

Key Stage 1 Maths Mastery Statements

Key
Cumulative Knowledge Vocabulary

Planning and support documents		Golden threads of mathematics at GTPS	
Use the National Curriculum for key learning objectives when planning maths. Refer to the calculation guidance for support in sequencing learning journeys and ideas for practical and pictorial support. Use the 'mind the gap' document to support small steps in calculation skills		The golden threads of fluency, flexibility, problem solving and reasoning should be incorporated within each area of learning. Children must demonstrate these through other strands e.g. use of place value to support calculations, fluency of recall of facts to support calculations, which in turn should be demonstrated through problem solving in measure (for example). Children should be able to explain what they are going to do/have done, using appropriate mathematical vocabulary	
Mastery statement	Number and Place Value	Calculation	Measure, shape and statistics
Year R	A GTPS learner can: Count reliably from one to 20. Order numbers to 20. Recognise one more and one less for numbers to 20. Compare using more or fewer.	A GTPS learner can: Use vocabulary involved in adding and subtracting. Choose the correct numeral for one to ten objects. Count up to ten objects. Use objects to solve addition and subtraction problems with 2 single digit numbers. Solve problems including doubling, halving and sharing.	A GTPS learner can: Use everyday language to talk about measures. Order 3 objects by length, height, weight or capacity. Use everyday vocabulary for time. Measure short periods of time and sequence familiar events. Identify and create patterns. Use language to describe position. Name 2D and 3D shapes.
Mastery Statement	Number and Place Value	Calculation	Measure, shape and statistics
Year 1	Building on knowledge of place value from EYFS a GTPS learner can: Count to and across 100 from any number forwards and backwards fluently and count in twos, five and tens Count by reciting numbers and counting objects. Order numbers and quantities (using relevant vocabulary) and recognise one more and one less. Use a range of equipment and models to represent numbers in different ways to develop flexibility Read and write numbers to 20 as numerals and words.	Building on knowledge of calculation from EYFS a GTPS learner can: Use and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) Recall and reason with number bonds to 10 and 20 in a range of addition and subtraction problems. Solve addition and subtraction problems in practical contexts. Use a variety of key vocabulary (including more than and less than, altogether and difference). Work with a range of materials and strategies (concrete objects, pictorial representations, grouping and sharing, patterns, arrays and counting in twos, fives and tens) to solve one step problems involving multiplication and division. Recognise $\frac{1}{2}$ and $\frac{1}{4}$ of objects, shapes and quantities. Connect halves and quarters to equal grouping and sharing.	Building on knowledge of measure, shapes and statistics from EYFS a GTPS learner can: Use and compare quantities and measures using non-standard units. Become familiar with standard measures and begin to record. Tell and draw the time for o'clock and half past. Use language for dates: days, weeks, months and years. Sequence events using relevant vocabulary. Identify and understand the value of notes and coins. Develop fluency for naming 2D and 3D shapes and relate to everyday object building on EYFS. Describe position, direction and movement.
Mastery Statement	Number and Place Value	Calculation	Measure, shape and statistics
Year 2	Building on knowledge of place value from EYFS and Year 1 a GTPS learner can: Count in steps of 2,3,5 from zero and in 10s from any number fluently (and in fractions using $\frac{1}{2}$ and $\frac{2}{4}$). Use a range of equipment and models to represent numbers in different ways to develop flexibility when working with number Compare and order numbers < > and = signs. Read and write numbers in digits and words accurately and fluently. Solve problems	Building on knowledge of calculation from EYFS and Year 1 a GTPS learner can: Recall number facts to 20 fluently. Use concrete and pictorial resources to solve problems with addition and subtraction. Use a range of mental and written methods with increasing fluency and flexibility. Explore commutativity and understand that this applies to addition and not subtraction. Recognise and use the inverse for addition and subtraction. Use key vocabulary for sum and difference. Begin to record addition and subtraction in columns drawing on knowledge of place value. Write $x \div$ and = signs within the multiplication tables. Recognise odd and even numbers. Explore commutativity and understand that this applies to multiplication and not division. Work with a range of materials and strategies (inverse, arrays, repeated addition, mental methods and fact recall) to solve problems involving multiplication and division. Write simple fractions of an amount Use resources and pictures to show understanding and recognition of the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ Connect unit fractions to equal grouping and sharing (introduce $\frac{3}{4}$ as a non-unit fraction) Count fluently	Building on knowledge of measure, shapes and statistics from EYFS and Year 1 a GTPS learner can: Use symbols for £ and pence Solve problems involving combinations of coins to make amounts. Recognise and count coins fluently and record amounts accurately. Draw and write the time for 5 minutes including quarter past and quarter to the hour. Know the number of minutes in an hour and hours in a day. Compare and sequence intervals of time. Choose and use appropriate standard units for length, height, mass and capacity and apply number knowledge (compare and order) calculation (add and subtract) and problem solving when estimating and measuring. Find lines of symmetry in 2D shapes. Read and write the names of 2D and 3D shape building on EYFS and Year 1 and compare and sort Use the concept and language of angles to describe turn by applying rotations. Interpret and construct a range of statistics. Ask and answer simple questions about data and apply number skills when totalling and comparing data.

Golden Thread

Fluency
Flexibility
Problem Solving
Reasoning