



YEAR 2 MATHS PROGRESSION IN SKILLS (N.C. COVERAGE) AND KNOWLEDGE STATUTORY REQUIREMENTS



AUTUMN	SPRING	SUMMER
<p>AUTUMN 1: NUMBER – NUMBER AND PLACE VALUE</p> <ul style="list-style-type: none"> ➤ Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number (Year 1) ➤ 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 ➤ compare and order numbers from 0 up to 100; use and = signs ➤ Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward <p>NUMBER – ADDITION AND SUBTRACTION</p> <ul style="list-style-type: none"> ➤ Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 ➤ Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones ➤ Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward ➤ Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures <p>GEOMETRY – PROPERTIES OF SHAPE</p> <ul style="list-style-type: none"> ➤ Compare and sort common 2D and 3D shapes and everyday objects 	<p>SPRING TERM: MEASURE - MONEY</p> <ul style="list-style-type: none"> ➤ 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 ➤ Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change <p>NUMBER – MULTIPLICATION AND DIVISION</p> <ul style="list-style-type: none"> ➤ Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts ➤ Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs ➤ Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers <p>MEASURE – LENGTH AND HEIGHT</p> <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 (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 = 	<p>SUMMER TERM: STATISTICS</p> <ul style="list-style-type: none"> ➤ 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 <p>FRACTIONS</p> <ul style="list-style-type: none"> ➤ (Year 1) recognise, find and name a half as one of two equal parts of an object, shape or quantity ➤ 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 $\frac{1}{2}$ ➤ <u>Non-statutory guidance: Pupils should count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line (for example, $1\frac{1}{4}$, $1\frac{2}{4}$ (or $1\frac{1}{2}$), $1\frac{3}{4}$, 2)</u> <p>GEOMETRY - POSITION AND DIRECTION</p> <ul style="list-style-type: none"> ➤ 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



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- Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line
- Compare and sort common 2-D and 3-D shapes and everyday objects
- Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces
- Order and arrange combinations of mathematical objects in patterns and sequences

- Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures

MEASURE – MASS, CAPACITY AND TEMPERATURE

- Compare and order lengths, mass, volume/capacity and 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); temperature ($^{\circ}$ C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels

and three-quarter turns (clockwise and anti-clockwise)

- Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times (Year 1)
- 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

NUMBER – ADDITION AND SUBTRACTION (PROBLEM SOLVING)

- Use place value and number facts to solve problems
- 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: using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts



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Year 2 Maths Skills

Addition and Subtraction	Number and Place Value	Fractions	Algebra	Measurement	Geometry: Position and Direction	Statistics
<p>NUMBER BONDS -Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>MENTAL CALCULATION -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 * adding three one-digit numbers</p>	<p>COUNTING -Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward</p> <p>COMPARING NUMBERS -compare and order numbers from 0 up to 100; use <, > and = signs</p> <p>IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS -Identify, represent and estimate numbers using different representations, including the number line</p> <p>READING AND WRITING NUMBERS</p>	<p>COUNTING IN FRACTIONAL STEPS -Pupils should count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line <i>(Non-Statutory Guidance)</i></p> <p>RECOGNISING FRACTIONS -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</p> <p>EQUIVALENCE -Write simple fractions e.g. $\frac{1}{2}$ of $6 = 3$ and recognise</p>	<p>EQUATIONS - recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. <i>(copied from Addition and Subtraction)</i></p> <p>-recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 <i>(copied from Addition and Subtraction)</i></p> <p>SEQUENCES</p>	<p>COMPARING AND ESTIMATING -compare and order lengths, mass, volume/capacity and record the results using >, < and =</p> <p>-compare and sequence intervals of time</p> <p>MEASURING and CALCULATING -choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}$C); capacity (litres/ml)</p>	<p>POSITION, DIRECTION AND MOVEMENT -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)</p> <p>PATTERN -order and arrange combinations of mathematical objects in patterns and sequences</p>	<p>INTERPRETING, CONSTRUCTING AND PRESENTING DATA -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</p>



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<p>-Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p> <p>INVERSE OPERATIONS, ESTIMATING AND CHECKING ANSWERS</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>PROBLEM SOLVING</p> <p>-Solve problems with addition and subtraction:</p> <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 	<p>- read and write numbers to at least 100 in numerals and in words</p> <p>UNDERSTANDING PLACE VALUE</p> <p>- recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>PROBLEM SOLVING</p> <p>-use place value and number facts to solve problems</p>	<p>the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.</p>	<p>-compare and sequence intervals of time <i>(copied from - Measurement)</i></p> <p>order and arrange combinations of mathematical objects in patterns <i>(copied from Geometry: position and direction)</i></p>	<p>to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</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 amounts 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>TELLING THE TIME</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.</p> <p>- know the number of minutes in an hour and</p>	<p>Geometry:</p> <p>Properties of shapes</p> <p>IDENTIFYING SHAPES AND THEIR PROPERTIES</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, [for example, a circle on a cylinder and a triangle on a pyramid]</p> <p>COMPARING AND CLASSIFYING</p> <p>-compare and sort common 2-D and 3-D shapes and everyday objects</p>	
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<p>-solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change <i>(copied from Measurement)</i></p>				<p>the number of hours in a day. <i>(appears also in Converting)</i> CONVERTING -know the number of minutes in an hour and the number of hours in a day. <i>(appears also in Telling the Time)</i></p>		
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