Mathematics long term plan – Year 3

Key Targets are highlighted in red – these targets should be delivered first within each unit of work and children should not progress beyond these targets within each unit of work until they are secure. If children do not secure key targets within a unit of work, they should progress onto the next unit of work with the rest of the class but these key targets should be revisited during consolidation weeks and/or during the next academic year (e.g. before progressing onto key targets for multiplication in Year 3, unsecured key targets for multiplication from the Year 2 curriculum should be secured first when a child progresses into Year 3).

Order of delivery – targets have been placed in a suggested order of delivery; however, class teachers should use their professional judgement and discuss the order of delivery and/or the number of lessons that should be dedicated to each learning objective with the maths coordinator/SLT members, if needed.

Teaching some objectives through regular practice – some targets/learning objectives may not need their own lesson for delivery (e.g. using estimation to check answer to calculations). Teachers should use their professional judgement when deciding how many lessons should be dedicated to each learning objective. Teachers may decide that using estimation to check answers to calculations is something that will be incorporated into most of their teaching inputs throughout the year and that additional lessons could be used for the delivery of more essential targets. Class teachers to discuss which targets may not need their own lesson for delivery with maths coordinator/SLT members; however, all key targets must have their own dedicated lessons for delivery.

Children working below age-related expectations – class teachers should consolidate and secure key targets from a previous year group before progressing children working below age-related expectations onto the learning objectives attached to their current year group (e.g. before progressing onto key targets for multiplication in Year 3, unsecured key targets for multiplication from the Year 2 curriculum should be secured first when a child progresses into Year 3). If children have secured key targets from the previous year group during the unit of work, they should progress onto key targets attached to their current year group. If a unit of work is being delivered with no key targets (e.g. statistics), class teachers should review gaps in learning from previous year groups and use their professional judgement when deciding which targets that child should consolidate and secure during that unit of work (e.g. more essential gaps in learning involving statistics from previous year groups should be consolidated and secured first; less-essential targets from previous year groups may be left undelivered if it is not appropriate for that child to progress onto that target).

Re-capping and consolidating targets from previous year groups – as part of ongoing and good practice across all year groups, all teachers should re-cap learning objectives from the previous year group as part of their success criteria in one or more of their lessons (e.g. Year 6 lessons should re-cap multiplying 4-digit numbers by a 1-digit number before progressing children onto multiplying numbers with up to 4 digits by 2-digit numbers.) A one-size-fits-all approach is nearly impossible to achieve but gaps in learning for a vast majority of pupils working at age-related expectations should be addressed and secured across all year groups if every year group does this well.

Adapting weeks to suit each academic year – the number of weeks in each academic year may slightly change (e.g. autumn term may have 15 weeks instead of 14 weeks in some academic years). Class teachers should adapt the overviews accordingly depending on the length of each term and discuss and agree this with the maths coordinator or SLT members if needed.

Retention of learning – Learning has been organised into units of work (e.g. 2 weeks may be dedicated to addition at the start of the year and then addition may not be planned in to be revisited for the remainder of the year). Class teachers should ensure that calculations of the day, discussion of past paper questions every day, and starter activities throughout the year recaps prior learning throughout the year to ensure retention of previous learning.

The aim of the curriculum design is to ensure that every child, or nearly every child, progresses into the next year group with all of the key targets attached to their year group secure. This will ensure that children can access maths lessons being delivered in the following academic year.

Year 3: Autumn Term

Weeks 1 & 2 Number – place value	Weeks 3, 4, 5 & 6 Number – addition, subtraction,	Weeks 7, 8, 9 & 10 Number - multiplication and division	Weeks 11 & 12 Measurement – length and perimeter	Weeks 13 & 14 Consolidation weeks
-Read and write numbers up to 1000 in numerals and in words. **-Recognise the place value of each digit in a three digit number (hundreds, tens, ones).** **-Compare and order numbers up to 1000** **-Count from 0 in multiples of 50 and 100** **-Find 10 or 100 more or less than a given number;** -Identify, represent and estimate numbers using different representations. -Solve number problems and practical problems involving these ideas.	**-Add and subtract numbers with up to three digits, using 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. -Add and subtract amounts of money to give change, using both £ and p in practical contexts. -Add and subtract numbers mentally, including a 3-digit number and ones; a 3-digit number and tens; a 3-digit number and hundreds.	**-Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.** **-Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.** -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 context.	-Continue to measure using the appropriate tools and units (m/cm/mm)., progressing to using a wider range of measures, including comparing and using mixed and simple equivalents of mixed units. -Measure, compare, add and subtract lengths (m/cm/mm). -Measure the perimeter of simple 2D shapes. -Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	**Based on knowledge of their pupils and awareness of misconceptions, class teachers to decide which targets should be re-capped and consolidated during these weeks.** **Key Targets should be prioritised during consolidation weeks.** **Assessment week will also take place during week 13.**

Year 3: Spring Term

Weeks 1, 2 & 3 Number – multiplication and division	Weeks 4, 5 & 6 Measurement - time	Weeks 7, 8, 9 & 10 Fractions	Weeks 11 & 12 Consolidation weeks
--Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. **-Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.** -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 objectives.	-Know the number of seconds in a minute and the number of days in each month, year and leap year. -Tell and write the time from an analogue clock, including using Roman numerals 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. -Compare durations of events (for example to calculate the time taken by particular events or tasks).	**-Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.** **-Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.** -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 tenths.	**Based on knowledge of their pupils and awareness of misconceptions, class teachers to decide which targets should be re-capped and consolidated during these weeks.** **Key Targets should be prioritised during consolidation weeks.** **Assessment week will also take place during week 11.**

Year 3: Summer Term

Weeks 1, 2, 3 & 4 Fractions	Weeks 5, 6 & 7 Geometry – properties of shape	Weeks 8, 9 & 10 Measurement	Week 11 Statistics	Weeks 12 & 13 Consolidation weeks
-Recognise and show, using diagrams, equivalent fractions with small denominators. **-Compare and order unit fractions, and fractions with the same denominators.** **-Add and subtract fractions with the same denominator within one whole.** -Solve problems that involve all of the above.	-Draw 2-D shapes and make 3-D shapes using modelling materials. -Recognise 3-D shapes in different orientations and describe them. -Recognise angles as a property of shape or a description of a turn. -Identify right angles, recognise that two right angles make a half-term, 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.	-Continue to measure using the appropriate tools and units (kg/g; l/ml), progressing to using a wider range of measures, including comparing and using mixed units (for example, 1kg and 200g) and simple equivalents of mixed units (for example, 5l = 5000ml). -Measure, compare, add and subtract mass (kg/g) and volume/capacity (l/ml). -Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	-Interpret and present data using bar charts, pictograms and tables. -Solve one-step and two-step questions (for example, 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables	**Based on knowledge of their pupils and awareness of misconceptions, class teachers to decide which targets should be re-capped and consolidated during these weeks.** **Key Targets should be prioritised during consolidation weeks.** **Assessment week will also take place during week 12.**