

## Navenby C of E Primary School Maths Overview Year 2

### Key Stage 1- Years 1 and 2








The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

### Intent

- Learners should develop a sense of enjoyment and curiosity about maths.
- Ensure that all pupils recall the fundamentals of maths fluently.
- To equip the children with the knowledge and skills to reason mathematically alongside strategies to solve problems independently.
- Encourage children to use mathematical vocabulary confidently and become effective communicators of maths.
- Be aware of the everyday uses and applications of Maths in our wonderful world.
- Equip children with the Maths knowledge required to be ready for the next stage in their education.

<b>National curriculum area:</b>	<b>Colour code</b>
Number – number and place value	
Number – addition and subtraction Number – multiplication and division	
Number – fractions	
Measurement	
Geometry – properties of shapes	
Geometry – position and direction	
Statistics	

## Year Overview for Maths Year 2

Term 1							
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<b>Focus maths unit</b>	<b>1 Number &amp; Place Value</b>	<b>2 Number &amp; Place Value</b>	<b>1 Measures Length and Weight</b>	<b>1 Addition and Subtraction</b>	<b>2 Addition and Subtraction</b>	<b>1 Geometry 2D shape</b>	<b>1 Geometry 3D shape</b>
<b>End of year expectations linked to the national curriculum programmes of study</b>	Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward. (End of year target)	Read and write and represent numbers to at least 100 in numerals and in words.	Compare & order lengths, mass, & record the results using $>$ , $<$ and $=$ .	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.	Add and subtract numbers mentally, including: 2-digit numbers & ones 2-digit numbers & tens two 2-digit numbers adding three 1-digit numbers	Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.	Identify and describe the properties of 3D shapes, including the number of edges, vertices & faces.
<b>Skills</b>	Count in multiples of 2 from 0  Count in multiples of 3 from 0  Count in multiples of 5 from 0  Count in multiples of 10 from any number  (forwards and backwards)  Reason about the location of any two-digit number in the linear	Read and write numbers to at least 100 in numerals and in words: demonstrate an understanding of the objective using concrete and pictorial representations e.g. deans, numicon, place value counters and whole part models.  Recognise the place value of each digit in a two-digit	Compare & order lengths, mass, & record the results using $>$ , $<$ and $=$ .	Add and subtract numbers using concrete objects, pictorial representations e.g. part, whole models, number lines, bar models and number sentences e.g. $15 + 5 = 20$ , $20 - 5 = 15$ and $20 - 15 = 5$  Fluency recall addition and subtraction facts within 10, through continued practice.	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 and adding three one-digit numbers. E.g. using deans: 3 tens and 4 ones add 2 tens and 8 ones equals 5 tens and 12 ones which becomes	Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.  To find lines of symmetry of 2D shapes.  Use precise language to describe the properties of 2D shapes, and compare shapes by reasoning about similarities and differences in properties.	Identify and describe the properties of 3D shapes, including the number of edges, vertices & faces.  Use precise language to describe the properties of 3D shapes, and compare shapes by reasoning about similarities and differences in properties.

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	number system, including identifying the previous and next multiple of 10.	number (tens, ones)  Compose and decompose two-digit numbers using standard and non-standard partitioning.			6 tens and 2 ones.  Add and subtract across 10.  Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number.		
<b>Knowledge</b>	To know the multiples of 2, 3, 5 and 10 from 0.	To know the place value of each digit in a two-digit number upto 100 (hundreds, tens, ones)	To know: > = more than < = less than = equal to  To know length and height is measured in cm/m  To know a centimetre is a small unit of measurement that we use to measure how long or short something is.  To know centimetre can be written as cm.	(See the calculation policy for further guidance e.g. using concrete and pictorial representations as part of the teaching sequence).		To know a line of symmetry divides a shape into symmetrical parts.  To know a triangle has 3 sides.  To know a square/rectangle has 4 sides.  To know a pentagon has 5 sides.  To know a hexagon has 6 sides.  To know an octagon has 9 sides.	To know an edge is where 2 faces meet in a 3D shape.  To know a vertex of a shape is a point at which 2 or more edges meet.  To know vertices refer to more than one vertex.  To know a face is one of the surfaces of a 3D shape.

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			<p>To know a metre is a larger unit of measurement for how long or short something is.</p> <p>To know metre can be written as m.</p> <p>To know mass is measured in kg/g</p>				
<b>Vocabulary</b>	<p>Multiple Two, four, six etc. three, six, nine etc. five, ten, fifteen etc. ten, twenty, thirty etc.</p>	<p>Hundreds, tens, ones, zero, place value, partition and digit.</p>	<p>More than, less than, equal to, order, centimetre, metre, gram, kilogram, lighter, heavier.</p>	<p>Add, Total, Make, Plus, Sum, More, Altogether, Difference, Leave, Subtract, Difference between, Less, Minus, Take away.</p>	<p>Mentally, orally, number facts, place value, tens, ones, exchange.</p>	<p>Pentagon, hexagon, octagon, line of symmetry, symmetrical and mirror line.</p>	<p>Cube, cuboid, pyramid, sphere, cone, cylinder, vertex, vertices, edge and face.</p>
<b>Links to White Rose units</b>	<p>White Rose unit: Autumn Block 1</p>	<p>White Rose unit: Autumn Block 1</p>	<p>White Rose unit: Spring block 5 Summer block 4</p>	<p>White Rose unit: Autumn block 2</p>	<p>White Rose unit: Autumn block 2</p>	<p>White Rose unit: Spring block 3</p>	<p>White Rose unit: Spring block 3</p>
<b>Continuous learning units</b>	<p>1 Number &amp; Place Value- Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward. 2 Number &amp; Place Value- Read and write numbers to at least 100 in numerals and in words. 1 Addition and Subtraction- Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100. 1 Multiplication &amp; Division- Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers.</p>						

## Year Overview for Maths Year 2

Term 2								
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
<b>Focus maths unit</b>	<b>1 Statistics</b>	<b>1 Fractions</b>	<b>1 Fractions</b>	<b>3 Measures Time</b>		<b>1 Multiplication &amp; Division</b>	<b>2 Measures Money</b>	<b>2 Measures Money</b>
<b>End of year expectations linked to the national curriculum programmes of study</b>	Interpret and construct: Pictograms, tally, charts, block diagrams and simple tables.	Recognise, find, name and write fractions $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ of a length, shape, set of objects, or quantity	Recognise, find, name and write fractions $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ of a length, shape, set of objects, or quantity	Tell & write the time to quarter past/to the hour & draw the hands on a clock face to show these times		Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers.	Recognise & use symbols for pounds (£) and pence (p); combine amounts to make a particular value.	Recognise & use symbols for pounds (£) and pence (p); combine amounts to make a particular value.
<b>Skills</b>	<p>To count the number of objects in each category.</p> <p>Sort the categories by quantity.</p> <p>Ask and answer questions about totalling and comparing categorical data</p>	Recognise, find, name and write fractions $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ of a length, shape, set of objects, or quantity	Recognise, find, name and write fractions $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ of a length, shape, set of objects, or quantity	<p>To tell and write the time to: quarter past and to the hour.</p> <p>To draw the hands on a clock face to show these times.</p>		<p>Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.</p> <p>Count in multiples of 2 from 0</p> <p>Count in multiples of 3 from 0</p> <p>Count in multiples of 5 from 0</p> <p>Count in multiples of 10 from any number</p>	<p>Recognise all the coins and notes up to £10</p> <p>Recognise &amp; use symbols for pounds (£) and pence (p)</p> <p>To combine amounts to make a particular value.</p>	<p>To recognise how many 10p; 20p and 50p coins are needed to make £1</p> <p>To find a combination of coins to pay for an item up to £5</p> <p>To identify more than one way of paying for any amount up to £5</p>

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					(forwards and backwards)		
<b>Knowledge</b>	To know in a pictogram, a picture can represent different numbers of objects.	To know the numerator is the top number in a fraction and tells us how many parts we have.  To know a denominator is the bottom number in a fraction and tells us how many equal parts are in the whole.	To know simple fractions of a number e.g. $1/2$ of 6 = 3.  For each fraction above e.g. a half: To know a half is one of two equal parts Half of a shape Half of a group e.g. There are 10 balloons, half of 10 is 5. The bottle is half full.	To know the hour hand (the short hand) points to the hours.  To know the minute hand (the long hand) points to the minutes past or to the hour.	To know even numbers can be divided evenly into groups of two.  To know odd numbers cannot be divided evenly into groups of two.  To know even numbers always end with a digit of 0, 2, 4, 6 or 8.  To know odd numbers always end with a digit of 1, 3, 5, 7, or 9.	To know a penny is the smallest unit of money that we use.  To know pence can be written as (p).  To know a pound is a larger unit of money.  To know the (£) symbol can be used to refer to pounds.  To know there are 100 pence in one pound.	To know how many 10p, 20p and 50p coins are needed to make £1
<b>Vocabulary</b>	tally, graph, block graph, pictogram represent, title, most popular, most common least popular and least common.	numerator, denominator, two halves, two quarters, three quarters, one third, two thirds, one of three equal parts	numerator, denominator, two halves, two quarters, three quarters, one third, two thirds, one of three equal parts	Time, clock, hours, minutes, hand, o'clock, half past, quarter past, quarter to, five minutes, duration, shorter and longer.	Multiples Two, four, six etc. three, six, nine etc. five, ten, fifteen etc. ten, twenty, thirty etc. even, odd.	Money, coin penny, pence, pound, bought, sold.	Money, coin penny, pence, pound, bought, sold, price, cost, change.
<b>Links to White Rose units</b>	White Rose unit: Spring Block 2	White Rose unit: Spring block 4	White Rose unit: Spring block 4	White Rose unit: Summer block 3	White Rose unit: Autumn 4 Spring 1	White Rose unit: Autumn block 3	White Rose unit: Autumn block 3
<b>Continuous learning units</b>	<p style="text-align: center;"><b>1 Number &amp; Place Value-</b> Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.  <b>2 Number &amp; Place Value-</b> Read and write numbers to at least 100 in numerals and in words.  <b>1 Addition and Subtraction-</b> Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.  <b>1 Multiplication &amp; Division-</b> Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers</p>						

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<b>Term 3</b>						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Focus maths unit</b>	<b>3 Number &amp; Place Value</b>	<b>2 Multiplication &amp; Division</b>	<b>3 Multiplication &amp; Division</b>	<b>2 Geometry, 2D and 3D shapes</b>	<b>10 Measures Money</b>	<b>3 Addition &amp; Subtraction</b>
<b>End of year expectations linked to the national curriculum programmes of study</b>	Compare and order numbers from 0 up to 100; use < > and = signs.	Calculate the mathematical statements for multiplication and division within the multiplication tables and write them using the x ÷ = signs.	Show that multiplication of two numbers can be one in any order (commutative) and division of one number by another cannot.	Identify 2D shapes on the surface of 3D shapes.	Find different combinations of coins that equal the same amounts of money.  Solve simple problems in a practical context involving addition & subtraction of money of the same unit, including giving change.	Show that addition of any two numbers can be done in any order (commutative) and subtraction of one number from another cannot. (apply money)
<b>Skills</b>	To read and write numbers to at least 100 in numerals and in words  To use the symbols > = more than < = less than = equal to between two numbers accurately  Recognise the place value of each digit in a two-digit number (tens, ones)	Calculate the mathematical statements for multiplication and division within the multiplication tables  Use the x ÷ = signs to write calculations using known table facts.	Show that multiplication of two numbers can be one in any order (commutative) and division of one number by another cannot.	To describe 3D shapes according to their 2D make up. E.g. a cuboid has 4 rectangular faces and 2 square faces.  Begin to explore the nets of 3D shapes according to 2D shapes contained within them.	To find all the different ways of making 10p E.g. 5 x 2p 2 x 5p 10 x 1p etc  To identify all the different ways of making 20p  Begin to calculate change from £1  To add monetary values and find change from £1	Show that addition of any two numbers can be done in any order (commutative) and subtraction of one number from another cannot.  Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?".

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<b>Knowledge</b>	To know the symbols > = more than < = less than = equal to	To know the function of the x sign.  To know the function of the ÷ sign.  To know the function of the = sign.	To know there is commutativity in multiplication, e.g. $8 \times 2 = 2 \times 8$ .  To know that commutativity cannot be applied to division.	To know the meaning of the vocabulary below.	To know ways of making given amounts with the least number of coins	To know there is commutativity in addition, e.g. $8 + 2 = 2 + 8$ . Swap numbers in addition and explain why they total the same answer.  To know that commutativity cannot be applied to subtraction and explain why. (Link to money learning from last week)
<b>Vocabulary</b>	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.	Groups, equal groups, lots of, arrays, repeated addition, multiplication and times tables.	Groups, equal groups, lots of, arrays, repeated addition, multiplication and times tables, commutative, commutativity.	<b>Surface</b> , triangle, rectangle, circle, pentagon, hexagon, cuboid, cone, sphere, cylinder, triangular prism and square based-pyramid.	Money, coin, penny, pence, pound, price, cost, buy, bought, sell, sold, spent, spend, pay, change, dear, costs more, cheap, costs less, cheaper, costs the same as	Commutative, commutativity, Add, Total, Make, Plus, Sum, More, Altogether, Difference, Leave, Subtract, Difference between, Less, Minus, Take away, inverse operation.
<b>Links to White Rose units</b>	White Rose unit: Autumn block 1	White Rose unit: Autumn block 4 Spring 1	White Rose unit: Autumn block 4 Spring 1	White Rose unit: Spring 3	White Rose unit: Autumn 3	White Rose unit: Autumn 2
<b>Continuous learning units</b>	<p>1 Number &amp; Place Value- Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.</p> <p>2 Number &amp; Place Value- Read and write numbers to at least 100 in numerals and in words.</p> <p>1 Addition and Subtraction- Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.</p> <p>1 Multiplication &amp; Division- Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers.</p>					

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Term 4						
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Focus maths unit</b>	<b>4 Measures Capacity &amp; Volume</b>	<b>6 Measures Length/ Weight/ Mass</b>	<b>2 Fractions</b>	<b>7 Measures Time</b>	<b>3 Geometry Position &amp; Direction</b>	<b>4 Geometry Position &amp; Direction</b>
<b>End of year expectations linked to the national curriculum programmes of study</b>	Compare & order volume/capacity & record the results using >, < and =.	Choose and use appropriate standard units to estimate and measure: length/height in any direction (m/cm) mass (kg/g) to the nearest appropriate unit, using rulers & scales,	Write simple fractions and recognise the equivalence	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.	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)
<b>Skills</b>	Compare & order volume/capacity  To use the symbols >, < and =.	Use scales to measure accurately in g/kg to the nearest g  Name objects that weigh more/less than 1kg, 5kg etc.  Know their own approx. weight in kg	Write simple fractions, e.g. $\frac{1}{2}$ of 6 = 3  To recognise and demonstrate the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$	To read the clock in 5 min intervals past the hour  To read the clock in 5 min intervals to the hour.  To draw hands on the clock showing 5 min intervals	To place objects in a repeating pattern e.g. to continue a repeated pattern that has been made.  To place objects in an order which forms a sequence e.g. to create their own repeated pattern.	Identify right angles in the environment e.g. the edge of a door frame is a right angle etc.  To be able to describe quarter, half and three-quarter turns in relation to right angles.  To describe straight line movement using appropriate

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						vocabulary e.g. forwards, backwards, left and right.
<b>Knowledge</b>	<p>To know:            &gt; = more than            &lt; = less than            = equal to</p> <p>To know volume and capacity are measured in ml/l</p> <p>To know a millilitre is a small unit of measurement that we use to measure capacity and volume.</p> <p>To know capacity is the amount of liquid a container can hold.</p> <p>To know volume is how much liquid is in the container.            We can write millilitre as ml.</p> <p>To know a litre is a larger unit of measurement for capacity and volume. We can write litres as l.</p> <p>To know there</p>	<p>To know how to use and read a ruler to measure accurately in centimetres</p> <p>To know how to measure accurately in metres</p> <p>To know 1m and make reasonable estimates of length/height up to 10m.</p> <p>To know 1cm and make reasonable estimates of length/height up to 100cm.</p> <p>To know kg and make reasonable estimates of weight up to 5kg.</p>	<p>To know for <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math>            e.g. a third:            A third is one of three equal parts            One third of a shape            One third of a group e.g. There are 15 balloons, one third of 15 is 5.            The bottle is one third full.</p>	<p>To know that 15 minutes past is the same as quarter past.</p> <p>To know that 15 minutes to is the same as quarter to.</p>	<p>To know the meaning of the vocabulary below.</p>	<p>To know the 4 compass points: north, east, south and west</p> <p>To know what a right angle is e.g. <math>90^\circ</math>, like the corner of a square</p> <p>To know that if a turn is in the same direction as the hands of a clock, it is clockwise</p> <p>To know that if a turn is in the opposite direction to the hands of a clock, it is anti-clockwise.</p> <p>To know left and right e.g. the hand that makes an L shape is the left hand.</p>

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	are 1000 ml in 1 l.					
<b>Vocabulary</b>	Capacity, volume, millilitre, litre, full, half full, quarter full.	More than, less than, equal to, order, centimetre, metre, gram, kilogram, lighter, heavier, ruler, scales. Nearest centimetre, nearest metre.	Fraction, part, whole, equal, share, half, quarter, third, equivalent, numerator, denominator.	Time, clock, hours, minutes, hand, o'clock, half past, quarter past, quarter to, five minutes, duration, shorter and longer.	Sequence, pattern, order, describe the pattern, describe the rule	North, south, east, west, quarter turn, half turn, three-quarter turn, clockwise, anticlockwise, left, right, forwards and backwards.
<b>Links to White Rose units</b>	White Rose unit: Summer 4	White Rose unit: Spring 5 Summer	White Rose unit: Spring 4	White Rose unit: Summer 3	White Rose unit: Summer 1	White Rose unit: Summer 1
<b>Continuous learning units</b>	<p>1 Number &amp; Place Value- Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.</p> <p>2 Number &amp; Place Value- Read and write numbers to at least 100 in numerals and in words.</p> <p>1 Addition and Subtraction- Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.</p> <p>1 Multiplication &amp; Division- Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers.</p>					

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<b>Term 5</b>					
	Week 1	Week 2	Week 3	Week 4	Week 5
<b>Focus maths unit</b>	<b>4 Number &amp; Place Value</b>	<b>4 Addition &amp; Subtraction</b>	<b>5 Geometry 2D &amp; 3D Shapes</b>	<b>4 Geometry Position &amp; Direction</b>	<b>2 Statistics</b>
<b>End of year expectations linked to the national curriculum programmes of study</b>	Recognise the place value of each digit in a 2 digit number	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.	Compare and sort common 2D and 3D shapes and everyday objects.	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)	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 compare categorical data
<b>Skills</b>	Identify the tens and ones in any 2 digit number  Partition a 2 digit number and identify the value of each digit  Work out the number directly, before and after a given number using their	To infer the related calculation from a given, e.g. If $6+8=14$ what is $14-8$ ?  $6+8=14$ $8+6=14$ $14-8=6$ $14-6=8$	Identify common 2D shapes: circle, triangle, rectangle and square.  Identify and name the common 3D shapes: cube, cuboid, square-based pyramid; triangular-based pyramid, sphere and cylinder.	Identify right angles in the environment e.g. the edge of a door frame is a right angle etc.  To be able to describe quarter, half and three-quarter turns in relation to right angles.  To describe straight line	To count objects to answer questions  To pose questions about given information for others to answer  To compare data and answer questions  To sort information and

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	<p>knowledge of place value e.g., <math>32 = 31</math> and <math>33</math></p> <p>To work out ten more than a given number using their knowledge of place value e.g. 10 more than 32 is 42 and only the tens digit changed</p>		<p>Identify the 2D shapes that make up common 3D shapes.</p> <p>To recognise similarities and differences in shapes so that they can be compared and sorted.</p> <p>To appreciate why certain shapes are used for everyday things, e.g. bricks for building walls</p>	<p>movement using appropriate vocabulary e.g. forwards, backwards, left and right.</p>	<p>present it pictorially</p>
<b>Knowledge</b>	<p>To know the meaning of the vocabulary below.</p>	<p>To know addition is the inverse to subtraction, e.g. <math>5+7</math>; <math>12 - 5</math>; <math>12 - 7</math> etc.</p> <p>To know the term inverse means the opposite to something so addition is the opposite to subtraction.</p>	<p>To know common 2D shapes e.g. circle, triangle, rectangle and square.</p> <p>To know the name of common 3D shapes: cube, cuboid, square-based pyramid; triangular-based pyramid, sphere and cylinder.</p>	<p>To know the 4 compass points: north, east, south and west</p> <p>To know what a right angle is e.g. <math>90^\circ</math>, like the corner of a square</p> <p>To know that if a turn is in the same direction as the hands of a clock, it is clockwise</p> <p>To know that if a turn is in the</p>	<p>To know the meaning of the vocabulary below.</p>

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				<p>opposite direction to the hands of a clock, it is anti-clockwise.</p> <p>To know left and right e.g. the hand that makes an L shape is the left hand.</p>	
<b>Vocabulary</b>	Hundreds, tens, ones, zero, place value, partition and digit.	Commutative, commutativity, inverse, inverse operation.	<b>Surface</b> , triangle, rectangle, circle, pentagon, hexagon, cuboid, cone, sphere, cylinder, triangular prism and square based-pyramid.	North, south, east, west, quarter turn, half turn, three-quarter turn, clockwise, anticlockwise, pattern and sequence.	tally, graph, block graph, pictogram, represent, title, most popular, most common, least popular and least common.
<b>Links to White Rose units</b>	White Rose unit: Autumn 1	White Rose unit: Autumn 2	White Rose unit: Spring 3	White Rose unit: Summer 1	White Rose unit: Spring 2
<b>Continuous learning units</b>	<p>1 Number &amp; Place Value- Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.</p> <p>2 Number &amp; Place Value- Read and write numbers to at least 100 in numerals and in words.</p> <p>1 Addition and Subtraction- Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.</p> <p>1 Multiplication &amp; Division- Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers</p>				

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### Term 6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<b>Focus maths unit</b>	<b>4 Multiplication &amp; Division</b>	<b>3 Fractions</b>	<b>8 Measures Capacity &amp; Volume + Temperature</b>	<b>8 Measures Capacity &amp; Volume + Temperature</b>	<b>9 Measures Time</b>	<b>5 Measures Money</b>	<b>9 Measures Time 10 Measures Money</b>
<b>End of year expectations linked to the national curriculum programmes of study</b>	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	Revisit and revise previous Year 2 objectives with regard to fractions, ie Know $\frac{1}{2}$ , $\frac{3}{4}$ , $\frac{1}{4}$ of numbers and work out equivalence of fractions	Choose and use appropriate standard units to estimate and measure: temperature ( $^{\circ}\text{C}$ ) capacity (l/ml) to the nearest appropriate unit, using, thermometers & measuring vessels.	Choose and use appropriate standard units to estimate and measure: temperature ( $^{\circ}\text{C}$ ) capacity (l/ml) to the nearest appropriate unit, using, thermometers & measuring vessels.	Compare and sequence intervals of time.	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. Find different combinations of coins that equal the same amounts of money.  Solve simple problems in a practical context involving addition & subtraction of money of the same unit, including giving change.
<b>Skills</b>	To know how use arrays, repeated addition, mental methods, and multiplication and division facts as methods of solving problems in contexts	Write simple fractions, e.g. $\frac{1}{2}$ of 6 = 3 To recognise and demonstrate the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$  For $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ e.g. a third: A third is one of three equal parts One third of a shape	To identify amounts that are more, less than a litre  To use containers to measure liquid accurately to the nearest litre and 50 ml	To use a thermometer to accurately measure temperature  To read liquid amounts to the nearest 10ml	To tell the time to 5 minute intervals (Revise)  Use appropriate time language, i.e. morning, afternoon, evening, night, earlier and later to sequence events in a given day.  Order a given number of time	To calculate change from £1 e.g. shop keepers method  Add and subtract monetary values and find change from £1 or £2	Compare and sequence intervals of time.  Find different combinations of coins that equal the same amounts of money.  Solve simple problems in a

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		One third of a group e.g. There are 15 balloons, one third of 15 is 5. The bottle is one third full.			events to the given hour or half an hour  Work out longest and shortest interval of times to the given hour  Compare the time using the vocabulary 'longer' and 'shorter'.		practical context involving addition & subtraction of money of the same unit, including giving change.
<b>Knowledge</b>	To know that division is the inverse of multiplication and use this to check calculations.  To know how to employ RUSCAC as a problem solving strategy. E.g. (Read, Underline, Choose, Solve, Answer and Check).	To know the numerator is the number of equal parts we have.  To know the denominator is the total number of parts in a whole.	To know one litre (l) is 1000 millilitres (ml)  To know that many liquids are sold in litres	To know that 0°C is freezing point of water  To know that 100°C is boiling point of water	To know everyday durations of time such as: 1 second= the time it takes to do 1 star jump  3 hours= a long walk  2 hours= a visit to the cinema  5 days= a week at school  30 minutes= a swimming lesson	To know ways of making given amounts with the least number of coins	To know how to employ RUSCAC as a problem solving strategy. E.g. (Read, Underline, Choose, Solve, Answer and Check).
<b>Vocabulary</b>	Groups, equal groups, lots of, arrays, repeated addition, multiplication and times tables, commutative, commutativity.	Fraction, part, whole, equal, share, half, quarter, third, equivalent, numerator, denominator.	litre, half litre, millilitre, capacity, volume, full, empty, contains and container	Temperature, Degrees, freezing point and boiling point.	Time, clock, hours, minutes, hand, o'clock, half past, quarter past, quarter to, five minutes, duration, shorter and longer.	Money, coin, penny, pence, pound, price, cost, buy, bought, sell, sold, spent, spend, pay, change, dear, costs more, cheap, costs less,	As in the 2 previous weeks.

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						cheaper, costs the same as	
<b>Links to White Rose units</b>	White Rose unit: Autumn 4 Spring 1	White Rose unit: Spring 4	White Rose unit: Summer 4	White Rose unit: Summer 4	White Rose unit: Summer 3	White Rose unit: Autumn 3	White Rose unit: Autumn 3
<b>Continuous learning units</b>	<p>1 Number &amp; Place Value- Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.</p> <p>2 Number &amp; Place Value- Read and write numbers to at least 100 in numerals and in words.</p> <p>1 Addition and Subtraction- Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.</p> <p>1 Multiplication &amp; Division- Recall and use multiplication and division facts for the 2, 5 and 10 tables, including recognising odd and even numbers.</p>						