

Our Mathematics curriculum aims to ensure all pupils:

- Our Maths curriculum aims to ensure that all pupils:
- Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument,
   justification or proof using mathematical language
- Can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication,
   including breaking down problems into a series of simpler steps and persevering in seeking solutions.



	Autumn 1		Autumn 2
Unit 1 Weeks 1-3 Place Value	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.	Unit 1 Weeks 1-2 Multiplication and Division Part One	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.
Unit 2 Weeks 4-5 Addition and Subtraction	Add whole numbers with more than 4digits (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	Unit 2 Weeks 3-4 Area and Perimeter	Measure perimeter. Calculate perimeter. Area of rectangles. Area of compound shapes. Area of irregular shapes.
Unit 3 Weeks 6-7 Statistics	Read and interpret line graphs. Draw line graphs. Use line graphs to solve problems. Read and interpret tables. Two way tables. Timetables.	Unit 3 Weeks 5-7 Multiplication and Division Part Two	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 remainder





	Spring 1		Spring 2
Unit 1 Weeks 1-6 Fractions	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.	Unit 1 Weeks 1-2 Decimals and Percentages  Unit 2 Weeks 3-6 Decimals	Decimals up to 2 d.p. Decimals as fractions. Understand thousandths. Thousands as decimals. Rounding decimals. Order and compare decimals. Understand percentages. Percentages as fractions and decimals. Equivalent F.D.P.  Adding decimals within 1. Subtracting decimals within 1. Complements to 1. 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. 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.

	Summer 1		Summer 2
Unit 1 Weeks 1-3 Geometry Properties of Shape	Measuring angles in degrees with a protractor. 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.	Unit 1 Week 1 Measurement Mass and Length	Grams and Kilograms.  Learning the symbols for g and Kg.  Converting between different measurements.  Rounding and estimating with measurements.  Performing the 4 operations involving measurements.  Metric and imperial.
Unit 2 Weeks 4-5 Geometry Position and Direction	Position in the first quadrant. Reflection. Reflection with coordinates. Translation. Translation with coordinates.	Unit 1 Week 2 Measurement Time	Seconds, minutes, hours. How many days in each month. Learning the symbols for time. Converting between different measurements. Rounding and estimating with measurements. Performing the 4 operations involving measurements.
		Unit 1 Week 3 Volume	What is volume? Compare volume. Estimate volume. Estimate capacity. Metric and imperial.
		Unit 1 Weeks 4 - 7	Enterprise project Consolidation of revision of topics Arithmetic fluency End of year assessments Transition unit

Garden Suburb Junior School		Mathematics Curriculum Overview 2021 – 2022		Year Group: 5	ARD P
		Unit 1 Weeks 5-6 Measurement Volume & Capacity	What is volume? Compare volume. Estimate volume. Estimate capacity. Metric and imperial.		A Hard To Succe