BARNSTON PRIMARY SCHOOL MEDIUM TERM PLANNING SPRING

SUBJECT: Maths **YEAR GROUP: Yr 6** **YEAR IN CYCLE: Yearly**

	NATIONAL CURRICULUM	ADDITIONAL SCHOOL CURRICULUM
Spring	**Ratio and proportion** • solve problems involving the relative sizes of 2 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 **Algebra** use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with 2 unknowns enumerate possibilities of combinations of 2 variables **Measurement** Pupils should be taught to: • solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 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 3 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	KS3 work – area and circumference of circles for higher level children. KS3 – number work on ratio and fractions KS3 – pie chart work KS2 – pervasive number work

	standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3] **Geometry** Pupils should be taught to: · 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. **Position and direction** Pupils should be taught to: · 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 **Statistics** Pupils should be taught to: · interpret and construct pie charts and line graphs and use these to solve problems · calculate and interpret the mean as an average.	
	ENTERPRISE	**SOCIAL, SPIRITUAL, MORAL & CULTURAL**
SCHOOL DRIVERS	• Fruit to Suit - running own healthy tuck shop	Team work and co coaching during Maths treasure hunts Second partner seats used during teaching – mixed abilities before set tables