

Mathematics

Long Term Plan


Year 2

Updated June 2023

To be read in conjunction with the Calculation Policy



Year 2 Long Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	
Autumn	NUMBER Place Value				NUMBER Addition and Subtraction <i>Including explicit teaching of mental methods</i> Addition			PiXL Assessments	NUMBER Addition and Subtraction MWE Maths Week England			GEOMETRY Shape			
Spring	MEASUREMENT Money (Statistics)	NUMBER Multiplication and Division			NUMBER Fractions		MEASUREMENT Time	PiXL Assessments	MEASUREMENT						
		NUMBER Length and Height		NUMBER Mass, Capacity and Temperature											
Summer	MEASUREMENT Time	GEOMETRY Shape (revision)	GEOMETRY Position and Direction	Word Problems	Statistics	SATs	Consolidation of RTP's PiXL Analysis Focus Times Tables Focus  My Money Maths								



Year 2 Medium Term Plan

Autumn Term	Weeks 1-4	Weeks 5-7	Week 8	Weeks 9-11 Maths Week England	Weeks 12-14
Domain	Place Value	Addition and Subtraction		Addition and Subtraction	Shape
NC Objective	<ul style="list-style-type: none"> ★ Read and write numbers to at least 100 in numerals and in words ★ Identify, represent and estimate numbers using different representations, including the number line ★ Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward ★ Recognise the place value of each digit in a 2-digit number (tens, ones) ★ Compare and order numbers from 0 up to 100; use and = signs <p style="text-align: center;">Ensure coverage of:</p> <ul style="list-style-type: none"> ★ Use place value and number facts to solve problems. 	<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: <ul style="list-style-type: none"> • a 2-digit number and 1s • a 2-digit number and 10s • two 2-digit numbers • adding three 1-digit numbers ★ 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 <p style="text-align: center;">Ensure coverage of:</p> <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. <p style="text-align: center;">Although formal algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives from Y1/2/3</p>	PiXL Assessments	<div style="text-align: center;"> <p>Maths Week England will be celebrated during this block with a set focus</p> </div> <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: <ul style="list-style-type: none"> • a 2-digit number and 1s • a 2-digit number and 10s • two 2-digit numbers • adding three 1-digit numbers ★ 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 <p style="text-align: center;">Ensure coverage of:</p> <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"> ★ Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line ★ 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 ★ Compare and sort common 2-D and 3-D shapes and everyday objects

Smaller Steps (WRM)

- Step 1 Numbers to 20
- Step 2 Count objects to 100 by making 10s
- Step 3 Recognise tens and ones
- Step 4 Use a place value chart
- Step 5 Partition numbers to 100
- Step 6 Write numbers to 100 in words
- Step 7 Flexibly partition numbers to 100
- Step 8 Write numbers to 100 in expanded form
- Step 9 10s on the number line to 100
- Step 10 10s and 1s on the number line to 100
- Step 11 Estimate numbers on a number line
- Step 12 Compare objects
- Step 13 Compare numbers
- Step 14 Order objects and numbers
- Step 15 Count in 2s, 5s and 10s
- Step 16 Count in 3s

- Step 1 Bonds to 10
- Step 2 Fact families - addition and subtraction bonds within 20
- Step 3 Related facts
- Step 4 Bonds to 100 (tens)
- Step 5 Add and subtract 1s
- Step 6 Add by making 10
- Step 7 Add three 1-digit numbers
- Step 8 Add to the next 10
- Step 9 Add across a 10
- Step 10 Subtract across 10
- Step 11 Subtract from a 10
- Step 12 Subtract a 1-digit number from a 2-digit number (across a 10)

- Step 13 10 more, 10 less
- Step 14 Add and subtract 10s
- Step 15 Add two 2-digit numbers (not across a 10)
- Step 16 Add two 2-digit numbers (across a 10)
- Step 17 Subtract two 2-digit numbers (not across a 10)
- Step 18 Subtract two 2-digit numbers (across a 10)
- Step 19 Mixed addition and subtraction
- Step 20 Compare number sentences
- Step 21 Missing number problems

- Step 1 Recognise 2-D and 3-D shapes
- Step 2 Count sides on 2-D shapes
- Step 3 Count vertices on 2-D shapes
- Step 4 Draw 2-D shapes
- Step 5 Lines of symmetry on shapes
- Step 6 Use lines of symmetry to complete shapes
- Step 7 Sort 2-D shapes
- Step 8 Count faces on 3-D shapes
- Step 9 Count edges on 3-D shapes
- Step 10 Count vertices on 3-D shapes
- Step 11 Sort 3-D shapes
- Step 12 Make patterns with 2-D and 3-D shapes

RTP's

- ★ **2NPV-1** Recognise the place value of each digit in two-digit numbers and compose and decompose two-digit numbers using standard and non-standard partitioning
 - Step 3-Recognise tens and ones
 - Step 4-Use a place value chart
 - Step 5-Partition numbers to 100
 - Step 7-Flexibly partition numbers to 100
 - Step 8-Write numbers in expanded form
- ★ **2NPV-2** Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10
 - Step 9-10s on the number line to 100
 - Step 10-10s and 1s on the number line to 100
 - Step 11-Estimate numbers on the number line

- ★ **2NF-1** Secure fluency in addition and subtraction facts within 10, through continued practice
 - Step 1-Bonds to 10
 - Step 6-Add by making 10
 - Step 8-Add to the next 10
 - Step 11-Subtract from a 10
- ★ **2AS-1** Add and subtract across 10
 - Step 9-Add across a 10
 - Step 10-Subtract across a 10
 - Step 11-Subtract from a 10
 - Step 12-Subtract 1-digit number from a 2-digit number (across a 10)
- ★ **2AS-3** 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
 - Step 9-Add across a 10
 - Step 10-Subtract across a 10
 - Step 11-Subtract from a 10
 - Step 12-Subtract 1-digit number from a 2-digit number (across a 10)

- ★ **2AS-3** 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
 - Step 13-10 more, 10 less
 - Step 14-Add and subtract 10s
- ★ **2AS-4** Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers
 - Step 15-Add two 2-digit numbers (not across a 10)
 - Step 16-Add two 2-digit numbers (across a 10)
 - Step 17-Subtract two 2-digit numbers (not across a 10)
 - Step 18-Subtract two 2-digit numbers (across a 10)
 - Step 19-Mixed addition and subtraction

- ★ **2G-1** Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another
 - Step 1-Recognise 2-D and 3-D shapes
 - Step 2-Count sides on 2-D shapes
 - Step 3-Count vertices on 2-D shapes
 - Step 7-Sort 2-D shapes
 - Step 8-Count faces on 3-D shapes
 - Step 9-Count edges on 3-D shapes
 - Step 10-Count vertices on 3-D shapes
 - Step 11-Sort 3-D shapes




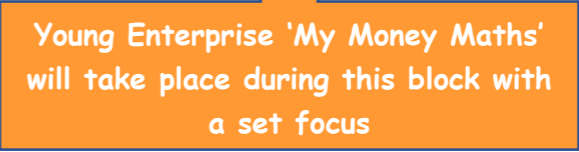

Year 2 Medium Term Plan

Spring Term	Week 1	Weeks 2-4	Weeks 5-6	Week 7	Week 8	Weeks 9-10	Weeks 11-12
Domain	Money	Multiplication and Division	Fractions	Time	PiXL Assessments	Length and Height	Mass, Capacity and Temperature
NC Objective	<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 	<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 ★ Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs ★ Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot ★ Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 	<ul style="list-style-type: none"> ★ 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 $\frac{1}{2}$ 	<ul style="list-style-type: none"> ★ Compare and sequence intervals of time ★ Tell and write the time, 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 			<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 (°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 =
Smaller Steps (WRM)	<ul style="list-style-type: none"> Step 1: Count money - pence Step 2: Count money - pounds (notes and coins) Step 3: Count money - pounds and pence Step 4: Choose notes and coins Step 5: Make the same amount Step 6: Compare amounts of money Step 7: Calculate with money Step 8: Make a pound Step 9: Find change Step 10: Two-step problems 	<ul style="list-style-type: none"> Step 1: Recognise equal groups Step 2: Make equal groups Step 3: Add equal groups Step 4: Introduce the multiplication symbol Step 5: Multiplication sentences Step 6: Use arrays Step 7: Make equal groups - grouping Step 8: Make equal groups - sharing Step 9: The 2 times-table Step 10: Divide by 2 Step 11: Doubling and halving Step 12: Odd and even numbers Step 13: The 10 times-table Step 14: Divide by 10 Step 15: The 5 times-table Step 16: Divide by 5 Step 17: The 5 and 10 times-tables 	<ul style="list-style-type: none"> Step 1: Introduction to parts and whole Step 2: Equal and unequal parts Step 3: Recognise a half Step 4: Find a half Step 5: Recognise a quarter Step 6: Find a quarter Step 7: Recognise a third Step 8: Find a third Step 9: Find the whole Step 10: Unit fractions Step 11: Non-unit fractions Step 12: Recognise the equivalence of a half and two-quarters Step 13: Recognise three-quarters Step 14: Find three-quarters Step 15: Count in fractions up to a whole 	<ul style="list-style-type: none"> Step 1: O'clock and half past Step 2: Quarter past and quarter to Step 3: Tell the time past the hour Step 4: Tell the time to the hour 		<ul style="list-style-type: none"> Step 1: Measure in centimetres Step 2: Measure in metres Step 3: Compare lengths and heights Step 4: Order lengths and heights Step 5: Four operations with lengths and heights 	<ul style="list-style-type: none"> Step 1: Compare mass Step 2: Measure in grams Step 3: Measure in kilograms Step 4: Four operations with mass Step 5: Compare volume and capacity Step 6: Measure in millilitres Step 7: Measure in litres Step 8: Four operations with volume and capacity Step 9: Temperature

RTP's	<p>★ 2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?"</p> <ul style="list-style-type: none"> • Step 9-Find change <p>★ 2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers</p> <ul style="list-style-type: none"> • Step 8-Make a pound • Step 9-Find change 	<p>★ 2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables</p> <ul style="list-style-type: none"> • Step 4-Introduce the multiplication symbol • Step 5-Multiplication sentences • Step 9-The 2 times-table • Step 13-The 10 times-table • Step 15-The 5 times-table • Step 17-The 5 and 10 times-tables <p>★ 2MD-2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division)</p> <ul style="list-style-type: none"> • Step 2-Make equal groups • Step 7-Make equal groups - grouping • Step 8-Make equal groups - sharing • Step 10-Divide by 2 • Step 14-Divide by 10 • Step 16-Divide by 5 				<p>★ 2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers</p> <ul style="list-style-type: none"> • Step 5-Four operations with lengths and heights 	<p>★ 2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables</p> <ul style="list-style-type: none"> • Step 8-Four operations with volume and capacity
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Year 2 Medium Term Plan

Summer Term	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Weeks 7-13 My Money Maths
Domain	Time	Shape	Position and Direction	Word Problems	Statistics		Consolidation of RTP's and Times Tables
NC Objective	<ul style="list-style-type: none"> ★ Compare and sequence intervals of time ★ Tell and write the time to five minutes 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 	Revision	<ul style="list-style-type: none"> ★ 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 anticlockwise) 	Revision	<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>This time is also used to consolidate:</p> <ul style="list-style-type: none"> ★ RTP's that need revisiting ★ Areas of concern through the PiXL analysis ★ Times Tables
Smaller Steps (WRM)	<ul style="list-style-type: none"> Step 1: Tell the time to 5 minutes Step 2: Minutes in an hour Step 3: Hours in a day 		<ul style="list-style-type: none"> Step 1: Language of position Step 2: Describe movement Step 3: Describe turns Step 4: Describe movement and turns Step 5: Shape patterns with turns 		<ul style="list-style-type: none"> Step 1: O'clock and half past Step 2: Quarter past and quarter to Step 3: Tell the time past the hour Step 4: Tell the time to the hour Step 5: Tell the time to 5 minutes Step 6: Minutes in an hour Step 7: Hours in a day 		
RTP's	<ul style="list-style-type: none"> ★ 2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables • Step 5-Tell the time to 5 minutes • Step 6-Minutes in an hour 						

SATS