



St. Patrick's RC Primary School



Mathematics Year 5 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number : Place Value				Number: Addition and Subtraction		Statistics		Number: Multiplication and division		Measurement: Perimeter and area	
Spring	Number: Multiplication and Division			Number: Fractions						Number: Decimals and percentages		
Summer	Number: Decimals				Geometry: Properties of shape			Geometry: Position and direction	Measurement: Converting units		Measurement: Volume	



Year 5 – Autumn Overview



	Week 1 - 4 BLOCK 1	Week 5-6 BLOCK 2	Week 7-8 BLOCK 3	Week 9-10 BLOCK 4	Week 11 - 12 BLOCK 5
	Number: Place Value	Number: Addition and Subtraction	Statistics	Number: Multiplication and Division	Measurement: Perimeter and Area
White Rose Maths Small Steps	<ul style="list-style-type: none"> • 1000s, 100s, 10s and 1s. • Rounding to the nearest 10 • Rounding to the nearest 100 • Number to 10,000. • Roman numerals to 1,000. • Round to the nearest 10, 100 and 1000. • Number to 100,000. • Compare and order numbers to 100,000. • Round numbers within 100,000. • Numbers to a million. • Counting in 10s, 100s, 1,000s, 10,000s and 100,000s. • Compare and order numbers to a million. • Round numbers to a million. • Negative numbers. 	<ul style="list-style-type: none"> • Add two 4-digit numbers- one exchange and more than one exchange • Subtract two 4-digit numbers with one exchange and more than one • Add whole numbers with more than 4-digits (column method). • Subtract whole numbers with more than 4-digits (column method). • Round to estimate and approximate. • Inverse operations (addition and subtraction). • Multi-step addition and subtraction problems. 	<ul style="list-style-type: none"> • Interpret charts • Comparison, sum and difference • Introduce line graphs • Read and interpret line graphs. • Draw line graphs. • Use line graphs to solve problems. • Read and interpret tables. • Two way tables. • Timetables. 	<ul style="list-style-type: none"> • Multiply by 10 • Multiply by 100 • Divide by 10 • Divide by 100 • Multiples. • Factors. • Common factors. • Prime numbers. • Square numbers. • Cube numbers. • Multiplying by 10, 100 and 1000. • Dividing by 10, 100 and 1000. • Multiples of 10, 100 and 1000. 	<ul style="list-style-type: none"> • Perimeter on a grid • Perimeter of rectangles • Perimeter of rectilinear shapes • Counting squares • Measure perimeter. • Calculate perimeter. • Area of rectangles. • Area of compound shapes. • Area of irregular shapes.

National Curriculum Link

- Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.
- Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.
- Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000.
- Solve number problems and practical problems that involve all of the above.
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

- Add and subtract numbers mentally with increasingly large numbers.
- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

- Solve comparison, sum and difference problems using information presented in a line graph.
- Complete, read and interpret information in tables including timetables.

- Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers.
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
- Establish whether a number up to 100 is prime and recall prime numbers up to 19.
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
- Multiply and divide numbers mentally, drawing upon known facts.
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
- Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³).
- Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes.
- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
- Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes.



Year 5 – Spring Overview

	Week 1 - 3 BLOCK 1	Week 4 - 10 BLOCK 2	Week 10 - 12 BLOCK 5
	Number: Multiplication and Division	Number: Fractions	Number: Decimals and Percentages
White Rose Maths Small Steps	<ul style="list-style-type: none"> Multiply by 2 digits by 1 digit Multiply by 3 digits by 1 digit Divide by 2 digits by 1 digit Divide 3 digits by 1 digit Multiply 4-digits by 1-digit. Multiply 2-digits (area model). Multiply 2-digits by 2-digits. Multiply 3-digits by 2-digits. Multiply 4-digits by 2-digits. Divide 4-digits by 1-digit. Divide with remainders. 	<ul style="list-style-type: none"> What is a fraction? Equivalent fraction s Fractions greater than 1 Calculate fractions of a quantity Equivalent fractions. Improper fractions to mixed numbers. Mixed numbers to improper fractions. Number sequences. Compare and order fractions less than 1. Compare and order fractions greater than 1. Add and subtract fractions. Add fractions within 1. Add 3 or more fractions. Add fractions. Add mixed numbers. Subtract fractions. Subtract mixed numbers. Subtract – breaking the whole. Subtract 2 mixed numbers. Multiply unit fractions by an integer. Multiply non-unit fractions by an integer. Multiply mixed numbers by integers. Fraction of an amount. Using fractions as operators. 	<ul style="list-style-type: none"> Decimals up to 2 d.p. Decimals as fractions (1). Decimals as fractions (2). Understand thousandths. Thousands as decimals. Rounding decimals. Order and compare decimals. Understand percentages. Percentages as fractions and decimals. Equivalent F.D.P.

Year 5 – Spring Overview

National Curriculum Link

- Multiply and divide numbers mentally drawing upon known facts.
- Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers.
- Divide numbers up to 4 digits by a one digit number using the formal written method of short division and interpret remainders appropriately for the context.
- Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.

- Compare and order fractions whose denominators are multiples of the same number.
- Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example $\frac{7}{5} + \frac{1}{5} = \frac{8}{5} = 1\frac{3}{5}$].
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Read and write decimal numbers as fractions [for example $0.71 = \frac{71}{100}$].
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

- Read, write, order and compare numbers with up to three decimal places.
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- Round decimals with two decimal places to the nearest whole number and to one decimal place.
- Solve problems involving number up to three decimal places.
- 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 $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{3}{4}$ and those fractions with a denominator of a multiple of 10 or 25.

Year 5 – Summer Overview

	Week 1 - 4 BLOCK 1	Week 5 - 7 BLOCK 2	Week 8-9 BLOCK 3	Week 9- 10 BLOCK 4	Week 11-12 BLOCK 5
	Number: Decimals	Geometry: Properties of Shape	Geometry: Position and Direction	Measurements: Converting Units	Measurement: Volume
White Rose Maths Small Steps	<ul style="list-style-type: none"> Adding decimals within 1. Subtracting decimals within 1. Complements to 1. Adding decimals – crossing the whole. Adding decimals with the same number of decimal places. Subtracting decimals with the same number of decimal places. Adding decimals with a different number of decimal places. Subtracting decimals with a different number of decimal places. Adding and subtracting whole and decimals. Decimal sequences. Multiplying decimals by 10, 100 and 1000. Dividing decimals by 10, 100 and 1,000. 	<ul style="list-style-type: none"> Identify angles Compare and order angles Triangles Quadrilaterals Measuring angles in degrees. Measuring with a protractor (1). Measuring with a protractor (2). Drawing lines and angles accurately. Calculating angles on a straight line. Calculating angles around a point. Calculating lengths and angles in shapes. Regular and irregular polygons. Reasoning about 3D shapes. 	<ul style="list-style-type: none"> Describe position Draw on a grid Lines of symmetry Complete a symmetric figure Position in the first quadrant. Reflection. Reflection with coordinates. Translation. Translation with coordinates. 	<ul style="list-style-type: none"> Kilometres Kilograms and kilometres. Milligrams and millilitres. Metric units. Imperial units. Converting units of time. Timetables. 	<ul style="list-style-type: none"> What is volume? Compare volume. Estimate volume. Estimate capacity.
National Curriculum Link	<ul style="list-style-type: none"> Solve problems involving number up to three decimal places. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. 	<ul style="list-style-type: none"> Identify 3D shapes, including cubes and other cuboids, from 2D representations. Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees. Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90°. 	<ul style="list-style-type: none"> Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. 	<ul style="list-style-type: none"> Convert between different units of metric measure [for example, km and m; cm and m; mm; g and kg; l and ml]. Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Solve problems involving converting between units of time. 	<ul style="list-style-type: none"> Estimate volume [for example using 1cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]. Use all four operations to solve problems involving measure.



Year 5 – Summer Overview

