Mathematics long term plan – Year 2

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 addition in Year 2, unsecured key targets for addition from the Year 1 curriculum should be secured first when a child progresses into Year 2).

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 addition in Year 2, unsecured key targets for addition from the Year 1 curriculum should be secured first when a child progresses into Year 2). 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 2: Autumn Term

Weeks 1 & 2 Number – place value	Weeks 3, 4, 5 & 6 Number – addition, subtraction,	Weeks 7 & 8 Measurement – length and mass	Weeks 9, 10, 11 & 12 Number – multiplication and division	Weeks 13 & 14 Consolidation weeks
-Read and write numbers to at least 100 in numerals and words. -Count in steps of 2, 3 and 5 from 0 and in tens from any number, forward and backward. -Recognise the place value of each digit in a two digit number (tens, ones) -Compare and order numbers from 0 up to 100; use and = signs. -Identify, represent and estimate numbers to 100 using different representations including the number line. -Use place value and number facts to solve problems.	-Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and ones; a 2-digit number and tens; two 2-digit numbers; adding three 1-digit numbers. -Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. -Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. -Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. -Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.	-Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) and mass (kg/g) to the nearest appropriate unit, using rulers and scales. -Compare and order length and mass and record the results using >, < and =.	-Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. -Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. -Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. -Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	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 2: Spring Term

Weeks 1 & 2 Measurement - money	Weeks 3 & 4 Geometry – properties of shape	Weeks 5 & 6 Statistics	Weeks 7, 8, 9 & 10 Fractions	Weeks 11 & 12 Measurement – capacity, volume and temperature
-Recognise and use symbols of 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.	-Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. -Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. -Identify 2D shapes on the surface of 3D shapes. -Compare and sort common 2D and 3D shapes and everyday objects. -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 anti-clockwise).	-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.	**-Recognise, find, name and write fractions 1/3 , 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity.** **-Write simple fractions for example, ½ of 6 = 3.** -Recognise the equivalence of 2/4 and 1/2 .	-Choose and use appropriate standard units to estimate and measure capacity (litres/ml) and temperature (˚C) to the nearest appropriate unit, using thermometers and measuring vessels. -Compare and order volume/capacity and record the results using >, < and =.

Year 2: Summer Term

Weeks 1 & 2 Measurement - time	Weeks 3, 4 & 5 Pre-SATs consolidation weeks	Weeks 6, 7 & 8 Post SATs consolidation weeks	Weeks 9 & 10 Consolidation weeks - time	Week 11 Consolidation week - money	Weeks 12 & 13 Consolidation weeks - geometry
-Know the number of minutes in an hour and the number of hours in a day. -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. -Compare and sequence intervals of time.	**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.** **It is suggested that addition and subtraction targets are consolidated during Week 3, multiplication and division targets are consolidated during Week 4, and fractions targets are consolidated during Week 5.**	**Based on knowledge of their pupil, performance on SATs assessments and evidence on teacher assessment frameworks, class teachers to decide which units of work and targets should be revisited during these weeks.** **Gaps in evidence on teacher assessment frameworks should be prioritised during these weeks.**	-Know the number of minutes in an hour and the number of hours in a day. -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. -Compare and sequence intervals of time.	-Recognise and use symbols of 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.	-Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. -Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. -Identify 2D shapes on the surface of 3D shapes. -Compare and sort common 2D and 3D shapes and everyday objects. -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 anti-clockwise). **Assessment week will also take place during week 12.**