Year 3

Long-term maths plan

Key
- Number
- Measurement
- Geometry
- Statistics
- Revisit and consolidate

Cornerstones

Term	Half term 1 Approximately 6 weeks			Half term 2 Approximately 6 weeks		
Autumn	Number and place value	Addition and subtraction		Multiplication and division	Geometry: Shape	Measurement: Length and perimeter
Spring	Number and place value	Multiplication and division	Measurement: Money, including addition and subtraction		Fractions	Measurement: Time
Summer	Fractions	Geometry: Shape	Measurement: Mass, capacity and volume	Number: The four operations and arithmetic	Statistics	Revisit and consolidate

Year 3

Medium-term maths plan
Autumn term coverage

Half term 1		Half term 2		
3–4 weeks	3–4 weeks	2–3 weeks	2–3 weeks	2–3 weeks
● **Number and place value**	● **Addition and subtraction**	● **Multiplication and division**	● **Geometry:** Shape	● **Measurement:** Length and perimeter
Count from 0 in multiples of 10, 50 and 100. Find 10 or 100 more or less than a given number. Compare and order numbers up to 200. Read and write numbers up to 200 in numerals and words. Recognise the place value of each digit in a three-digit number with numbers up to 200 (hundreds, tens and ones). Identify, represent and estimate numbers to 200 using different representations. Solve number problems and practical problems that involve all of the above.	Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds. Begin to add numbers with two and three digits, using the formal written methods of columnar addition, progressing gradually from concrete and pictorial representation to abstract representation. Estimate the answer to a calculation and use inverse operations to check answers. Solve simple problems, including missing number problems, using number facts and place value with numbers up to and including 200.	Recall and use multiplication and division facts for the 2, 3, 5 and 10 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know (2, 3, 5 and 10). Multiply one-digit numbers by 2, 3, 5 and 10, using mental strategies. Progress to formal written methods to multiply two-digit numbers by a one-digit number (multiplying by 2, 3 and 5). Recognise the inverse relationship between multiplication and division when performing calculations to check answers and written methods (when multiplying by 2, 3, 5 and 10).	Recognise and name symmetrical and non-symmetrical polygons. Continue to identify, name and describe 3-D shapes, including: cones, cylinders, prisms, pyramids, cubes, cuboids, spheres. Continue to compare, sort and describe common 2-D and 3-D shapes and everyday objects by the number of sides/faces, edges, vertices and lines of symmetry (e.g. using a Venn or Carroll diagram). Recognise angles as a property of shapes. Identify right angles. Identify horizontal and vertical lines.	Measure, compare, add and subtract lengths (m/cm/mm). Measure the perimeter of simple 2-D shapes.

Medium-term maths plan
Spring term coverage

Half term 1			Half term 2	
2–3 weeks	3–4 weeks	2–3 weeks	3–4 weeks	2–3 weeks
● **Number and place value**	● **Multiplication and division**	● **Measurement:** Money, including addition and subtraction	● **Fractions**	● **Measurement:** Time
Count from 0 in multiples of 4, 8, 50 and 100. Find 10 or 100 more or less than a given number. Compare and order numbers up to 1000. Read and write numbers up to 1000 in numerals and words. Recognise the place value of each digit in a three-digit number (hundreds, tens and ones). Identify, represent and estimate numbers to 1000 using different representations. Solve number problems and practical problems involving these ideas.	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental strategies. Use the multiplication tables that they know, including for two-digit numbers times one-digit numbers, progressing to formal written methods. Recognise the inverse relationship between multiplication and division when performing calculations to check answers and written methods. Multiply numbers to 100 by 10 and understand the effect on the place value of the number being multiplied. 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.	Add and subtract amounts of money to give change, using both £ and p in practical contexts. Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds. Add and subtract numbers with up to three digits, using the formal written methods of columnar addition and subtraction. Estimate the answer to a calculation and use inverse operations to check answers. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Recognise and show, using diagrams, equivalent fractions with small denominators (including: halves, quarters, thirds, sixths, fifths and tenths). Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (including: halves, quarters, thirds, sixths, fifths and tenths). Compare and order unit fractions and fractions with the same denominator and plot them on segmented number lines. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators (including: halves, quarters, thirds, sixths, fifths and tenths). Solve simple problems that involve all of the above.	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. 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, a.m./p.m., 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 (e.g. to calculate the time taken by particular events or tasks).

Year 3

Cornerstones

Medium-term maths plan
Summer term coverage

Half term 1			Half term 2		
3–4 weeks	**2–3 weeks**	**2–3 weeks**	**3–4 weeks**	**2–3 weeks**	**1–2 weeks**
● **Fractions**	● **Geometry:** Shape	● **Measurement:** Mass, capacity and volume	● **Number:** The four operations and arithmetic	● **Statistics**	
Recognise and show, using diagrams, equivalent fractions with small denominators. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. Compare and order unit fractions with the same denominators. 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. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ and $\frac{1}{3} + \frac{2}{3}$ make a whole). Solve problems that involve all of the above.	Recognise angles as a property of shape or a description of a turn. Identify right angles, recognise that two right angles make a half-turn, three make three-quarters of a turn and four a complete turn. Identify whether angles are greater than or less than a right angle. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. Draw 2-D shapes accurately and connect decimals and rounding to drawing and measuring straight lines in centimetres in a variety of contexts (e.g. rounding mm on a ruler to the nearest cm). Make 3-D shapes using modelling materials and name and describe the properties using accurate language when describing the angles, edges, vertices and measurements. Recognise 3-D shapes in different orientations and describe them.	Measure, compare, add and subtract volume/capacity (l/ml). Measure, compare, add and subtract mass (kg/g).	Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds. Add and subtract numbers with up to three digits, using the formal written methods of columnar addition and subtraction. Estimate the answer to a calculation and use inverse operations to check answers. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. 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.	Interpret and present data using bar charts, pictograms and tables. Solve one-step and two-step questions (e.g. 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables.	● **Revisit and consolidate**