



Maths Long Term Plan 2020 – 2021 Year 6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
	Number and Place Value Addition and Subtraction			Multiplication and Division				Measurement/ Time/ Geometry and properties of shape			Fractions, decimals and percentages			
Autumn	<p>Read, write, order and compare numbers up to 1 million.</p> <p>Read, write, order and compare numbers to at least 10,000,000</p> <p>Identify, represent and estimate numbers using different representations including number lines</p> <p>Round any whole number to a required degree of accuracy</p>	<p>Formal methods to add and subtract whole numbers with more than 4 digits</p> <p>Perform mental calculations, including with mixed operations and large numbers</p> <p>Use estimation to check answers in problems to determine accuracy</p> <p>Solve addition and subtraction multi-step problems, deciding operation and method and why</p>	<p>Recognise the same areas can have different perimeters and vice versa</p> <p>Use knowledge of the order of operations to carry out calculations involving the 4 operations</p> <p>Assessment Point 1</p>	<p>Multiply 4 digits by 1 digit using a formal method</p> <p>Multiply 4 digits by 2 digits using a formal method</p> <p>Use estimation to check answers in problems to determine accuracy</p>	<p>Multiply 4 digits by 2 digits using a formal method</p> <p>Use estimation to check answers in problems to determine accuracy</p>	<p>Divide 4 digits by 1 digit using short division and interpreting remainders</p> <p>Divide 4 digits by 2 digits using long division or short division where appropriate, interpreting remainders according to the context</p> <p>Use estimation to check answers in problems to determine accuracy</p> <p>Assessment Point 2</p>	<p>Divide 4 digits by 2 digits using long division or short division where appropriate, interpreting remainders according to the context</p> <p>Use estimation to check answers in problems to determine accuracy</p>	<p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>Identify angles at a point and one whole turn and identify angles at a point on a straight line and half a turn</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference</p> <p>Identify angles where they meet at a point, on a straight line or are vertically opposite and find missing angles</p>	<p>Draw 2D shapes using given dimensions and angles</p> <p>Recognise, describe and build simple 3D shapes, including making nets</p> <p>Describe positions on the full co-ordinate grid (all 4 quadrants – link to negative numbers on a number line)</p> <p>Draw and translate simple shapes in the co-ordinate plane and reflect them in</p>	<p>Solve problems involving converting between units of time</p> <p>Complete, read and interpret information in tables including timetables</p> <p>Solve problems involving durations of time e.g. 2/3 of a day in time</p>	<p>Use common factors to simplify fractions: using common multiples to express fractions in the same denominator</p> <p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</p>	<p>Improper fractions to mixed numbers and vice versa</p> <p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</p> <p>Compare and order fractions, including fractions greater than 1.</p>	<p>Use place value knowledge to find 10% and 1% of any number</p> <p>Know that 50% = ½, 25% = ¼ and 75% = ¾ of a quantity or shape</p> <p>Solve problems involving the calculation of percentages e.g. 15% of 360 and the use of percentages for comparison</p>	<p>Multiply proper fractions and mixed numbers by whole numbers (diagrams)</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form (1/4 x 1/2 = 1/8)</p> <p>Divide proper fractions by whole numbers (1/3 ÷ 2)</p>

Year teams are responsible for annotating the LTP to track progress in terms of which objectives have been taught and for how long. This is a guide and there is flexibility in it provided the curriculum objectives are covered.

Each assessment point will inform the daily fluency sessions for the next unit (Assessment points will be White Rose/ TestBase sourced).

The first two assessment points are set (place value, addition and subtraction end of week 3; and multiplication and division end of week 6). All other assessments and practise SATS tests to be agreed and determined by the year 6 team.

Statistics will be taught through topic lessons – Year leader to work out where best to plan this in to match up with topics taught over the year – see statistics objectives at the end of this document.

									the axes					
	Number and PV All 4 Operations (linked to measure)			Algebra and ratio & proportion			SATs Revision (based on 2020 revision timetable)							
Spring	Identify common factors, common multiples and prime numbers Solve problems involving addition, subtraction, multiplication and division, deciding which operations and methods to use and why	Identify the value of each digit to 3dp and multiply and divide numbers by 10, 100 and 1000 where the answers are up to 3dp Use, read, write and convert between standard units, converting measurements of mass and capacity from a smaller unit of measure to a larger unit and vice versa	Understand and use equivalents between metric units and common imperial units such as pounds and pints. Solve problems involving the calculation and conversion units of measure (g/kg; ml/L) using decimal notation up to 3dp	Use simple formulae Generate and describe linear number sequences	Express missing number problems algebraically Find pairs of numbers that satisfy pairs of numbers involving two unknowns Enumerate all possibilities of combination of two variables	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	Fractions, percentages, ratio	Place value, rounding	Reasoning using all 4 operations, BODMAS, multi-step problems	Measures, conversions	Algebra, statistics (mean average)	Geometry – position and direction, shape	Fractions	4 operations, percentages, fractions
	SATs Revision		SATS Week	Problem Solving (Y6 to plan and organise)	Investigations (Y6 to plan and organise)	Transition(Y6 to plan and organise)								
Summer	Gaps: steps in problems – check children are always answering in the context of the problem	Teacher choice based on gaps in learning												

Year teams are responsible for annotating the LTP to track progress in terms of which objectives have been taught and for how long. This is a guide and there is flexibility in it provided the curriculum objectives are covered.

Each assessment point will inform the daily fluency sessions for the next unit (Assessment points will be White Rose/ TestBase sourced).

The first two assessment points are set (place value, addition and subtraction end of week 3; and multiplication and division end of week 6). All other assessments and practise SATs tests to be agreed and determined by the year 6 team.

Statistics will be taught through topic lessons – Year leader to work out where best to plan this in to match up with topics taught over the year – see statistics objectives at the end of this document.

Statistics to be covered through topic – e.g Geography, science, computing

- Interpret and construct pie charts and line graphs and use these to solve problems
- Calculate and interpret the mean as an average

Year teams are responsible for annotating the LTP to track progress in terms of which objectives have been taught and for how long. This is a guide and there is flexibility in it provided the curriculum objectives are covered.

Each assessment point will inform the daily fluency sessions for the next unit (Assessment points will be White Rose/ TestBase sourced).

The first two assessment points are set (place value, addition and subtraction end of week 3; and multiplication and division end of week 6). All other assessments and practise SATS tests to be agreed and determined by the year 6 team.

Statistics will be taught through topic lessons – Year leader to work out where best to plan this in to match up with topics taught over the year – see statistics objectives at the end of this document.