction	<ul style="list-style-type: none"> Addition with exchange concrete equipment Subtraction with exchange concrete equipment Model subtraction as difference using concrete materials and count between numbers to find the difference Recognise that $? + 3 = 11$ can be solved by calculating $11 - 3 = ?$ because 11 is the whole which is made of two parts one of which is 3 Recognise that $? - 5 = 9$ can be solved by calculating $9 + 5 = ?$ because two parts which are 9 and 5 go together to create the whole
	Money	<ul style="list-style-type: none"> Exchange different coins for other coins of the same value Recognise that amounts of money can be partitioned in different ways (using coins) e.g. 50p can be 30p and 20p or 15p and 35p For a given value identify how much more can be spent following the purchase of one item (finding change) e.g. $38p + ? = 50p$ Identify combinations which can be bought for a specific amount of money e.g. what two or more items can I buy for exactly 70p? Solve problems involving addition and subtraction of money
	Multiplication and division	<ul style="list-style-type: none"> Write two different number sentences to represent a repeated addition situation and an array e.g. $5 + 5 + 5 = 15$ or $5 \times 3 = 15$ Recall and use doubles of all multiples of 10 up to 100 Use the previously identified relationship to recall and use halves of all multiples of 10 up to 100 with an even tens digit Use partitioning to halve simple two-digit even numbers (numbers in which the tens are even) In real life contexts share an amount equally across sets where there is no remainder and where there is Model division number sentences using concrete materials Recognise that in practical situations the division of one number by another cannot be done in any order because they give different answers Make equal sized groups from an amount where there is no remainder Use concrete materials to represent division as grouping by creating equal sized groups of a given size from an amount Write a number sentence to represent the amount being grouped, the number in each group and how many groups are created e.g. $20 \div 5 = 4$ Using an array, show how many groups of a given size can be made from the total (using rows and columns) Write a number sentence to represent the total and the groups of a given size e.g. $20 \div 5 = ?$ understanding this as how many groups of 5 can be made out of 20 Represent and solve multiplication and division problems using concrete materials Represent and solve multiplication and division problems using pictorial representations and arrays
	Length	<ul style="list-style-type: none"> Choose and use the correct equipment to measure length and height in metres e.g. metre rule, tape measure, trundle wheel Order the values of three or more lengths or heights



	<ul style="list-style-type: none"> Solve simple problems in a practical context involving addition and subtraction of measures (identifying operation required from vocabulary used represent as bar model)
Addition and subtraction	<ul style="list-style-type: none"> Addition with exchange using jottings from concrete Subtraction with exchange jottings from concrete Represent and solve addition and subtraction problems using bar modelling (length context)
2D and 3D shapes	<ul style="list-style-type: none"> Describe 2-D shapes according to the number of sides and vertices, and whether any of the sides or vertices are the same size as each other, e.g. oblong rectangle and regular hexagon Describe 2-D shapes according to the number of sides and vertices, and whether any of the sides or vertices are the same size as each other, e.g. oblong rectangle and regular hexagon include sorting shapes Identify a vertical line of symmetry in a 2-D shape Describe 3-D shapes according to the number and shape of the faces, the number of edges and vertices and whether any of the faces are the same size as each other Describe 3-D shapes according to the number and shape of the faces, the number of edges and vertices and whether any of the faces are the same size as each other Include sorting shapes
Fractions	<ul style="list-style-type: none"> Recognise, name and find one quarter, two quarters, three quarters and four quarters of a shape and object Recognise, name and find one quarter, two quarters, three quarters and four quarters of a length (represent using bar model) Recognise, name and find one quarter, two quarters, three quarters and four quarters of a quantity Know that a quarter turn is the same as a turn through one right angle Know that a half turn is the same as a turn through two right angles Know that a full turn is the same as a turn through four right angles Plate spinner modelling
Time	<ul style="list-style-type: none"> Recap telling the time to the hour, half past, quarter past and quarter to the hour Count in fives clockwise starting at 12 (for zero) to 6 (for thirty) progressing to counting in times, e.g. 5 minutes past, 10 minutes past, 15 minutes past (quarter past), 20 minutes past etc. Tell the time to the nearest five minutes past the hour (up to 25 minutes past) Solve simple problems involving time language focus

YEAR 2	SUMMER	
	Topic	Sequence of Learning
	Number and place value Statistics	<ul style="list-style-type: none"> Recap partitioning a two-digit number into a multiple of 10 and another number Partition a two-digit number in different ways and reason about how the parts change Use the <, > and = signs when comparing one and two-digit numbers, particularly when the numbers have the same digits e.g. 34 and 43 Order the amounts for each category in a data set Correctly place a number from 1-100 on a number line with multiples of 10 marked but not labelled
	Addition and subtraction	<ul style="list-style-type: none"> Extend number sequences counting on and back in twos, fives and tens from any number Addition with exchange using jottings Subtraction with exchange jottings Mixed addition and subtraction with exchange jottings Represent and solve addition and subtraction problems using bar modelling
	Capacity and volume	<ul style="list-style-type: none"> Know common points of reference for volume / capacity such as teaspoon / medicine spoon 5ml, and large bottle of fizzy drink is 2 litres Use common points of reference they know to estimate the volume in / capacity of other vessels Read scales to measure the volume of liquid including pictures Use <, > and = to compare volumes and capacities
	Temperature	<ul style="list-style-type: none"> Know that temperature is the measure of how hot or cold something is Know that temperature is measured in degrees Celsius and is measured using a thermometer Read the temperature on a thermometer Know that the average room temperature is between 18 and 20 degrees Celsius Compare different temperatures saying whether they are hotter or colder than room temperature Read the temperature on a thermometer
	Fractions	<ul style="list-style-type: none"> Recognise and name one third as any one of three equal parts of a shape or object and write the fraction one third Find one third of a shape, object, set of objects/quantity or length Find different fractions of shapes, objects, quantities and lengths Count in steps of $\frac{1}{4}$ changing the counting sequence to simplest form
	Time	<ul style="list-style-type: none"> Compare different units of time, converting between units where appropriate e.g. half an hour is 30 minutes Tell the time to the nearest 5 minutes to the hour including draw hands on the clock Tell the time to the nearest 5 minutes including draw hands on the clock Understand language of clockwise and anticlockwise when turning: quarter, half, three quarter and full turns Starting point North/up Understand language of clockwise and anticlockwise when turning: quarter, half, three quarter and full turns Different starting points



Ellel St. John's CofE Primary School **Year 2 Maths Curriculum**

2D and 3D Shapes	<ul style="list-style-type: none">• From a set of shapes identify those with a vertical line of symmetry and those without• Sort and reason about shapes using the properties learned• Order and arrange a combination of mathematical objects in patterns / sequences
Addition and subtraction	<ul style="list-style-type: none">• Add numbers by bridging through a multiple of 10 efficiently e.g. $48 + 6$ becomes $48 + 2 + 4$• Subtract numbers by bridging through a multiple of 10 efficiently e.g. $43 - 6$ becomes $43 - 3 - 3$• Add 9 and 19 by rounding and compensating e.g. $46 + 9$ becomes $46 + 10 - 1$ using a number line• Subtract 9 and 19 by rounding and compensating e.g. $46 - 9$ becomes $46 - 10 + 1$ using a number line• Mixed addition and subtraction – select the operation and the strategy
Multiplication and division	<ul style="list-style-type: none">• Recap multiplication as repeated addition, arrays including problem solving and commutativity• Recap division as grouping: make equal sized groups including where there is a remainder• Understand the remainder in the context of a grouping division problem• Recap division as sharing• Problems solving with division, selecting grouping or sharing strategy appropriate for the context
Statistics and calculations	<ul style="list-style-type: none">• Ask and answer questions about statistics presented in tables, block graphs, pictograms (where the symbol is worth 1) and tally charts• Interpret and construct pictograms where the symbol is worth 5• Interpret and construct pictograms where the symbol is worth 2 or 10 (including partial symbols)• Sort objects, shapes and numbers in different ways• Identify the property / properties by which a set has been sorted
Measurement	<ul style="list-style-type: none">• Know common points of reference for length and height such as ruler 30cm, door height 2m• Use common points of reference they know to estimate the length and height of different objects• Measure the length and height of different objects• Use $<$, $>$ and $=$ to compare lengths and heights• Know common points of reference for mass such as small packet of crisps between 25g and 30g and a bag of sugar 1kg• Use common points of reference they know to estimate the mass of different objects• Measure the mass of different objects• Use $<$, $>$ and $=$ to compare masses• Solve mixed measurement problems