



YEAR 3/4 MATHS OVERVIEW



Objectives taught for Year 3 only

Objectives taught for Year 4 only

Underlined: Ready to Progress (RTP) strands

Term 1	Topic	Skills/Objectives
	Number: ● Place value ● Addition/subtraction	<ul style="list-style-type: none"> ● <u>know that 10 tens are equivalent to 1 hundred and that 100 is 10 times the size of 10: apply this to identify and work out how many 10s/100s there are in other three/four digit multiples of 10s/100s.</u> ● <u>Recognise the value of a digit in a 3-digit and 4-digit number and compose and decompose numbers.</u> ● How to add and subtract 10 <hr/> <ul style="list-style-type: none"> ● <u>Reason about the location of any three-digit number in a linear number system, including identifying the previous and next multiple of 10:</u> ● add multiples of 10 ● subtract multiples of 10 ● Consolidation and reasoning of number facts <hr/> <ul style="list-style-type: none"> ● <u>Reason about the location of any three-digit number in a linear number system, including identifying the previous and next multiple of 100 and 1000.</u> ● add and subtract 100s and 1000s ● Adding single and double digits using known facts ● Subtracting single and double digits using known facts. <hr/> <ul style="list-style-type: none"> ● <u>Addition and subtraction facts that bridge 10</u> <hr/> <ul style="list-style-type: none"> ● <u>Apply place-value knowledge to known additive number facts:</u> ● Calculate complements to 100 ● Add by partitioning ● <u>add using columnar method (3-digit & 4-digit).</u> ● add using column method (with exchanging) <hr/> <ul style="list-style-type: none"> ● Subtraction using column method (3-digit & 4-digit). ● Subtraction using column method (with exchanging) ● Use of a bar model ● Consolidation



YEAR 3/4 MATHS OVERVIEW



Term 2	Topic	Skills/Objectives
	Number: ● Addition/subtraction	<ul style="list-style-type: none"> ● <u>estimate the answer to a calculation and use inverse operations to check answers</u> ● <u>Calculate complements to 100</u> ● rounding to nearest 10 ● <u>estimate the answer to a calculation and use inverse operations</u> ● Order and compare numbers up to 1000 ● <u>Understand the inverse relationship between addition and subtraction and how they both relate to a part-part-whole</u> ● Word problems: <ul style="list-style-type: none"> Year 3 <ul style="list-style-type: none"> - solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction Year 4 <ul style="list-style-type: none"> - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
	Shape: ● Area/Perimeter ● Types of line Some practise of measure (length) ● Angles	<ul style="list-style-type: none"> ● Measure in cm and mm (pre-requisite for next units) ● Area: counting squares ● <u>Find the perimeter of regular and irregular polygons, incl. missing lengths of rectilinear shapes (cm, mm and m)</u> <hr/> <ul style="list-style-type: none"> ● <u>Identify regular polygons, including equilateral triangles and squares</u> ● <u>Recognise right angles as a property of shape and identify right angles presented in shapes in different orientations</u> ● <u>Draw polygons by joining marked points and identify parallel and perpendicular lines</u> ● <u>recognise right angles as a property of shape and recognise right angles in 2D shapes, presented in different orientations</u> ● identify whether angles are greater than or less than a right angle <hr/> <ul style="list-style-type: none"> ● identify horizontal and vertical lines and pairs of perpendicular and parallel lines ● <u>draw polygons by joining marked points and recognise perpendicular and parallel lines</u>



YEAR 3/4 MATHS OVERVIEW



Term 3	Topic	Skills/Objectives
	Shape: <ul style="list-style-type: none"> • Properties of 2D shapes • Properties of 3D shapes 	<ul style="list-style-type: none"> • Compare 2D shapes and their properties (Y2). <u>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</u> • Group shapes based on properties incl. symmetry • <u>Identify line symmetry in 2D shapes, presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry</u>
	Number: <ul style="list-style-type: none"> • Multiplication/Division 	<ul style="list-style-type: none"> • Repeated addition, arrays • Counting in 4s incl. skip counting • $x \div 2, 4$ and 8 (making connections) • <u>recall multiplication facts and corresponding division facts in the 10, 5, 2, 4 and 8 multiplication tables and recognise the products in these</u> • <u>Divide 100/1000 into 2, 4, 5 and 10 equal parts and read scales/number lines marked in multiples of 100/1000 with 2, 4, 5 and 10 equal parts</u> <hr/> <ul style="list-style-type: none"> • <u>apply known multiplication and division facts to solve contextual problems with different structures, including quotative and partitive division</u> • <u>understand and apply the distributive property of multiplication</u> <hr/> <ul style="list-style-type: none"> • <u>know that 10 tens are equivalent to 1 hundred and that 100 is 10 times the size of 10</u> • $\times 10$ and 100 • $\div 10$ and 100 <hr/> <ul style="list-style-type: none"> • 2 digit by 1 digit multiplication • <u>solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</u> <hr/> <ul style="list-style-type: none"> • <u>Solve problems with a two-digit \div one-digit and involve remainders. Interpret remainders appropriately according to the context.</u>



YEAR 3/4 MATHS OVERVIEW



		<ul style="list-style-type: none"> ● <u>Manipulate multiplication and division problems and apply commutativity</u>
	<ul style="list-style-type: none"> ● Fractions 	<ul style="list-style-type: none"> ● <u>Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.</u> ● <u>Reason about the location of any fraction within 1 in the linear number system</u> ● Compare and order unit fractions, and fractions with the same denominators, solve problems that involve all of the above. ● <u>Find unit fractions of quantities, using known division facts (multiplication fluency).</u>

Term 4	Topic	Skills/Objectives
	Fractions	<ul style="list-style-type: none"> ● <u>Add and subtract improper and mixed fractions with the same denominator, within 1 (Year 3) including bridging whole numbers (Year 4)</u> [for example, $5/7 + 1/7 = 6/7$], solve problems that involve all of the above ● <u>Convert mixed numbers to improper fractions and vice versa</u>
	Fractions	<ul style="list-style-type: none"> ● <u>Reason about the location of mixed numbers in the linear number system</u> ● recognise and show, using diagrams, equivalent fractions with small denominators, solve problems that involve all of the above
	Measure	<ul style="list-style-type: none"> ● <u>Divide 100/1000 into 2, 4, 5 and 10 equal parts and read scales/number lines marked in multiples of 100/1000 with 2, 4, 5 and 10 equal parts</u> ● Y3 Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); ● volume/capacity (l/ml) add and subtract amounts of money to give change, using both £ and p in practical contexts ● Y4 Convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence
	Measure: Money	Year 3: Pupils should be taught to:



YEAR 3/4 MATHS OVERVIEW



		<ul style="list-style-type: none"> • add and subtract amounts of money to give change using both pounds and pence in practical contexts • use manageable amounts - rounded to the nearest 10p etc <p>Year 4: Pupils should be taught to:</p> <ul style="list-style-type: none"> • estimate, compare and calculate different measures, including money in pounds and pence. • solve simple measure and money problems involving fractions and decimals to 2 decimal places. • decimal recording of money introduced
--	--	--

Term 5	Topic	Skills/Objectives
	Fractions	<ul style="list-style-type: none"> • <u>3F-2: Find unit fractions of quantities using known division facts (multiplication tables fluency).</u> • 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 • Reason about the location of mixed numbers in the linear number system.
	Fractions and Decimals	<ul style="list-style-type: none"> • 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 • Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 • recognise and write decimal equivalents of any number of tenths or hundreds
	Number & Decimals	<ul style="list-style-type: none"> • <u>Reason about the location of any three-digit number in a linear number system, including identifying the previous and next multiple of 10</u> • <u>Reason about the location of any three-digit number in a linear number system, including identifying the previous and next multiple of 100 and 1000.</u> • rounding to nearest 10, 100 and 1000 (Y4) • round decimals with 1 decimal place to the nearest whole number • compare numbers with the same number of decimal places up to 2 decimal places



YEAR 3/4 MATHS OVERVIEW



		<ul style="list-style-type: none"> ● solve simple measure and money problems involving fractions and decimals to 2 decimal places. ● recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$
	Time	<p>Year 3</p> <ul style="list-style-type: none"> ● tell and write the time from an analogue clock, including ● estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight ● 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>Year 4</p> <ul style="list-style-type: none"> ● 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
	Roman Numerals	<ul style="list-style-type: none"> ● tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks ● read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value

Term 6	Topic	Skills/Objectives
	<ul style="list-style-type: none"> ● Measure (time) ● Addition and subtraction ● Multiplication and division 	<ul style="list-style-type: none"> ● Work out the duration of time by finding the difference ● Know the order of days of the week, months, how many days of the week ● Time consolidation ● Adding and subtracting (both crossing and no crossing 10) ● <u>estimate the answer to a calculation and use inverse operations to check answers inverse to reason and check answers</u> ● Multiplying and dividing by the use of partitioning



YEAR 3/4 MATHS OVERVIEW



	<ul style="list-style-type: none"> Statistics 	<ul style="list-style-type: none"> exploring data interpreting data in pictograms and bar charts drawing data in pictograms and bar charts
	Statistics Arithmetic	<ul style="list-style-type: none"> Interpreting line graphs Drawing line graphs Two-way tables
	Geometry – position and direction	<ul style="list-style-type: none"> Reading coordinates Plotting coordinates <u>Drawing polygons, specified by coordinates in the first quadrant and translate in the first quadrant</u> Translation
	Multiplication	<ul style="list-style-type: none"> Multiply three 1-digit numbers
	Consolidation of number	<ul style="list-style-type: none"> Subtraction 4-digit numbers Addition and subtraction missing numbers

Times table and Number sense plan

- Recall multiplication and division facts up to 12x12**

	<u>Term 1</u>	<u>Term 2</u>	<u>Term 3</u>	<u>Term 4</u>	<u>Term 5</u>	<u>Term 6</u>
<u>Year 3</u>	Number sense - Facts and strategies across 10	Number sense - Extending facts and strategies across 10	Doubles (5 weeks) 2x tables (5 weeks)	2x tables (5 weeks) Squares (5 weeks, 7 facts)	5x tables (5 weeks, 6 facts)	Consolidation - <u>21 of 36 facts learnt by end of Year 3</u>
<u>Year 4</u>	Self quizzing 2's, 5's 10's squares 3 x tables (5 weeks, 5 facts)	3 x tables (5 weeks, 5 facts) 4 x tables (5 weeks, 4 facts)	6 x tables (3 weeks, 3 facts) 7 x tables (3 weeks, 2 facts)	8 x table (2 weeks, 1 fact) 9 x table (2 weeks, 0 facts) 10/11 TT (1 week) More squares (1 week)	12 x table (4 weeks) MTC prep (3 week)	MTC (1 week) Consolidation (5 weeks)