



Maths Curriculum - Year 2 - Key Skills Areas

Number and Place Value:

	Counting	Writing Numbers	Representing Numbers	Place Value	Comparing and Ordering	Rounding	Problems
Year 2	<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	<ul style="list-style-type: none">read and write numbers to at least 100 in numerals and in words	<ul style="list-style-type: none">identify, represent and estimate numbers using different representations, including the number line	<ul style="list-style-type: none">recognise the place value of each digit in a two-digit number (tens, ones)	<ul style="list-style-type: none">compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs		<ul style="list-style-type: none">use place value and number facts to solve problems.



Addition and Subtraction:

	Number Statements	Mental Recall	Addition	Subtraction	Relationships	Problems
Year 2		<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 	<ul style="list-style-type: none"> Add numbers using concrete objects, pictorial representations, and mentally including: <ul style="list-style-type: none"> TU + U TU + T TU + TU U + U + U 	<ul style="list-style-type: none"> Subtract numbers using concrete objects, pictorial representations, and mentally including: <ul style="list-style-type: none"> TU - U TU - T TU - TU 	<ul style="list-style-type: none"> Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	<ul style="list-style-type: none"> Solve problems with addition and subtraction: <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

Examples:

Written Methods:

Children should move into the vertical partitioned method, as an interim step to column addition.

$40 + 6$	$50 + 8$
$30 + 2$	$40 + 3$
$70 + 8$	$90 + 11$
$= 78$	$= 101$

Children should add the ones first to prepare them for the formal written method. Once children are secure with this method, they can move into formal compact column addition.

Step 1:
No crossing of the tens boundary.

46
+ 32
78

Step 2:
Crossing the tens boundary.

58
+ 43
101

Children should use the language of, "4 tens and 3 tens make 7 tens." NOT, "4 and 3 make 7."

Written Methods:

Children should be introduced to the Expanded Decomposition method. First with numbers which do not require exchange. Once children are secure, they can move onto numbers which do require exchange, still using the expanded method, before moving into Compact Column Subtraction.

85 - 32 = 53
80 + 5
- 30 + 2
50 + 3

$53 - 36 = 17$

$40 + 13$
 $- 30 + 6$
 $10 + 7$

53
- 36
17



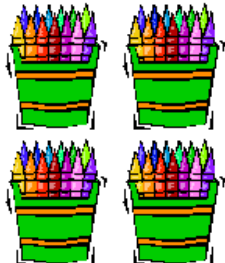
Multiplication and Division:

	Number Statements	Mental Recall	Written Calculations	Relationships	Numbers	Problems
Year 2	<ul style="list-style-type: none"> Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs 	<ul style="list-style-type: none"> Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers 		<ul style="list-style-type: none"> Show that multiplications of two numbers can be done in any order (commutative and division of one number by another cannot) 		<ul style="list-style-type: none"> Solve one-step problems involving multiplication and division, using materials arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Examples:

Written Methods:

Children should build on their understanding of **Combining Groups** for multiplication.




4 groups of 10 crayons

$$10 + 10 + 10 + 10 = 40$$

4 groups of 10

4 times 10

$$4 \times 10 = 40 \quad 10 \times 4 = 40$$



5 groups of 6 5 lots of 6

$$6 + 6 + 6 + 6 + 6 = 30$$

$$5 \times 6 = 30 \quad 6 \times 5 = 30$$

Children should also use **arrays** to record multiplication statements in different ways.

Written Methods:

Children should continue to use arrays and the language of **grouping and sharing** for division, moving into using a **number line** to record divisions.

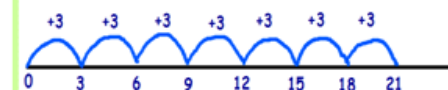
$$20 \div 5 = 4$$



$$20 \div 4 = 5$$



$$21 \div 3 = 7$$





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Fractions:

	Recognising Fractions	Decimals	Finding FDP	Links to Place Value	Comparing and Ordering FDP	Operations	Problems
Year 2	<p>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>Write simple fractions e.g. $\frac{1}{2}$ of $6 = 3$ and recognise the equivalent of two quarters and one half</p>						



Non Key Skills Areas:

Geometry:

	2D Shapes	3D Shapes	Symmetry	Angles	Coordinates	Translations	Problems
Year 2	<p>Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line</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>Compare and sort common 3-D shapes and everyday objects</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>Compare and sort common 3-D shapes and everyday objects</p>	<p>Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line</p>				



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Measures:

	Measuring	Units	Money	Area	Perimeter	Capacity	Time	Problems
Year 2	<p>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</p> <p>Read relevant scales to the nearest numbered unit</p>	<p>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</p> <p>Compare and order lengths, mass, volume/capacity and record the results using $<$, $>$ and $=$</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>Compare and sequence intervals of time</p> <p>Tell and write 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 the number of hours in a day</p>	<p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>

Statistics:

	Constructing Graphs	Interpreting Graphs	Tables	Averages	Problems
Year 2	<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p>	<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</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 compare categorical data.</p>