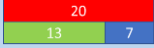




Year 2 Maths Half Termly Planning

Autumn 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	Partitioning Partition numbers up to 100 in as many different ways as possible. $56 = 50 + 6, 25 + 25 + 6, 50 + 3 + 3...$	Counting Count in steps of 2, 5 and 10 from 0, and in tens from any number, forward and backward. <i>Use counting sticks and hundred squares.</i>	Adding mentally (number bonds) Recall and use addition facts to 20 fluently, and derive and use related facts up to 100. $12 + 8 = ?$ $2 + 8 = 10$ so $10 + 10 = 20$ $32 + 8 = 2 + 8 = 10$, so $10 + 30 = 40...$ $32 + 18 = 8 + 2 = 10$, $30 + 10 = 40$, so $40 + 10 = 50$	Adding/subtracting mentally (number bonds) Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. <i>I know that $13 + 7 = 20$, so I know that $20 - 7 = 13...$</i> <i>Use the bar model as well Numicon to model this concept.</i> 	Adjust to subtract mentally (-9 and -11 to start with). $37 - 9 = 28$ <i>(Adjust 9 by adding one to it to make 10, $37 - 10 = 27$, then adjust the answer by adding 1, $27 + 1 = 28$)</i> <i>Apply the same with -11, but encourage children to partition 11 into $10 + 1$, take 10 away first, then take 1 away.</i>	Counting Count in steps of 3 from 0 from any number, forward and backward. <i>Use counting sticks and hundred squares.</i>	Investigations/Assessment Week Allow children to apply skills they have been taught this half term through investigations and puzzles. Use NRICH investigations too, this is a valuable source of application and assessment as the children apply their knowledge.
Maths Unit	Place Value Recognise the place value of each digit in a two-digit number (tens, ones). Read and write numbers to at least 100 in numerals and in words.	Place Value Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs.	Addition Add 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.	Subtraction 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.		2D Shape Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	
Reasoning/ Problem Solving	Use place value and number facts to solve problems.	Identify, represent and estimate numbers using different representations, including the number line.	Solve problems with addition using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods.	Solve problems with subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods.		Compare and sort common 2-D shapes and everyday objects.	
X tables	TTRS Counting Sticks <i>End of year target: recall multiplication and division facts for the 2, 5 and 10 times tables.</i>	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.

Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures
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Year 2 Maths Half Termly Planning

Autumn 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
Basic Skills / Daily Mental Maths	<p>Odd and even numbers</p> <p>Use Numicon to model to the children why/how some numbers are odd/even.</p> 	<p>Times Tables / inverses</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</p> <p><i>8 divided by 2 = ?</i> <i>2 x 4 = 8, so 8 divided by 2 = 4.</i></p> <p>Allow children to investigate this concept with Numicon/arrays.</p> 		<p>Adding three numbers</p> <p>Model how to use previous knowledge of numbers to add efficiently, for example:</p> <p>$5 + 10 + 5 =$ Chn should use their knowledge of doubles (5+5) then add 10 + 10.</p> <p>$4 + 10 + 6 =$ Chn should be taught to look out for number bonds (6+4 = 10, then 10 + 10 = 20)</p>		<p>Counting</p> <p>Count in steps of 3 from 0 from any number, forward and backward.</p> <p><i>Use counting sticks and hundred squares.</i></p>	Investigations/Assessment Week Allow children to apply skills they have been taught this half term through investigations and puzzles. Use NRICH investigations too, this is a valuable source of application and assessment as the children apply their knowledge.	<p>Doubles (known facts)</p> <p>Children should know their doubles up to 20 by rote.</p> <p>Double 1 / $1 + 1 = 2$ Double 2 / $2 + 2 = 4 \dots$</p> <p>Use equipment to model doubling so that children see what happens to the numbers.</p>
	<p>Measures – length/height</p> <p>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers and scales.</p>	<p>Multiplication</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs.</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p>	<p>Division</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs.</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p>		<p>Statistics</p> <p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</p>	<p>Fractions</p> <p>Recognise, find, name and write fractions $1/3$, $1/4$, $2/4$ and $3/4$ of a length, shape, set of objects or quantity.</p>		
Reasoning/ Problem Solving	<p>Compare and order lengths and record the results using $>$, $<$ and $=$</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>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</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>Pupils use fractions as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, sets of objects or shapes.</p>	

Mental Maths strategies should be kept on the boil throughout all units, remind children of them when you model concepts. Drip-feed teaching Time, use daily opportunities to teach/discuss it.

Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures
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Year 2 Maths Half Termly Planning

X tables	TTRS Counting Sticks <i>End of year target: recall multiplication and division facts for the 2, 5 and 10 times tables.</i>	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks		TTRS Counting Sticks
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Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Basic Skills / Daily Mental Maths	Counting Count in steps of 2, 3, 5 and 10 from 0, and in tens from any number, forward and backward. <i>Use counting sticks and hundred squares. Can also use this opportunity to count up in scales to support learning in this week's unit of mass.</i>	Addition/subtraction (inverse) 1) $100 - \underline{\quad} = 52$ 2) $\underline{\quad} + 8 = 20$ Explore and discuss strategies to solve both calculations above. Investigate why using the inverse operation can help you solve question 2, but not question 1.	Compensate to subtract $35 - 18 = ?$ Add two to 18 to make 20 (friendly number)... $35 - 20 = 15$ Then add 2 back on... $15 + 2 = 17$	Inverse Understand that subtraction is the inverse of addition and apply this knowledge mentally to solve problems. $\underline{\quad} + 8 = 12$	Subtracting multiples of 10 $39 - 20 = \underline{\quad}$ Discuss what happens to the ones column each time a multiple of 10 is subtracted, it never changes. Why? Model this using different resources such as Numicon, Dienes and counters.	Investigations/Assessment Week Allow children to apply skills they have been taught this half term through investigations and puzzles. Use NRICH investigations too, this is a valuable source of application and assessment as the children apply their knowledge.	Adding/subtracting mentally (number bonds) Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. <i>I know that $13 + 7 = 20$, so I know that $20 - 7 = 13$...</i> <i>Use the bar model as well Numicon to model this concept.</i>
Maths Unit	Measures (Mass) Choose and use appropriate standard units to estimate and measure mass (kg/g); to the nearest appropriate unit, using scales	Addition Add 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.	Subtraction 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.		Measures (Money) Find different combinations of coins that equal the same amounts of money.		Geometry – 3D Shape 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]

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures
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Year 2 Maths Half Termly Planning

Reasoning/ Problem Solving	Compare and order mass and record the results using $>$, $<$ and $=$.	Solve problems with addition using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods.	Solve problems with subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods.		Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.		Compare and sort common 3-D shapes and everyday objects.
X tables	TTRS Counting Sticks <i>End of year target: recall multiplication and division facts for the 2, 5 and 10 times tables.</i>	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks		TTRS Counting Sticks

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5
Basic Skills / Daily Mental Maths	Partitioning to add $23 + 37 =$ <i>Partition tens and ones...</i> $3 + 7 = 10$ $20 + 30 = 50$ <i>So, $10 + 50 = 60$</i>	Halving numbers/recall known facts Half of 100 = 50 Half of 90 = 45 Half of 50 = 25 Half of 30 = 15 Half of 20 = 10 Half of 10 = 5	Use inverse to find fractions of amounts $\frac{1}{4}$ of 8 Encourage children to use their knowledge of the two times tables to answer this – $2 \times 4 = 8$, therefore 8 divided by 4 = 2.	Counting Count in steps of 2, 3, 5 and 10 from 0, and in tens from any number, forward and backward. <i>Use counting sticks and hundred squares.</i>	Investigations/Assessment Week Allow children to apply skills they have been taught this half term through investigations and puzzles. Use NRICH investigations too, this is a valuable source of application and assessment as the children apply their knowledge.
Maths Unit	Multiplication Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	Division Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	Fractions Write simple fractions for example, $\frac{1}{2}$ of 6 = 3.		

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures
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Year 2 Maths Half Termly Planning

Reasoning/ Problem Solving	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Pupils use fractions as 'fractions of' discrete and continuous quantities by solving problems using shapes, objects and quantities. They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, sets of objects or shapes
X tables	TTRS Counting Sticks <i>End of year target: recall multiplication and division facts for the 2, 5 and 10 times tables.</i>	TTRS Counting Sticks	TTRS Counting Sticks

Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Basic Skills / Daily Mental Maths	Time (Recall/known facts) Know the number of minutes in an hour and the number of hours in a day.	Knowledge of numbers inside numbers to find fractions of amounts $\frac{1}{2}$ of 90 = 45 $90 = 60 + 30$ Half of 60 = 30 Half of 30 = 15 Therefore $30 + 15 = 45$	Addition Adding three two digit numbers $20 + 30 + 50 = \underline{\quad}$ Encourage children to look at what they know about the numbers, $30 + 20 = 50$ and double $50 = 100$.	Use knowledge of near doubles to add mentally. $5 + 6 = (6 \text{ can be partitioned in to } 5 + 1, \text{ so } 5 + 5 = 10, 10 + 1 = 11)$ $25 + 26 = 51$ (26 can be partitioned into $25 + 1$, so $25 + 25 = 50, 50 + 1 = 51$)	Investigations/Assessment Week Allow children to apply skills they have been taught this half term through investigations and puzzles. Use NRICH investigations too, this is a valuable source of application and assessment as the children analyse their knowledge.	Number Count in steps of 5.

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures
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Year 2 Maths Half Termly Planning

Maths Unit	2D Shape 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 anticlockwise).	Fractions Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. Explore with different diagrams and using post-it activities how finding $\frac{2}{4}$ of a number is equivalent to finding $\frac{1}{2}$. For example $\frac{2}{4}$ of 36 is the same as finding $\frac{1}{2}$ of 36.	Measures (Volume/capacity) Choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit.	Measures – Money Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.		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.
Reasoning/ Problem Solving Opportunities	Pupils use the concept and language of angles to describe ‘turn’ by applying rotations, including in practical contexts (for example, pupils themselves moving in turns, giving instructions to other pupils to do so, and programming robots using instructions given in right angles).	Pupils use fractions as ‘fractions of’ discrete and continuous quantities by solving problems using shapes, objects and quantities. They connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, sets of objects or shapes.	Compare and order volume/capacity and record the results using $>$, $<$ and $=$	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. <i>Pupils become fluent in counting and recognising coins. They read and say amounts of money confidently and use the symbols £ and p accurately, recording pounds and pence separately.</i>		Compare and sequence intervals of time.
X tables	TTRS Counting Sticks <i>End of year target: recall multiplication and division facts for the 2, 5 and 10 times tables.</i>	TTRS Counting Sticks	TTRS Counting Sticks	TTRS Counting Sticks		TTRS Counting Sticks

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures
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Year 2 Maths Half Termly Planning

Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		
Basic Skills / Daily Mental Maths	Review Mental Strategies based on AfL.						Investigations/Assessment Week Allow children to apply skills they have been taught this half term through investigations and puzzles. Use NRICH investigations too, this is a valuable source of application and assessment as the children apply their knowledge.		
gMaths Unit	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.	4 Calculations Review	Geometry Review	Fractions Review	Measures Review				
Reasoning/ Problem Solving Opportunities	Compare and sequence intervals of time.								
X tables	TTRS Counting Sticks <i>End of year target: recall multiplication and division facts for the 2, 5 and 10 times tables.</i>					TTRS Counting Sticks		TTRS Counting Sticks	TTRS Counting Sticks
									TTRS Counting Sticks
							2 Day week - Plan revision lessons based on whole class gaps.		

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Number and Place Value	Multiplication and Division	Addition and Subtraction	Fractions/Decimals	Geometry	Statistics	Measures
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