Holy Trinity and S.Silas
Maths Curriculum Overview
Year 6

Number: Number and Place Value

Counting	Understanding place value		Reading and Writing numbers		Rounding		Problem solving
Use negative numbers in context, and calculate intervals across zero	Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit	Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal place	Read, write, order and compare to at least 10,000,000 and determine the value of each digit	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals Write dates in Roman numerals	Round any whole number to a required degree of accuracy	Solve problem which require answers to be rounded to specified degrees of accuracy	Solve number problems and practical problems that involve all of the previous

Number: Addition and Subtraction

Mental Calculation	Inverse, estimating and checking answers	Problem solving
Use their knowledge of operations to carry our calculations involving the four operations	Use estimation 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 Use mathematical reasoning to investigate

Number: Multiplication and Division

Mental Calculation		Written Calculation				Properties of numbers
Perform mental calculations, including with mixed operations and large numbers	Find simple percentages of amounts, including money	Multiply multi-digit numbers up to 4 numbers by a two-digit whole number using the formal written method of long multiplication.	Divide numbers by up to 4 digits by a 1 or 2-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/long division where appropriate for the context	Interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context	Identify common factors, common multiples and prime numbers

Number: Fractions and Decimals

Comparing fractions	Comparing decimals	Rounding	Equivalence			
Compare and order fractions , including fractions < 1 Compare fractions with unlike but related denominators	Identify the value of each digit in numbers given to three decimal places	Solve problems which require answers to be rounded to specified degrees of accuracy	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination	Associate a fraction with division and calculate decimal fraction equivalents (e.g.0.3750 for a simple fraction (e.g.3/8)		Recall and use equivalences between simple fractions, decimals and percentages, including in a different context

Addition and subtraction	Multiplication and Division of fractions	Multiplication and Division of decimals		
Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	Multiply simple pairs of proper fractions writing the answer in its simplest form, e.g ¼ x1/2 = 1/8 Multiply one-digit numbers with up to two decimal places by whole numbers Divide proper fractions by whole numbers, e.g. 1/3 divide by 2 = 1/6	Multiply one-digit numbers with up to two decimal places by whole numbers	Multiply and divide numbers by 10,100 and 1000 where the answers are up to three decimal places	Use written division methods in cases where the answer has up to two decimal places

Number: Algebra			Number: Ratio and Proportion	
Equations	**Formulae**	**Sequences**	**Solving problems**	

Express missing number problems algebraically	Find pairs of numbers that satisfy number sentences involving two unknowns	Enumerate all possibilities of combinations of two variables	Use simple formulae	Generate and describe linear number sequences	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.

Comparing and estimating	Measuring and calculating, including money			
Calculate, estimate and compare volume of cubes and cuboids using standard units including centimetre cubed (cm^3) and cubic metres m^3 and extending to other such units such as mm^3 km^3	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three places where appropriate	Recognise that shapes with the same areas can have different perimeters and vice versa	Calculate the area of parallelograms and triangles	Recognise when it is possible to use formulae for area and volume of shapes

Geometry :Properties of shape			
Identifying shapes	**Drawing and constructing**	**Comparing and classifying**	**Angles**

Recognise, describe and build simple 3D shapes, including making nets	Illustrate and name parts of circles including radius, diameter and circumference and know that the diameter is twice the radius	Draw 2D shapes using given dimensions and angles	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

Statistics	
Interpreting, constructing and representing data	**Problem solving**
Interpret and construct pie charts and line graphs and use these to solve problems	Calculate and interpret the mean as an average