NUMBER			
Place Value	**Addition / Subtraction**	**Multiplication / Division**	**Fractions / Decimals**
- Use negative numbers in context and calculate intervals across 0. - Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. - Round any whole number to a required degree of accuracy - e.g. to the nearest 10, 20, 50 etc. - Solve number and practical problems that involve all of the above	- Perform mental calculations, including with mixed operations and large numbers. - Solve +/- multi-step problems in contexts, deciding which operations to use. - *Explore the order of operations using brackets. e.g. 2+1x5 = 5 and (2+1) x 3 = 9* - Solve problems involving addition and subtraction. - Use estimation to check answers to calculations and determine, in the context, an appropriate degree of accuracy.	- Identify common factors, common multiples and prime numbers. - Perform mental calculations, including with mixed operations and large numbers. - Multiply numbers up to 4-digits by 2-digit numbers using long multiplication. - Divide numbers up to 4-digits by 2-digit numbers using short or long division as appropriate. -Interpret remainders as whole number remainders, fractions or by rounding, as appropriate for the context. - Use their knowledge of the order of operations to carry out calculations involving the 4 operations. - Solve problems involving multiplication & division. - Use estimation to check answers to calculations and determine, in the context, an appropriate degree of accuracy.	- Use common factors to simplify fractions. - Use common multiples to express fractions in the same denomination. - Compare and order fractions using fractions >1. - +/- fractions with different denominators and mixed numbers using the concept of equivalent fractions. e.g. 1/2+1/8 = 4/8+1/8 = 5/8 - Multiply simple pairs of proper fractions, writing the answer in its simplest form. - Divide proper fractions by whole numbers. - Associate fractions with division. e.g. A ¼ of a length = 36cm so the whole length is 36 x 4 = 144cm - Calculate decimal fraction equivalents (e.g. 0.375 = 3/8) for simple fractions. - Identify the value of each digit in numbers to 3dp. - x/÷ numbers by 10, 100 & 1000 giving answers up to 3dp. - Multiply a 1-digit number with up to 2dp by whole numbers. e.g. 0.4 x 2 = 0.8 - Use written division methods where the answer has up to 2dp. - Solve problems involving the calculation of percentages of measures and numbers. e.g. 15% of 360. - Recall and use equivalences between fractions, decimals and percentages, including in different contexts.
Ratio, Proportion and Algebra			
- Solve problems involving the relative size of 2 quantities where missing values can be found by using integer multiplication and division facts. - 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 - Use simple algebraic formulae. - Generate and describe linear number sequences. - Express missing number problems algebraically. - Find pairs of numbers that satisfy an equation with 2 unknowns. e.g. a + b = 10 - Solve problems which require answers to be rounded to specific degrees of accuracy. - solve problems involving the calculation of % and the use of % for comparison - enumerate possibilities of combinations of 2 variables			

MEASUREMENT
Measures / Money / Time
- Solve problems involving the calculation and conversion of units of measure using decimal notation up to 3dp 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 up to 3dp. - Convert between miles and km. - 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 the volume of cubes and cuboids using standard units including cm3 and m3 and extending to other units.

GEOMETRY	
Properties of Shape (incl. Angles)	**Position and Direction**
- Illustrate and name parts of circles including radius, diameter and circumference. - Know that diameter is twice the radius. - Draw 2d shapes using given dimensions and angles. - Compare and classify geometric shapes based on their properties and sizes. - Recognise, describe and build simple 3d shapes including making nets. - Find unknown angles in any triangle, quadrilateral or regular polygon. - Recognise angles where they meet at a point, are on a straight line or are vertically opposite and find missing angles. - *Calculate missing angles based on knowledge of angle sum facts. e.g. 2 angles in a triangle are 42^0 and 108^0.*	- Describe positions on a four quadrant grid using co-ordinates. - Draw and label axes in all 4 quadrants with equal scaling. - Draw and translate simple shapes on the coordinate plane and reflect them in the axes.

STATISTICS
Drawing / Extracting / Interpreting
- Construct pie charts and line graphs. - Interpret pie charts linking angles of pie charts to percentages or 360^0. - Calculate and interpret the mean as an average. - Interpret line graphs relating to 2 variables. - Use pie charts and line graphs to solve problems.