



Year 6 Maths Long Term Overview

	1	2	3	4	5	6	7
HT1	Number: Place Value	Number: Place Value	Addition, Subtraction, Multiplication and Division	Addition, Subtraction, Multiplication and Division	Addition, Subtraction, Multiplication and Division	Addition, Subtraction, Multiplication and Division	Fractions
HT2	Fractions	Fractions	Fractions	Geometry – Position and Direction	Decimals	Consolidation Week/Assessment Week	Christmas activities
HT3	Decimals	Percentages	Percentages	Algebra	Algebra	Measurement: Converting Units	Measurement: Perimeter, Area and Volume
HT4	Measurement – Perimeter, Area and Volume	Ratio	Consolidation and boosting	Geometry: Properties of Shape	Consolidation and boosting	-----	-----
HT5	Consolidation and boosting	Problem solving and statistics	Consolidation and boosting	SATS	Statistics	Geometry: Properties of Shape	-----
HT6	Ratio	Statistics	Consolidation/ Investigations	Consolidation/ Investigations	Consolidation/ Investigations	Consolidation/ Investigations	Summer activities



Year 6 Maths Medium Term Plan HT1

Week	Topic	Objectives to cover	Mental Maths/Recap
1.1	Number – Place Value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. • Round any whole number to a required degree of accuracy.	
1.3	Number – Place Value	• Use negative numbers in context, and calculate intervals across zero. • Solve number and practical problems that involve all of the above.	
1.3	Addition, Subtraction, Multiplication and Division	• Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why. • Perform mental calculations, including with mixed operations and large numbers.	
1.4	Addition, Subtraction, Multiplication and Division	• Divide numbers up to 4 digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding as appropriate for the context. • Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context. • Multiply multi-digit number up to 4 digits by a 2-digit number using the formal written method of long multiplication	
1.5	Addition, Subtraction, Multiplication and Division	• Identify common factors, common multiples and prime numbers • Use their knowledge of the order of operations to carry out calculations involving the four operations. • Solve problems involving addition, subtraction, multiplication and division. • Use estimation to check answers to calculations and determine in the context of a problem, an appropriate degree of accuracy.	
1.6	Addition and subtraction, Multiplication and division	• Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why. • Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context.	
1.7	Fractions	• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination	



- Compare and order fractions, including fractions > 1
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

Year 6 Maths Medium Term Plan HT2

Week	Topic	Objectives to cover	Mental Maths/Recap
2.1	Fractions	• Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $4 \frac{1}{2} \times 2 \frac{1}{2} = 8 \frac{1}{2}$] • Divide proper fractions by whole numbers [for example, $3 \frac{1}{2} \div 2 = 6 \frac{1}{2}$] • Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{8}{3}$]	
2.2	Fractions	• Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places. • Multiply one-digit numbers with up to two decimal places by whole numbers • Use written division methods in cases where the answer has up to two decimal places	
2.3	Fractions	• Solve problems which require answers to be rounded to specified degrees of accuracy • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	
2.4	Geometry – Position and Direction	• Describe positions on the full coordinate grid (all four quadrants). • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.	
2.5	Decimals	• Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places. • Multiply one-digit numbers with up to 2 decimal places by whole numbers.	
2.6	Consolidation week	• Consolidation lessons on anything needing covered again	



2.7

Assessment
Week/
Christmas
Maths
Activities

- Assessments
- Activities covering what children have previously been learning





Year 6 Maths Medium Term Plan HT3

Week	Topic	Objectives to cover	Mental Maths/Recap
3.1	Decimals	• Use written division methods in cases where the answer has up to 2 decimal places. • Solve problems which require answers to be rounded to specified degrees of accuracy.	
3.2	Percentages	• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal • Solve problems which require knowing percentage and decimal equivalents of $2\frac{1}{4}$, $4\frac{1}{4}$	
3.3	Percentages	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	
3.4	Algebra	• Use simple formulae • Generate and describe linear number sequences • Express missing number problems algebraically	
3.5	Algebra	• Find pairs of numbers that satisfy an equation with two unknowns • Enumerate possibilities of combinations of two variables.	
3.6	Measurement – Converting Units	• solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate • Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • Convert between miles and kilometres	
3.7	Measurement – Perimeter, Area and Volume	• Recognise that shapes with the same areas can have different perimeters and vice versa • Recognise when it is possible to use formulae for area and volume of shapes	



Year 6 Maths Medium Term Plan HT4

Week	Topic	Objectives to cover	Mental Maths/Recap
4.1	Measurement – Perimeter, Area and Volume	• Calculate the area of parallelograms and triangles • Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³].	
4.2	Ratio	• 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 the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison	
4.3	Consolidation and boosting	• Consolidation lessons on anything needing covered again	
4.4	Geometry – Properties of Shapes	• Draw 2-D shapes using given dimensions and angles • Recognise, describe and build simple 3-D shapes, including making nets • Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	
4.5	Consolidation and boosting	• Consolidation lessons on anything needing covered again	



Year 6 Maths Medium Term Plan HT5

Week	Topic	Objectives to cover	Mental Maths/Recap
5.1	Consolidation and boosting	Consolidation lessons on anything needing covered again	
5.2	Problem Solving and statistics	- Interpret and construct pie charts and line graphs and use these to solve problems - Calculate and interpret the mean as an average.	
5.3	Consolidation and boosting	Consolidation lessons on anything needing covered again	
5.4	SATS		
5.5	Statistics	- Interpret and construct pie charts and line graphs and use these to solve problems - Calculate and interpret the mean as an average.	
5.6	Geometry: properties of shapes	- Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius - Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	



Year 6 Maths Medium Term Plan HT6

Week	Topic	Objectives to cover	Mental Maths/Recap
6.1	Ratio	• 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.	
6.2	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems • Calculate and interpret the mean as an average.	
6.3	Consolidation/ Investigations	• Consolidation lessons on anything needing covered again • Investigations applying knowledge children have been learning throughout Year 6	
6.4	Consolidation/ Investigations	• Consolidation lessons on anything needing covered again • Investigations applying knowledge children have been learning throughout Year 6	
6.5	Consolidation/ Investigations	• Consolidation lessons on anything needing covered again • Investigations applying knowledge children have been learning throughout Year 6	
6.6	Consolidation/ Investigations	• Consolidation lessons on anything needing covered again • Investigations applying knowledge children have been learning throughout Year 6	
6.7	Summer Activities	• Activities covering what children have previously been learning	



Mental Maths Targets Year 6

Properties of Number:

- Know prime factors of numbers to 100
- Know prime numbers to 100
- Know fraction and percentage facts for 1000, 10,000 100,000 1,000,000
- Explain place value of digits in 8 digit numbers

Counting

- Count in 0.3s forwards and backwards from any number
- Count in 0.4s forwards and backwards from any number
- Count in 0.25s forwards and backwards from any number
- Count forwards and backwards through 0 in any step

Number bonds

- Decimal complements for 1 to 10 from any number with 2dp

Calculation

- Calculate intervals across 0

Doubles and Halves

- Know doubles and halves of numbers with 2dp to 100

Times Tables

- Know cubes to $10 \times 10 \times 10$

Fractions

- Find percentages of amounts using tables knowledge
- Know FDP equivalences for $\frac{1}{3}$ s $\frac{1}{5}$ s $\frac{1}{6}$ s $\frac{1}{8}$ s ($\frac{1}{9}$ and $\frac{1}{11}$ where possible)
- Find common factors and denominators