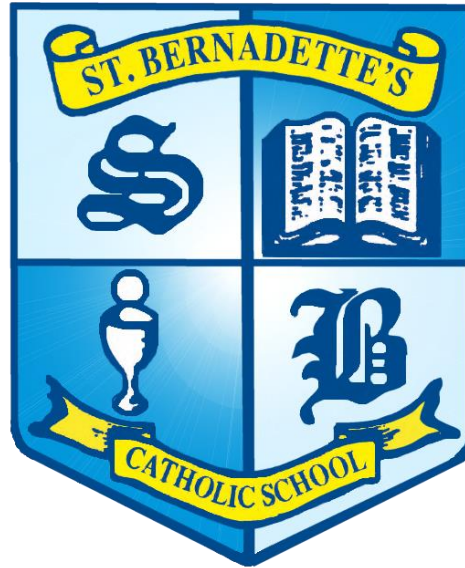


Mathematics



Long Term Overview and Small Steps

Year 6

15 weeks

Autumn

15 weeks	Autumn			
	Number Place Value	Number Addition and Subtraction	Number Multiplication and Division	Number Fractions
	4 weeks	3 weeks	3 weeks	4 weeks
Autumn	<ol style="list-style-type: none"> Numbers to 1,000,000 Numbers to 10,000,000 Number line to 10,000,000 Powers of 10 Compare and order any integers Place value within 1. (Decimals) Place value – integers and decimals (Decimals) Round any integer Round decimals (Decimals) Multiply by 10, 100 and 1,000 (Decimals) Divide by 10, 100 and 1,000 (Decimals) Convert metric measures Calculate with metric measures Negative numbers 	<ol style="list-style-type: none"> Teach mental methods for addition and subtraction Add and subtract integers Multi-step problems Use inverse to check calculations Add and subtract decimals (Decimals) Mental calculations and estimations 	<ol style="list-style-type: none"> Multiply and divide using known times tables facts (7×0.5 and $630 / \text{by } 7$) Square and cube numbers Common factors Common multiples Rules of divisibility Prime numbers to 100 Mental calculations and estimations Reason from known facts Multiply up to a 4-digit number by a 2-digit number Solve problems with multiplication Multiply decimals by integers (Decimals) Short division Division with a decimal remainder Divide decimals by integers (Decimals) Division using factors Introduction to long division Long division with remainders Solve problems with division Solve multi-step problems Multiply and divide decimals in context (Decimals) Order of operations Reason from known facts Using estimations to check answers 	<ol style="list-style-type: none"> 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 Multiply fractions by integers (B) Multiply fractions by fractions (B) Divide a fraction by an integer (B) Divide any fraction by an integer (B) Mixed questions with fractions (B) Fractions of an amount (B) Fractions of an amount – find the whole (B)

13 weeks	Spring				
	Number Fractions, Decimals and Percentages	Number Algebra	Measurement	Number Ratio	Geometry Shape
	2 weeks	2 weeks	3 weeks	2 weeks	3 weeks
Spring	<ol style="list-style-type: none"> Decimals and fraction equivalents Fractions as division Understand percentages Fractions to percentages Equivalent fractions, decimals and percentages Order fractions, decimals and percentages Percentage of an amount – one step Percentage of an amount – multi-step Percentages – missing values 	<ol style="list-style-type: none"> 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 	<p>Converting units</p> <ol style="list-style-type: none"> Metric measures Miles and kilometres Imperial measures <p>Area, perimeter and volume</p> <ol style="list-style-type: none"> 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 <p>Time (revision)</p> <ol style="list-style-type: none"> Tell the time using the digital, analogue and 24-hour clock 	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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 quadrilaterals Angles in polygons Circles Draw shapes accurately Nets of 3-D shapes

11 weeks	Summer		
	Geometry Position and Direction	Statistics	Consolidation
	1 week	2 weeks	
Summer	<ol style="list-style-type: none"> 1. The first quadrant 2. Read and plot points in four quadrants 3. Solve problems with coordinates 4. Translations 5. Reflections 	<ol style="list-style-type: none"> 1. Line graphs 2. Dual bar charts 3. Read and interpret pie charts 4. Pie charts with percentages 5. Draw pie charts 6. The mean 	

White Rose - Suggested number of weeks	
Place Value	2 weeks
Addition and Subtraction, Multiplication and Division	5 weeks
Fractions	4 weeks
Converting Units	1 week
Ratio	2 weeks
Algebra	2 weeks
Decimals <i>*Added to Place Value*</i>	2 weeks
Fractions, Decimals and Percentages	2 weeks
Area, perimeter and volume	2 weeks
Statistics	2 weeks
Shape	3 weeks
Position and Direction	1 weeks
Themed projects and consolidation	8 weeks