



ST CHARLES' CATHOLIC PRIMARY SCHOOL



MATHS MEDIUM TERM PLANNING

	AUTUMN	SPRING	SUMMER
EYFS	Just Like Me Number <ul style="list-style-type: none"> Match and Sort Compare Amounts Measure, Shape and Spatial Thinking <ul style="list-style-type: none"> Compare size, mass and capacity Exploring pattern 	Alive in 5 Number <ul style="list-style-type: none"> Introducing zero Comparing numbers to 5 Composition of 4 and 5. Measure, Shape and Spatial Thinking <ul style="list-style-type: none"> Compare mass (2) Compare capacity (2) 	To 20 and Beyond Number <ul style="list-style-type: none"> Building numbers beyond 10 Counting patterns beyond 10. Spatial Thinking <ul style="list-style-type: none"> Spatial Reasoning (1) Match, rotate, manipulate
	It's Me 1 2 3! Number <ul style="list-style-type: none"> Representing 1,2 and 3 Comparing 1,2 and 3 Composition of 1,2 and 3. Measure, Shape and Spatial Thinking <ul style="list-style-type: none"> Circles and Triangles Positional Language 	Growing 6 7 8 Number <ul style="list-style-type: none"> 6,7 and 8 Combining 2 amounts Making pairs Measure, Shape and Spatial Thinking <ul style="list-style-type: none"> Length and height Time. 	First Then Now Number <ul style="list-style-type: none"> Adding more Taking away Spatial Thinking <ul style="list-style-type: none"> Spatial Reasoning (2) Compose and decompose
	Light and Dark Number <ul style="list-style-type: none"> Representing numbers to 5. One more and less. Measure, Shape and Spatial Thinking <ul style="list-style-type: none"> Shapes with 4 sides Time. 	Building 9 and 10 Number <ul style="list-style-type: none"> Counting to 9 and 10 Comparing numbers to 10 Bonds to 10. Measure, Shape and Spatial Thinking <ul style="list-style-type: none"> 3D- shapes Patterns 	Find my Pattern Number <ul style="list-style-type: none"> Doubling Sharing and grouping Even and odd Spatial Thinking <ul style="list-style-type: none"> Spatial Reasoning (3) Visualise and build.
			On the Move Number <ul style="list-style-type: none"> Deepening understanding Patterns and relationships Spatial Thinking

			<ul style="list-style-type: none"> Spatial Reasoning (4) Mapping
YEAR 1	Number and Place Value (Within 10) <ul style="list-style-type: none"> Count to 10 forwards and backwards from any number Identify one more and one less, given a starting number to 10 Read and write numbers 1 to 10 in numbers and words (phonetically plausible) Find and show numbers using objects and pictures including number lines and use: equal to, more than, less than (fewer), most, least Read, write numbers to 10 in digits, numerals. 	Number and Place Value (Within 20, moving on to 50 later in the term) <ul style="list-style-type: none"> Count to 20 (50) forwards and backwards from any number Identify one more and one less, given a starting number to 20 (50) Read and write numbers 1 to 20 (50) in numbers and words (phonetically plausible) Find and show numbers using objects and pictures including number lines and use: equal to, more than, less than (fewer), most, least <ul style="list-style-type: none"> Read, write numbers to 20 (50) in digits, numerals. Addition and Subtraction (Within 20) <ul style="list-style-type: none"> Use number bonds and matching subtraction facts to 20 Add and subtract 1 digit and 2 digit numbers to 20, including zero Tell how much different coins and notes are worth Add and subtract coins to the value of 20p Read, write and understand number statements using + - = Answer problems that use addition and subtraction, including missing number problems, using objects and pictures 	Multiplication and Division <ul style="list-style-type: none"> Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. Number and Place Value (Within 100) <ul style="list-style-type: none"> Count to 100 forwards and backwards from any number Identify one more and one less, given a starting number to 100 Read and write numbers 1 to 100 in numbers and words (phonetically plausible) Find and show numbers using objects and pictures including number lines and use: equal to, more than, less than (fewer), most, least Read, write numbers to 100 in digits, numerals.
	Addition and Subtraction (Within 10) <ul style="list-style-type: none"> Use number bonds and matching subtraction facts to 20 Add and subtract 1 digit and 2 digit numbers to 20, including zero Tell how much different coins and notes are worth Add and subtract coins to the value of 20p Read, write and understand number statements using + - = Answer problems that use addition and subtraction, including missing number problems, using objects and pictures 	Number and Place Value (Within 100) <ul style="list-style-type: none"> Count to 100 forwards and backwards from any number Identify one more and one less, given a starting number to 100 Read and write numbers 1 to 20 in numbers and words (phonetically plausible) Find and show numbers using objects and pictures including number lines and use: equal to, more than, less than (fewer), most, least Read, write numbers to 100 in digits, numerals. Count in jumps of 2, 5 and 10 	Fractions <ul style="list-style-type: none"> Find and name half ($\frac{1}{2}$) of an object, shape and amount Find and name quarter ($\frac{1}{4}$) as one of four equal parts of an object, shape and amount
	Shape <ul style="list-style-type: none"> Recognise and name common 2D shapes such as rectangles, squares, circles, triangles, pentagons, 	Measurement <ul style="list-style-type: none"> Compare, describe and solve practical problems for: 	Time <ul style="list-style-type: none"> Sequence events in chronological order using language [for example, before and after, next, first,

	<p>hexagons</p> <ul style="list-style-type: none"> • Sort 2D shapes • Recognise and name common 3D shapes such as cuboids, pyramids, spheres and cylinder • Sort 3D shapes 	<ul style="list-style-type: none"> ➤ lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ➤ mass/weight [for example, heavy/light, heavier than, lighter than] ➤ capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] ➤ time [for example, quicker, slower, earlier, later] • Measure and begin to record the following: <ul style="list-style-type: none"> ➤ lengths and heights ➤ mass/weight ➤ capacity and volume ➤ time (hours, minutes, seconds) • Recognise and know the value of different denominations of coins and notes 	<p>today, yesterday, tomorrow, morning, afternoon and evening]</p> <ul style="list-style-type: none"> • Recognise and use language relating to dates, including days of the week, weeks, months and years • Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
YEAR 2	<p>Number and Place Value</p> <ul style="list-style-type: none"> • Find and show numbers using different equipment such as number lines and number squares • Read and write numbers to 100 in digits and words (spelt correctly) • Say 10 more/less than any number up to 100 • Find the place value of each digit of a number with tens and units • Use place value and number facts to answer questions • Compare amounts using these signs $< > =$ • Compare and order numbers from 0 to 100 using $< > =$ • Derive and use related facts to 100 e.g $90+10$ $70+30$ $100-20=80$ $100-40=60$ $45+55$ $35+65$ $100-55=45$ $100-75=25$ 	<p>Money</p> <ul style="list-style-type: none"> • Use the £ and p signs • Use notes and coins to make particular amounts • Find different ways for coins to add up to an amount <ul style="list-style-type: none"> • Add and subtract money and give change 	<p>Fractions</p> <ul style="list-style-type: none"> • Find, name and write fractions of a length, shape, set of objects or amount, including $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, and $\frac{3}{4}$ • Write and recognise equivalence of simple fractions ($\frac{1}{2}$s and $\frac{1}{4}$s)
	<p>Addition and Subtraction</p> <ul style="list-style-type: none"> • Recall and use addition and subtraction facts to 20 • Add and subtract a 2 digit number and tens mentally and when using objects, number lines and pictures • Add and subtract two 2 digit numbers mentally and when using objects, number lines and pictures • Add and subtract three 1 digit numbers mentally and when using objects, number lines and pictures • Show that adding 2 numbers can be done in any order but subtraction can not • Show that subtraction is the opposite of addition and use this to check my work 	<p>Multiplication and Division</p> <ul style="list-style-type: none"> • Remember and use multiplication and division facts for the 2,5 and 10 times tables and recognise odd and even numbers • Count forward and backwards in jumps of 3 from zero • Answer questions involving multiplication and division mentally and with objects • Show that multiplying 2 numbers can be done in any order but division cannot (commutative) • Answer multiplication and division problems within the tables using $\times / =$ 	<p>Time</p> <ul style="list-style-type: none"> • Compare and sequence intervals of time • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times • Know the number of minutes in an hour and the number of hours in a day.

	<ul style="list-style-type: none"> • Solve problems with addition and subtraction including those involving numbers, 	<ul style="list-style-type: none"> • Derive and use halves (even numbers) and derive and use doubles of simple 2 digit numbers 	
	<p>Properties of Shape</p> <ul style="list-style-type: none"> • Notice and explain the properties of 2D shapes e.g the number of sides and lines of symmetry (Y1 shapes plus octagon and quadrilaterals both regular and irregular) • Recognise right angles • Draw and/or construct 2D and 3D shapes • Compare and sort common 2D and 3D shapes and everyday objects (1 criteria for 1 or 2, more than 1 criteria for 3) • Notice and explain the properties of 3-D shapes e.g. the number of edges, vertices and faces (Y1 plus cones, prism, pyramid), • Spot 2-D shapes on the surface of 3-D shapes such as a circle on a cylinder and a triangle on a pyramid 	<p>Measurement – Length, mass and capacity</p> <ul style="list-style-type: none"> • Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and = 	<p>Statistics</p> <ul style="list-style-type: none"> • Read and draw simple pictograms, tally charts, block diagrams and simple tables • Ask and answer questions about totalling and comparing grouped data
			<p>Position and Direction</p> <ul style="list-style-type: none"> • Order mathematical objects in patterns and sequences • Use mathematical vocabulary to describe position, direction and movement. This could include movement in a straight line (e.g. right, left, forward, backward, turn, clock wise, anti-clock wise)
YEAR 3	<p>Number and Place Value</p> <ul style="list-style-type: none"> • Read and write numbers to 1000 in numerals / digits and words • Find, show and estimate numbers using objects and pictures • Find 10 or 100 more or less than a given number • Recognise the place value of each digit of a number with hundreds, tens and units • Compare and order numbers up to 1000 • Round numbers to the nearest 10/100 up to 1000. 	<p>Multiplication and Division (B)</p> <ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 3, 4 and 8 times tables • Derive and use doubles of all numbers up to 100 and their corresponding halves. • Calculate multiplication and division problems, both mentally and in writing, using the times tables, including two digit numbers times one digit numbers • Multiply 2 digit by 1 digit • Solve problems, including missing number problems, involving multiplication and division, including factors and correspondence. 	<p>Fractions (B)</p> <ul style="list-style-type: none"> • Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators • Recognise and show, using diagrams, equivalent fractions with small denominators • Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] • Compare and order unit fractions, and fractions with the same denominators • Solve problems that involve all of the above.

	Addition and Subtraction <ul style="list-style-type: none"> • Add and subtract numbers in my head, including a three digit number and ones • Add and subtract numbers in my head, including a three digit number and tens • Add and subtract numbers in my head, including a three digit number and hundreds • Add and subtract numbers with up to three digits using formal column methods • Estimate the answer to a calculation and use this and inverse operations to check answers • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction • Add and subtract money giving change, using pounds and pence. I can do this with real coins and notes. 	Measurement – Length and Perimeter <ul style="list-style-type: none"> • Measure, compare, add and subtract: lengths (m/cm/mm) • Measure the perimeter of simple 2-D shapes 	Measurement – Time and Money <ul style="list-style-type: none"> • Add and subtract amounts of money to give change, using both £ and p in practical contexts • Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight • Know the number of seconds in a minute and the number of days in each month, year and leap year • Compare durations of events [for example to calculate the time taken by particular events or tasks].
	Multiplication and Division (A) <ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 3, 4 and 8 times tables • Derive and use doubles of all numbers up to 100 and their corresponding halves. • Calculate multiplication and division problems, both mentally and in writing, using the times tables, including two digit numbers times one digit numbers • Multiply 2 digit by 1 digit • Solve problems, including missing number problems, involving multiplication and division, including factors and correspondence. 	Fractions (A) <ul style="list-style-type: none"> • Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators • Recognise and show, using diagrams, equivalent fractions with small denominators • Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] • Compare and order unit fractions, and fractions with the same denominators • Solve problems that involve all of the above. 	Properties of Shape <ul style="list-style-type: none"> • Draw 2D shapes and make 3D shapes with modelling materials • Recognise 3D shapes in different orientations and describe them • Recognise angles as properties of shape. I know that angles are a description of a turn • Spot horizontal and vertical lines and pairs of perpendicular and parallel lines
		Measurement – Mass and Capacity <ul style="list-style-type: none"> • Measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml) 	Statistics <ul style="list-style-type: none"> • Interpret and present data using bar charts, pictograms and tables • Solve one-step and two-step questions e.g. "How many more?" and "How many fewer?" e.g. using information presented in scaled bar charts, pictograms and tables

			<ul style="list-style-type: none"> Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time charts
YEAR 4	Number and Place Value <ul style="list-style-type: none"> Recognise the place value of each digit of a 4 digit number (thousands, hundreds, tens and units) Recognise the place value of any 4 digit number. Find 1000 more or less than a given number Order and compare numbers up to 100,000. Round numbers to the nearest 10, 100 or 1000 	Multiplication and Division (B) <ul style="list-style-type: none"> Recall times tables facts up to 12x12 multiplication & division) Use place value and number facts to multiply and divide mentally, including multiplying by 1 and 0; dividing by 1; and multiplying together 3 numbers Divide one and two digit numbers by 10 and 100 and can explain the effect this has on place value <ul style="list-style-type: none"> Recognise and use factor pairs and commutativity in mental calculations 	Decimals (B) <ul style="list-style-type: none"> To make a whole To write decimal numbers. To order and compare decimals.
	Addition and Subtraction <ul style="list-style-type: none"> Add and subtract numbers with up to four digits using formal column methods Use estimating and inverse operations to check my answers <ul style="list-style-type: none"> Solve two step addition and subtraction problems using different methods and explain why I used them 	Measurement: Length and Perimeter <ul style="list-style-type: none"> Convert between different units of measure [for example, kilometre to metre; hour to minute] Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres 	Measurement: Time and Money <ul style="list-style-type: none"> Estimate, compare and calculate different measures, including money in pounds and pence Read, write and convert time between analogue and digital 12- and 24-hour clocks Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
	Measurement: Area <ul style="list-style-type: none"> Find the area of rectilinear shapes by counting squares 	Fractions Including Decimals <ul style="list-style-type: none"> Recognise and show, using diagrams, families of common equivalent fractions Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number Add and subtract fractions with the same denominator Recognise and write decimal equivalents of any number of tenths or hundredths Recognise and write decimal equivalents to $4\frac{1}{10}$, $2\frac{1}{10}$, $\frac{4}{10}$ Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths 	Position and Direction <ul style="list-style-type: none"> Describe positions on a 2-D grid as coordinates in the first quadrant Describe movements between positions as translations of a given unit to the left/right and up/down Plot specified points and draw sides to complete a given polygon.

		<ul style="list-style-type: none"> • Round decimals with one decimal place to the nearest whole number • Compare numbers with the same number of decimal places up to two decimal places • Solve simple measure and money problems involving fractions and decimals to two decimal places. 	
	Multiplication and Division (A) <ul style="list-style-type: none"> • Recall times tables facts up to 12x12 (multiplication & division) • Use place value and number facts to multiply and divide mentally, including multiplying by 1 and 0; dividing by 1; and multiplying together 3 numbers • Divide one and two digit numbers by 10 and 100 and can explain the effect this has on place value • Recognise and use factor pairs and commutativity in mental calculations 	Decimals (A) <ul style="list-style-type: none"> • Use place value to tenths and hundredths. To look at tenths and hundredths on a number line and a place value grid. • To divide 1 and 2 digits by 10 and 100. 	Properties of Shape <ul style="list-style-type: none"> • Identify acute and obtuse angles. I can compare and order angles up to two right angles by size • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Identify lines of symmetry in 2-D shapes presented in different orientations • Complete a simple symmetric figure with respect to a specific line of symmetry <ul style="list-style-type: none"> • Use line symmetry with two lines of symmetry
			Statistics <ul style="list-style-type: none"> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
YEAR 5	Number and Place Value <ul style="list-style-type: none"> • Count forwards/backwards in steps of powers of 10 for any given number up to 1,000,000. • Keep multiplying a number by 10 or 100 up to 1,000,000 and count back • Recognise the place value of any number up to 1,000,000. • Read, write, order and compare numbers to at least 1,000,000 (one million) and say the value of each digit • Round numbers up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000 • Solve number and practical problems that involve ordering and comparing numbers to 1 000 000, counting forwards or backwards in steps, negative numbers and rounding 	Multiplication and Division (B) <ul style="list-style-type: none"> • Multiply and divide whole and decimal numbers by 10, 100 and 1000 • Find multiples and factors of a number and can identify factors common to 2 different numbers • Recall prime numbers up to 19. • Use vocabulary relating to prime numbers, prime factors and composite numbers • Work out if any given number up to 100 is a prime number • Identify and use square and cube numbers and their notations • Solve problems involving multiplication and division including using factors and multiples, squares and cubes • Use known tables to derive other number facts. 	Properties of Shape <ul style="list-style-type: none"> • Tell the difference between regular and irregular polygons. I can do this using reasoning about equal sides and angles • Use sorting diagrams to solve problems. • Identify 3-D shapes, including cubes and other cuboids, from 2-D representations • Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • Draw given angles, and measure them in degrees (o) • Identify: <ul style="list-style-type: none"> ➤ angles at a point and one whole turn (total 360o) ➤ angles at a point on a straight line and 2 1 a turn (total 180o) ➤ other multiples of 90o

		<ul style="list-style-type: none"> • Multiply numbers with up to 4 digits by a one or two digit number using formal written methods (including long multiplication for 2 digit numbers) 29 Solve two step word problems involving all 4 operations 	
	Addition and Subtraction <ul style="list-style-type: none"> • Add and subtract 2 and 3 digit numbers in my head • Add and subtract numbers with up to 4 digits using formal written methods • Use rounding to check answers to calculations and determine levels of accuracy • Solve addition and subtraction problems needing more than one step and can work out which operation and method is the most suitable • Solve word problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign • Solve two step word problems involving all 4 operations 	Fractions (B) <ul style="list-style-type: none"> • Compare and order fractions whose denominators are all multiples of the same number • Find, name and write equivalent fractions of a given fraction including tenths and hundredths • Identify mixed numbers and improper fractions and convert from one to another such as $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$ • Add and subtract fractions whose denominators are all multiples of the same number • Multiply fractions by whole numbers using objects and pictures 	Position and Direction <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.
	Multiplication and Division (A) <ul style="list-style-type: none"> • Multiply and divide whole and decimal numbers by 10, 100 and 1000 • Find multiples and factors of a number and can identify factors common to 2 different numbers • Recall prime numbers up to 19. • Use vocabulary relating to prime numbers, prime factors and composite numbers • Work out if any given number up to 100 is a prime number • Identify and use square and cube numbers and their notations • Solve problems involving multiplication and division including using factors and multiples, squares and cubes • Use known tables to derive other number facts. • Multiply numbers with up to 4 digits by a one or two digit number using formal written methods (including long multiplication for 2 digit numbers) 29 Solve two step word problems involving all 4 operations 	Decimals and Percentages <ul style="list-style-type: none"> • To write decimals as fractions. • To order and compare decimals • To understand thousandths and thousandths as decimals. • To round decimals. • To understand percentages and write percentages as fractions and decimals. 	Decimals <ul style="list-style-type: none"> • Adding and subtracting: <ul style="list-style-type: none"> • decimals within 1. • decimals crossing the whole • with the same number of decimal places • with a different number of decimal places • Adding and subtracting wholes and decimals. • Multiplying and dividing decimals by 10, 100 and 1,000. • To work with decimal sequences.
	Fractions (A)	Measurement	Negative Numbers

	<ul style="list-style-type: none"> • Compare and order fractions whose denominators are all multiples of the same number • Find, name and write equivalent fractions of a given fraction including tenths and hundredths • Identify mixed numbers and improper fractions and convert from one to another such as $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$ • Add and subtract fractions whose denominators are all multiples of the same number • Multiply fractions by whole numbers using objects and pictures 	<ul style="list-style-type: none"> • Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes • Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] • Solve problems involving converting between units of time • 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"> • To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
		<p style="text-align: center;">Statistics</p> <ul style="list-style-type: none"> • Solve comparison, sum and difference problems using information presented in a line graph <ul style="list-style-type: none"> • Complete, read and interpret information in tables, including timetables. 	<p style="text-align: center;">Converting Units</p> <ul style="list-style-type: none"> • To convert: <ul style="list-style-type: none"> • kilograms and kilometres • millimetres and millilitres • Converting units of time. • To work with metric and imperial units.
			<p style="text-align: center;">Measurement: Volume</p> <ul style="list-style-type: none"> • To find out what volume is. • To compare volume. • To estimate volume and capacity.
YEAR 6	<p style="text-align: center;">Number and Place Value</p> <ul style="list-style-type: none"> • Read, write, order and compare numbers to at least 10,000,000 (ten million) and say the value of each digit • Round any whole number to 10, 100, 1,000, 10,000, and 100,000 • Fluently add and subtract decimal numbers and round when required to specified degree of accuracy. • Solve problems and reason about place value and number. • Use understanding of place value to multiply and divide whole numbers and decimals with up to 3 decimal places by 10, 100 and 1,000. 	<p style="text-align: center;">Ratio and Proportion</p> <ul style="list-style-type: none"> • 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 • 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. 	<p style="text-align: center;">Properties of Shape</p> <ul style="list-style-type: none"> • 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 • 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.

	<ul style="list-style-type: none"> • Explain the place value of any digit in a number with up to 3 decimal places and multiply or divide these by 10, 100 or 1000 		
	<p>Addition and Subtraction</p> <ul style="list-style-type: none"> • Add and subtract mentally with increasingly large numbers. • Add and subtract whole numbers with more than 4 digits, using formal written methods • Fluently add and subtract decimal numbers and round when required to specified degree of accuracy. • Solve word and practical problems with more than one step and operation and explain why I used them • Use estimation to check answers to calculations and determine an appropriate degree of accuracy. 	<p>Algebra</p> <ul style="list-style-type: none"> • Use simple formulae • Create and describe linear number sequences • Record missing number problems algebraically • Find pairs of numbers which complete an equation with two unknowns • Create a list of possibilities of the combination of two variables 	<p>Position and Direction</p> <ul style="list-style-type: none"> • Describe positions in all four quadrants on a full coordinate graph • Draw and translate simple shapes on the co-ordinate plane in all 4 quadrants. • Use reasoning to solve problems related to co-ordinates, reflections and translations.
	<p>Multiplication and Division</p> <ul style="list-style-type: none"> • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • Divide numbers up to 4 digits by a two-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 two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context • Perform mental calculations, including with mixed operations and large numbers • Identify common factors, common multiples and prime numbers • Use their knowledge of the order of operations to carry out calculations involving the four operations 	<p>Decimals</p> <ul style="list-style-type: none"> • To work with decimal numbers to 3 decimal places. • Multiplying and dividing decimal numbers by 10, 100 and 1,000. • To multiply and divide decimals by integers. • To change fractions to decimals and decimals to fractions. 	<p>Themed Projects, Consolidation and Problem Solving.</p>
	<p>Fractions</p> <ul style="list-style-type: none"> • 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 	<p>Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> • To convert between fractions, decimals and percentages. 	

	<ul style="list-style-type: none"> • Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1/4 \times 1/2 = 1/8$] • Divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$] • Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $3/8$] • 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 • 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. 		
	<p style="text-align: center;">Converting Units</p> <ul style="list-style-type: none"> • Converting metric measures. • Calculate with metric measures. • Miles and kilometres. • Imperial measures. 	<p>Measurement, including Area, Perimeter and Volume.</p> <ul style="list-style-type: none"> • 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 • 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 • 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]. 	

		<p>Statistics</p> <ul style="list-style-type: none">• Present, complete, read and interpret information in tables, bar charts and sorting diagrams• Interpret and construct pie charts and line graphs. I can use these to solve problems<ul style="list-style-type: none">• Calculate and interpret the mean as an average	
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