



LEARNING TO LOVE, LOVING TO LEARN

Maths Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<p>X2 weeks: baseline/getting to know you</p> <p>Matching</p> <p>Sorting</p> <p>Comparing amounts</p> <p>Compare size/mass/capacity</p> <p>Exploring patterns</p>	<p>Representing and comparing 1,2,3</p> <p>Composition of 1,2,3</p> <p>Circles and triangles & Spatial awareness</p> <p>The number 4/ The number 5</p> <p>One more one less</p> <p>Comparing shapes</p> <p>Night and day (routines/time)</p>	<p>Zero and comparing numbers to 5</p> <p>Composition of 4 and 5</p> <p>Mass and capacity</p> <p>Learning about 6,7 and 8</p> <p>Pairs and combining groups to 10</p> <p>Length and height</p>	<p>9 and 10</p> <p>Comparing numbers to 10</p> <p>Number bonds to 10 (2 weeks)</p> <p>3D shape</p> <p>Consolidation (respond to what they need more support with)</p>	<p>Building numbers beyond 10</p> <p>Counting patterns/spatial reasoning</p> <p>Adding more x2 weeks</p> <p>Taking away x2 weeks</p>	<p>Doubles</p> <p>Sharing and grouping</p> <p>Odd and Even</p> <p>Spatial reasoning</p> <p>Deepening understanding x2 weeks</p> <p>Patterns</p> <p>Consolidation</p>
Year 1	<p>Number: Place value (within 10)</p> <p>4 Weeks</p> <p>Count to ten, forward and backwards with 0 or 1 from any given number.</p> <p>Count, read and write numbers to 10 in numerals and words.</p> <p>Given a number, identify one more or one less.</p> <p>Identify and represent numbers using objectives and pictorial representation including the number line, and use the language of: equal</p>	<p>Number: Addition and subtraction (within 10)</p> <p>2 weeks</p> <p>Geometry: Shape</p> <p>1 weeks</p> <p>Recognise and name common 2-D shapes, including: (for example, rectangles (including squares), circles and triangles).</p> <p>Recognise and name common 3-D shapes including: (for example,</p>	<p>Number: Addition and Subtraction (within 20)</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero.</p>	<p>Number: Place Value (within 50) (Multiplies of 2, 5 and 10 included)</p> <p>1 week</p> <p>Measurement: Length and Height</p> <p>2 weeks</p> <p>Measure and begin to record lengths and heights.</p> <p>Compare, describe and solve practical problems for: lengths and heights. (for example, long/short, longer/shorter, tall/short, double/half)</p>	<p>Number: Multiplication and Division (Reinforce multiples of 2, 5 and 10 to be included)</p> <p>3 weeks</p> <p>Count in multiples of twos, fives and tens.</p> <p>Solve one step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial</p>	<p>Geometry: Position and Direction</p> <p>1 week</p> <p>Describe position and movement, including whole, half and quarter and three quarter turns.</p> <p>Number: Place Value (within 100)</p> <p>2 weeks</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1 or from any given number.</p> <p>Count, read and write numbers to 100 in numerals.</p> <p>Given a number, identify one more and one less.</p>



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<p>to. More than, less than (fewer) most, least.</p> <p>Number: Addition and subtraction (within 10)</p> <p>2 weeks</p> <p>Represent and use number bonds and related subtraction facts (within 10).</p> <p>Read, write and interpret mathematical statements involving addition. (+) subtraction (-) and equals (=) signs.</p> <p>Add and subtract one-digit number to 10, including zero.</p> <p>Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems.</p>	<p>cuboids (including cubes), pyramids and spheres)</p> <p>Number: Place value (within 20)</p> <p>2 weeks</p> <p>Count to twenty, forwards and backwards, beginning with 0 or 1, from any given number.</p> <p>Count, read and write numbers to 20 in numerals and words.</p> <p>Given a number, identify one more or one less.</p> <p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer) most, least.</p> <p>Consolidation</p> <p>1 week</p>	<p>Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = _ - 9$.</p> <p>4 weeks</p> <p>Number: Place Value (within 50) (Multiplies of 2, 5 and 10 included)</p> <p>2 weeks</p> <p>Count to 50 forwards and backwards, beginning with 0 or 1, or from any number.</p> <p>Count, read and write numbers to 50 in numerals.</p> <p>Given a number, identify one more or one less.</p> <p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.</p>	<p>Measurement: Weight and Volume</p> <p>2 weeks</p> <p>Measurement: Weight and Volume Measure and begin to record mass/weight, capacity and volume.</p> <p>Compare, describe and solve practical problems for mass/weight: (For example, heavy/light, heavier than, lighter than); capacity and volume (for example, full/empty, more than, less than, half, half full, quarter)</p> <p>Consolidation</p> <p>1 week</p>	<p>representations and arrays with the support of the teacher.</p> <p>Count in multiples of two, fives</p> <p>Number: Fractions</p> <p>2 weeks</p> <p>Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p> <p>Compare, describe and solve practical problems for: lengths and heights, for example, long/short longer/shorter, tall/short, longer/shorter, tall/short, double/half)</p> <p>Compare, describe and solve practical problems for: mass/weight (for example, heavy/light, heavier than/ lighter than); capacity and volume (for example</p>	<p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than, most, least.</p> <p>Measurement: Money</p> <p>1 week</p> <p>Recognise and know the value of different denominations of coins and notes.</p> <p>Measurement: Time</p> <p>2 weeks</p> <p>Sequence events in chronological order using language (for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening).</p> <p>Recognise and use language relating to dates, including days of the week, weeks, months and years.</p> <p>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p> <p>Compare, describe and solve practical problems for time. (for example quicker, slower, earlier, later.)</p> <p>Measure and begin to record time (hours, minutes, seconds).</p> <p>Consolidation</p> <p>1 week</p>
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			Count in multiples of twos, fives and tens.		full/empty, more than, less than, half, half full, quarter).	
Year 2	<p>Number: Place Value 3 weeks Read and write numbers to at least 100 in numerals and in words.</p> <p>Recognise the place value of each digit in a two digit number (tens, ones).</p> <p>Identify, represent and estimate numbers using different representations including the number line.</p> <p>Compare and order numbers from 0 up to 100' use <, > and = signs.</p> <p>Use place value and number facts to solve problems.</p> <p>Count in steps of 2, 3 and 5 from 0, and in tens from any number, forwards or backwards.</p> <p>Number: Addition and Subtraction 3 weeks</p> <p>Recall and use addition and subtraction facts to 20 fluently, and</p>	<p>Number: Addition and Subtraction 2 weeks</p> <p>Measurement: Money 2 weeks</p> <p>Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.</p> <p>Find different combinations of coins that equal the same amount of money.</p> <p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</p> <p>Number: Multiplication and Division 2 weeks</p>	<p>Number: Multiplication and Division 2 weeks</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising off and even numbers.</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them.</p> <p>Solve problems involving multiplication and division, using materials arrays, repeated addition, mental methods and multiplication and division facts, including problems in context. Show that the multiplication of two numbers can be done in any order (commutative) and division of one</p>	<p>Geometry: Properties of Shape 1 weeks</p> <p>Number: Fraction 3 weeks</p> <p>Recognise, find, name and write fractions or a length, shape, set of objects or quantity.</p> <p>Write simple fractions for example, half or $\frac{6}{3}$. Recognise equivalence.</p> <p>Measurement: Length and Height 1 week</p> <p>Choose and use appropriate standard units to estimate and measure length/eight in any direct (m/cm); mass (kg/g) temperature (degrees); capacity (ltr/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.</p>	<p>Geometry: Position and Direction 3 weeks</p> <p>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 or right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).</p> <p>Order and arrange combinations of mathematical objects in patterns and sequences.</p> <p>Problem solving and efficient methods 2 weeks</p>	<p>Measurement: Time 2 weeks</p> <p>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.</p> <p>Compare the sequence intervals of time.</p> <p>Measurement: Mass, Capacity and Temperature 3 weeks</p> <p>Choose and use appropriate standard units to estimate and measure length, height in any direction (m/cm); mass (kg/g); temperature; capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, Thermometers and measuring vessels.</p> <p>Compare and order lengths, mass, volume/capacity and record the results using <, > and =.</p> <p>Investigations 2 weeks</p> <p>https://whiterosemaths.com/resources/classroom-resources/problems/page/3/</p>



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	<p>derive and use related facts up to 100.</p> <p>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-digit number; adding three one-digit numbers.</p> <p>Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>Solve problems with addition and subtraction; using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>Recall and use multiplication and division facts for the 2, 5 and 10 times-tables, including recognising odd and even numbers.</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and rite them using the multiplication (x) and division and equals signs.</p> <p>Solve problems involving multiplication and division, using materials, arrays repeated addition, mental methods and multiplication and division facts, including problems in contexts.</p> <p>Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p>	<p>number by another cannot.</p> <p>Statistics 2 weeks</p> <p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</p> <p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</p> <p>Ask and answer questions about totalling and comparing categorical data</p> <p>Geometry: Properties of Shape 2 weeks</p> <p>Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.</p> <p>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.</p> <p>Identify 2-D shapes on the surface of 3-D shapes,</p>	<p>Compare and order lengths, mass, volume/capacity and record the results using < > or =.</p> <p>Consolidation 1 week</p>		
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			<p>(for examples, a circle on a cylinder and a triangle on a pyramid.)</p> <p>Compare and sort common 2-D and 3-D and everyday objects.</p>			
<p>Year 3</p>	<p>Number: Place Value</p> <p>3 weeks</p> <p>Find 10 or 100 more or less than a given number identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words</p> <p>recognise the place value of each digit in a three-digit number (hundreds, tens, ones) compare and order numbers up to 1000 solve number problems and practical problems involving these ideas</p>	<p>Number: Addition and Subtraction</p> <p>2 weeks</p> <p>Number: Multiplication and Division</p> <p>3 weeks</p> <p>count from 0 in multiples of 4, 8, 50 recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</p> <p>write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit</p>	<p>Number: Multiplication and Division</p> <p>3 weeks</p> <p>write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p>Measurement: Money</p> <p>1 week</p>	<p>Measurement: Length and Perimeter</p> <p>3 weeks</p> <p>measure the perimeter of simple 2-D shapes</p> <p>Number: Fractions</p> <p>2 weeks</p> <p>count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 recognise, find and write fractions of a discrete set of objects: unit fractions and non-</p>	<p>Number: Fractions</p> <p>3 weeks</p> <p>recognise and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions, and fractions with the same denominators</p> <p>add and subtract fractions with the same denominator within one whole [for</p> <p>Measurement: Time</p> <p>3 weeks</p>	<p>Geometry: Properties of shape</p> <p>1 week</p> <p>make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p> <p>recognise angles as a property of shape or a description of a turn identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle</p> <p>identify horizontal and vertical lines and pairs of perpendicular and parallel lines</p> <p>Measurement: Mass and Capacity</p> <p>3 weeks</p>



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<p>Number: Addition and Subtraction</p> <p>3 weeks</p> <p>add and subtract numbers mentally, including: a three - digit number and ones a three - digit number and tens a three - digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p> <p>estimate the answer to a calculation and use inverse operations to check answers</p> <p>solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p>	<p>numbers times one - digit numbers, using mental and progressing to formal written methods</p> <p>Consolidation 1 week</p>	<p>add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p>Statistics</p> <p>2 weeks</p> <p>interpret and present data using bar charts, pictograms and tables</p> <p>solve one - step and two - step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables</p>	<p>unit fractions with small denominators recognise and use fractions as numbers: unit fractions and non - unit fractions with small denominators</p> <p>Consolidation 1 week</p>	<p>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12 - hour and 24 - hour clocks estimate and read time with increasing accuracy to the nearest minute;</p> <p>record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight</p> <p>know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events [for example to calculate the time taken by particular events or tasks]</p>	<p>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>Consolidation 1 week</p>
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					<p>Geometry: Properties of shape</p> <p>1 week</p> <p>draw 2 D shapes</p>	
<p>Year 4</p>	<p>Number: Place Value 4 weeks</p> <p>count backwards through zero to include negative numbers</p> <p>identify, represent and estimate numbers using different representations</p> <p>read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value</p> <p>find 1000 more or less than a given number</p> <p>recognise the place value of each digit in a four - digit number</p>	<p>Measurement: Length and Perimeter</p> <p>1 week</p> <p>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>Convert between different units of measure [for example, kilometre to metre; hour to minute]</p> <p>estimate, compare</p>	<p>Number: Multiplication and Division</p> <p>3 weeks</p> <p>multiply two - digit and three - digit numbers by a one - digit number using formal written layout</p> <p>solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n</p>	<p>Number: Fractions</p> <p>1 week</p> <p>add and subtract fractions with the same denominator</p> <p>solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non - unit fractions where the answer is a whole number</p> <p>Number: Decimals</p> <p>3 weeks</p> <p>recognise and write decimal equivalents of any number of</p>	<p>Number: Decimals</p> <p>2 weeks</p> <p>round decimals with one decimal place to the nearest whole number</p> <p>compare numbers with the same number of decimal places up to two decimal places</p> <p>Measurement: Money</p> <p>2 weeks</p> <p>solve simple measure and money problems</p>	<p>Geometry: Properties of shape</p> <p>3 weeks</p> <p>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p> <p>identify lines of symmetry in 2 - D shapes presented in different orientations</p> <p>identify acute and obtuse angles and compare and order angles up to two right angles by size</p> <p>identify lines of symmetry in 2 - D shapes presented in different orientations</p> <p>complete a simple symmetric figure with respect to a specific line of symmetry</p> <p>Geometry: Position and Direction</p>



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<p>(thousands, hundreds, tens, and ones) order and compare numbers beyond 1000</p> <p>round any number to the nearest 10, 100 or 1000 solve number and practical problems that involve all of the above and with increasingly large positive numbers</p> <p>Number: Addition and Subtraction 3 weeks</p> <p>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</p> <p>estimate and use inverse operations to check answers to a calculation</p> <p>solve addition and subtraction two - step problems in contexts,</p>	<p>and calculate different measures</p> <p>Number: Multiplication and Division 3 weeks</p> <p>count in multiples of 6, 7, 9, 25 and 1000</p> <p>recall multiplication and division facts for multiplication tables up to 12×12 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations</p>	<p>objects are connected to m objects</p> <p>Measurement: Area 1 week</p> <p>find the area of rectilinear shapes by counting squares</p> <p>Number: fractions 3 weeks</p> <p>count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</p> <p>recognise and show, using diagrams, families of common equivalent fractions</p>	<p>tenths or hundredths recognise and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$</p> <p>find the effect of dividing a one - or two - digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</p> <p>Consolidation 1 week</p>	<p>involving fractions and decimals to two decimal places</p> <p>estimate, compare and calculate different measures, including money in pounds and pence</p> <p>Measurement: Time 1 weeks</p> <p>read, write and convert time between analogue and digital 12 - and 24 - hour clocks solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p> <p>Statistics</p>	<p>2 weeks</p> <p>describe positions on a 2 - D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon</p> <p>identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed</p> <p>describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes</p> <p>Consolidation 1 week</p>
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	deciding which operations and methods to use and why	Consolidation 1 week			2 weeks interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	
Year 5	Number: Place Value 3 weeks count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 count forwards and backwards with	Number: Multiplication and Division 2 weeks identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers know and use the	Number: Multiplication and Division 3 weeks solve problems involving multiplication and division including using their knowledge of factors and	Number: Fractions 3 weeks add and subtract fractions with the same denominator and denominators that are multiples of the same number multiply proper fractions and mixed	Number: Decimals 4 weeks multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 solve problems	Geometry: Position and Direction 1 week identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed



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	<p>positive and negative whole numbers, including through zero</p> <p>read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit</p> <p>read Roman numerals to 1000 (M) and recognise years written in Roman numerals. (read, write) order and compare numbers to at least 1 000 000</p> <p>and determine the value of each digit</p> <p>interpret negative numbers in context</p> <p>round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</p> <p>solve number problems and practical problems that involve all of the above</p>	<p>vocabulary of prime numbers, prime factors and composite (non - prime) numbers</p> <p>establish whether a number up to 100 is prime and recall prime numbers up to 19</p> <p>recognise and use square numbers and cube numbers, and the notation for 2 squared () and 3 cubed ()</p> <p>multiply numbers up to 4 digits by a one - or two - digit number</p> <p>using a formal written method, including long multiplication for two - digit numbers</p> <p>multiply and divide numbers mentally</p> <p>drawing upon known facts</p>	<p>multiples, squares and cubes</p> <p>solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>Number: Fractions</p> <p>4 weeks</p> <p>identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical</p>	<p>numbers by whole numbers, supported by materials and diagrams</p> <p>solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p> <p>read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$]</p> <p>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</p> <p>Number: Decimals and percentages</p> <p>2 weeks</p> <p>round decimals with two decimal places to</p>	<p>involving number up to three decimal places</p> <p>Geometry: Properties of Shape</p> <p>3 weeks</p> <p>distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p> <p>use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>identify 3 D shapes, including cubes and other cuboids, from 2 D representations</p>	<p>Measurement: Converting units of measure</p> <p>2 weeks</p> <p>convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</p> <p>use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling</p> <p>use all four operations to solve problems involving measure [for example, money]</p> <p>solve problems involving converting between units of time</p> <p>Measurement: Volume</p> <p>1 week</p> <p>estimate volume [for example, using 1 cm blocks to build cuboids (including</p>
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<p>Number: Addition and Subtraction</p> <p>2 weeks</p> <p>add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p> <p>add and subtract numbers mentally with increasingly large numbers</p> <p>use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p> <p>solve addition and subtraction multi - step problems in contexts, deciding which operations and methods to use and why</p> <p>solve problems involving addition, subtraction, multiplication and</p>	<p>divide numbers up to 4 digits by a one - digit number using the formal written method of short division and interpret remainders appropriately for the context</p> <p>Measurement: Perimeter and Area</p> <p>2 weeks</p> <p>measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the</p>	<p>statements > 1 as a mixed number [for</p> <p>compare and order fractions whose denominators are all multiples of the same number</p>	<p>the nearest whole number and to one decimal place</p> <p>read, write, order and compare numbers with up to three decimal places</p> <p>recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal</p> <p>solve problems which require knowing percentage and decimal equivalents</p> <p>1</p> <p>,</p> <p>of and -----</p> <p>those fractions with a denominator of a multiple of 10 or 25</p>		<p>cubes)] and capacity [for example, using water]</p> <p>Consolidation</p> <p>1 week</p>
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	<p>division and a combination of these, including understanding the meaning of the equals sign</p> <p>Statistics</p> <p>2 weeks</p> <p>complete, read and interpret information in tables, including timetables</p> <p>solve comparison, sum and difference problems using information presented in a line graph</p>	<p>area of irregular shapes</p> <p>Consolidation</p> <p>1 week</p>		<p>Consolidation</p> <p>1 week</p>		
Year 6	<p>Number: Place Value</p> <p>2 weeks</p> <p>read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit</p> <p>(read, write), order and compare</p>	<p>Number: Fractions</p> <p>4 weeks</p> <p>use common factors to simplify fractions; use common multiples to express fractions in the same denomination</p> <p>compare and order fractions, including fractions > 1</p>	<p>Number: Decimals</p> <p>2 weeks</p> <p>identify the value of each digit in numbers given to three decimal places</p> <p>multiply and divide numbers by 10, 100 and 1000 giving answers up to three</p>	<p>Measurement: Converting units</p> <p>1 week</p> <p>solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where</p>	<p>Geometry: Properties of Shape</p> <p>2 weeks</p> <p>draw 2 - D shapes using given dimensions and angles</p> <p>compare and classify geometric shapes</p>	<p>Investigations</p> <p>4 weeks</p> <p>Consolidation</p> <p>1 week</p>



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	<p>numbers up to 10 000 000 and determine the value of each digit</p> <p>round any whole number to a required degree of accuracy</p> <p>use negative numbers in context, and calculate intervals across zero</p> <p>solve number and practical problems that involve all of the above</p> <p>Number: Addition, Subtraction, Multiplication and Division</p> <p>4 weeks</p> <p>perform mental calculations, including with mixed operations and large numbers</p> <p>use their knowledge of the order of operations to carry out calculations involving the four operations</p>	<p>add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</p> <p>multiply simple pairs of proper fractions, writing the answer in its simplest form [for</p> <p>divide proper fractions by whole numbers [for</p> <p>Geometry: Position and Direction</p> <p>1 week</p> <p>solve problems involving similar shapes where the scale factor is known or can be found</p> <p>solve problems involving unequal</p>	<p>decimal places</p> <p>multiply one - digit numbers with up to two decimal places</p> <p>by whole numbers</p> <p>use written division methods in cases where the answer has up to two decimal places</p> <p>solve problems which require answers to be rounded to specified degrees of accuracy</p> <p>associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375]</p> <p>for a simple fraction [for example,]</p> <p>recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</p>	<p>appropriate</p> <p>use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places</p> <p>convert between miles and kilometres</p> <p>use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa</p>	<p>based on their properties and sizes</p> <p>illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</p> <p>recognise, describe and build simple 3 - D shapes, including making nets</p> <p>find unknown angles in any triangles, quadrilaterals, and regular polygons</p> <p>recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</p> <p>Problem Solving</p>	
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<p>solve addition and subtraction multi - step problems in contexts, deciding which operations and methods to use and why</p> <p>identify common factors, common multiples and prime numbers use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p> <p>multiply multi - digit numbers up to 4 digits by a two - digit whole number using the formal written method of long multiplication divide numbers up to 4 digits by a two - digit whole number using the formal written method of long division, and interpret</p>	<p>sharing and grouping using knowledge of fractions and multiples.</p> <p>describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes</p> <p>Consolidation</p> <p>1 week</p>	<p>Number: Percentages</p> <p>2 weeks</p> <p>solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison</p> <p>Number: Algebra</p> <p>2 weeks</p> <p>use their knowledge of the order of operations to carry out calculations involving the four</p>	<p>Measurement: Perimeter, Area and Volume</p> <p>2 weeks</p> <p>recognise that shapes with the same areas can have different perimeters and vice versa recognise when it is possible to use formulae for area and volume of shapes calculate the area of parallelograms and triangles calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic cm^3 and cubic metres m^3 (m³), and extending to other units [for cm^3 example, mm³ and km³]</p> <p>Number: Ratio</p>	<p>3 weeks</p> <p>Statistics</p> <p>2 weeks</p> <p>interpret and construct pie charts and line graphs and use these to solve problems</p> <p>calculate and interpret the mean as an average</p>	
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<p>remainders as whole number remainders, fractions, or by rounding, as appropriate for the context</p> <p>divide numbers up to 4 digits by a two - digit number using the formal written method of short division where appropriate, interpreting remainders according to the context</p> <p>perform mental calculations, including with mixed operations and large numbers</p> <p>solve problems involving addition, subtraction, multiplication and division</p> <p>use their knowledge of the order of operations to carry out calculations involving the four operations</p>		<p>operations</p> <p>use simple formulae</p> <p>generate and describe linear number sequences</p> <p>express missing number problems algebraically</p> <p>find pairs of numbers that satisfy an equation with two unknowns</p> <p>enumerate possibilities of combinations of two variables.</p>	<p>2 weeks</p> <p>solve problems involving similar shapes where the scale factor is known or can be found</p> <p>solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p> <p>Consolidation</p> <p>1 week</p>		
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