Year 6 Maths						
Term	Autumn 1		Autumn 2		Spring 1	Spring 2	Summer 1	Summer 2
Topic	Place Value (2 weeks)	Addition, Subtraction, Multiplication and division (3 weeks)	Statistics (1 week)	Shape and angles (3 weeks)	Algebra (3 week)	Position and direction (2 week)	Ratio and proportion (2 weeks)	Fractions and angles (3 weeks)	Measurement perimeter and area 4 weeks	Consolidation	Project work – what are the objectives??
Objectives	- Read, write, order and compare numbers up to 10000000 and determine the value of each digit - Round any whole number to a required degree f accuracy - Use negative numbers in context, and calculate intervals across zero - Solve number and practical problems that involve all of the above	- 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 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 short division where appropriate, interpreting remainders according to the context - Perform mental calculations, including with mixed operations and large numbers - Identify common factors, common multiplies and prime numbers - Use their knowledge of the order of operations to carry out calculations involving the four operations - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why - Solve problems involving addition, subtraction, multiplication and division - Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy	- Interpret and construct pie charts and line graphs and is these to solve problems - Calculate and interpret the mean as an average	- 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	- Use simple formulae - Generate and describe linear number - Express missing number problems algebraically - Find pairs of numbers that satisfy an equation with two unknowns - Enumerate all possibilities of combinations of two variables	- Describe positions on the full coordinate grid (all four quadrants) - Draw and translate simple shapes on the coordinate plane, and reflect them in the axes	- 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 percentage (e.g. 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, grouping knowledge of fractions	- 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 - Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. ¼ x ½ = 1/8) - Divide proper fractions by whole numbers (e.g. 1/3 ÷ 2 = 1/6) - Associate a fraction with division and calculate fraction equivalents (e.g. 0.375) for a simple fraction (e.g. ¾) - 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 requires answers to be rounded to specified degrees of accuracy - Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts - recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles'	- Solve problems involving the calculation and conversion of units to measure, using decimal notation up to three decimal places where appropriate - Use, read, write and 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 the formulae for 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, (e.g. mm³ and km³)	- Solve problems involving the calculation of percentage (e.g. of measures, and such as 15% of 360) and the use of percentages for comparison - 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 remainders, fractions, or by rounding, as appropriate for the context	- Profit and loss, value, budget, climate, marketing and salaries and conversion - Solve problems involving addition, subtraction, multiplication and division