

Year 6 Maths Autumn Term Overview

Mathematical strand:	Number	Number	Number	Number	Number
Topic:	Place Value	Addition and Subtraction Multiplication & Division	Fractions A	Fractions B	Decimals
Big Question:	Why is it important to understand the place value of the numbers I am working with?	What are the best methods to add and subtract numbers, and how can I make sure my answers are correct?	How can knowing about unit fractions help us in everyday life?	How can knowing about unit fractions help us in everyday life?	How are decimals important to every day life?
Key knowledge and skills:	The small steps of key knowledge and skills in this unit are: • Numbers to 1,000,000 • Numbers to 10,000,000 • Read and write numbers to 10,000,000 • Powers of 10 • Number line to 10,000,000 • Compare and order any integers • Round any integer • Negative numbers	The small steps of key knowledge and skills in this unit are: • Add and subtract integers • Common factors • Common multiples • Rules of divisibility • Primes to 100 • Square and cube numbers • Multiply up to a 4-digit number by a 2-digit number • Solve problems with multiplication • Short division • Division using factors • Introduction to long division • Long division with remainders • Solve problems with division • Solve multi-step problems • Order of operations - Mental calculations and estimation	The small steps of key knowledge and skills in this unit are: • Equivalent fractions and simplifying • Equivalent fractions on a number line • Compare and order (denominator) • Compare and order (numerator) • Add and subtract simple fractions • Add and subtract any two fractions • Add mixed numbers • Subtract mixed numbers • Multi-step problems	The small steps of key knowledge and skills in this unit are: • Multiply fractions by integers • Multiply fractions by fractions • Divide a fraction by an integer • Divide any fraction by an integer • Mixed questions with fractions • Fraction of an amount • Fraction of an amount - find the whole	The small steps of key knowledge and skills in this unit are: • Place value within 1 • Place value - integers and decimals • Round decimals • Add and subtract decimals • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiply decimals by integers • Divide decimals by integers • Multiply and divide decimals in context
Key vocabulary:	Nearest 10, 100, 1000, Roman numerals (to 100), Positive numbers, Hundred thousand, Digit, Value, Place	Column addition and column subtraction, Inverse, Estimate, Round to check, Efficient method, Exchange (in subtraction), Carry (in addition)	Grouping, Remainder, Short multiplication (formal written method) Short division (formal written method, 'bus stop method'), Estimate, Mental strategies, Partitioning (larger numbers)	Simplify, Mixed number, Decimal fraction, Fraction wall (visual aid) Add and subtract fractions (with the same denominator), Improper fraction Non-unit fraction (e.g., $\frac{3}{4}$, $\frac{2}{3}$)	Decimal point, Place value, Tenth / Hundredth / Thousandth, Equivalent Rounding, Compare, Multiply / Divide decimals, Percentage equivalence
What I will know by the end:	I will be able to apply my new skills and knowledge to a range of situations and representation.				

Year 6 Maths Spring Term Overview

Mathematical strand:	Number	Measure	Measure	Statistics	Number
Topic:	Fractions, decimals and percentages	Converting units	Area, perimeter and volume	Statistics	Ratio & Algebra
Big Question:	How are fractions, decimals and percentages linked?	Which units of measurement are easier to use - metric or imperial?	How can I use area, perimeter, and volume in real life?	How can using statistics help me in other subjects at school?	What's similar about fractions and ratios?
Key knowledge and skills:	The small steps of key knowledge and skills in this unit are: • Decimal and fraction equivalents • Fractions as division • Understand percentages • Fractions to percentages • Equivalent fractions, decimals and percentages • Order fractions, decimals and percentage • Percentage of an amount - one step • Percentage of an amount - multi-step • Percentages - missing values	The small steps of key knowledge and skills in this unit are: • Metric measures • Convert metric measures • Calculate with metric measures • Miles and kilometres • Imperial measures	The small steps of key knowledge and skills in this unit are: • Shapes - same area • Area and perimeter • Area of a triangle - counting squares • Area of a right-angled triangle • Area of any triangle • Area of a parallelogram • Volume - counting cubes • Volume of a cuboid	The small steps of key knowledge and skills in this unit are: • Line graphs • Dual bar charts • Read and interpret pie charts • Pie charts with percentages • Draw pie charts • The mean	The small steps of key knowledge and skills in this unit are: Ratio: • Add or multiply? • Use ratio language • Introduction to the ratio symbol • Ratio and fractions • Scale drawing • Use scale factors • Similar shapes • Ratio problems • Proportion problems • Recipes Algebra: • 1-step function machines • 2-step function machines • Form expressions • Substitution • Formulae • Form equations • Solve 1-step equations • Solve 2-step equations • Find pairs of values • Solve problems with two unknowns
Key vocabulary:	Equivalent, Simplify, Convert, Mixed number, Improper fraction, Percentage, Common denominator, Proportion	Convert, Metric, Imperial, Millimetre, Centimetre, Kilometre, Millilitre, Kilogram	Perimeter, Area, Volume, Square centimetres (cm ²), Square metres (m ²), Cubic centimetres (cm ³), Base, Height	Line graph, Pie chart, Mean, Data, Interpret, Axis, Scale, Compare	Ratio, Proportion, Formula, Variable, Equation, Expression, Term, Sequence
What I will know by the end:	I will be able to apply my new skills and knowledge to a range of situations and representation.				

Year 6 Maths Summer Term Overview

Mathematical strand:		Shape	Position and direction	
Topic:	SATS prep	Shape	Position and direction	Transition units, themed projects, problem solving practice in preparation for Y7.
Big Question:		How can I work out the size of angles when the measurements aren't given?	How can I use coordinates to help me draw shapes?	
Key knowledge and skills:	TBC by the Y6 team	The small steps of key knowledge and skills in this unit are: • Measure and classify angles • Calculate angles • Vertically opposite angles • Angles in a triangle • Angles in a triangle - special cases • Angles in a triangle - missing angles • Angles in a quadrilateral • Angles in polygons • Circles • Draw shapes accurately • Nets of 3-D shapes	The small steps of key knowledge and skills in this unit are: • The first quadrant • Read and plot points in four quadrants • Solve problems with coordinates • Translations	TBC by the Y6 team
Key vocabulary:		Polygon, Regular, Irregular, Vertices, Parallel, Perpendicular, Nets, 3D shapes	Coordinates, Quadrant, Reflection, Rotation, Translation, Axis, Grid, Symmetry	
What I will know by the end:	I will be able to apply my new skills and knowledge to a range of situations and representation.			