Mathematics

Year 6: Spring Term

Maths Cultural Capital = In every lesson, where possible, try to include pedagogy so pupils are expected to apply their maths knowledge and skill to different problems and subject contexts across the curriculum. Differentiation – Please see teachers' weekly planning for challenging the exceeding pupils and ensuring access for the emerging pupils. Also, refer to the SEND pupils IEP's to ensure their needs are included. Minimum expectations for AfL strategies in Maths lessons = targeted questioning, mini whiteboards, peer talk, modelling. Developing pupils' long term memory skills - use – LAST/LAST/LAST strategy linked to WALTs for the lesson.

Term	Week	National Curriculum Statement	WALT Intent	Success Criteria Impact	Key Questions and NC skills developed in the activities Implementation	Resources	Vocabulary
Spring 1	Week 1 Algebra	*Use simple formulae* *Generate and describe linear number sequences* *Express missing number problems algebraically* *Find pairs of umbers that satisfy an equation with two unknowns* *Enumerate possibilities of combinations of two variables*	WALT: 1a. *Use simple formulae* 1b. *Generate and describe linear number sequences* 1c *Express missing number problems algebraically* 1d *Find pairs of numbers that satisfy an equation with two unknowns* 1e *Enumerate possibilities of combinations of two variables*	I can use simple formulae to solve problems I can express missing numbers algebraically I can *Use simple formulae* *Generate and describe linear number sequences* *Express missing number problems algebraically* *Find pairs of umbers that satisfy an equation with two unknowns*		Digit cards counters	Positive Sum Product Commutative associative Algebraic Variable Equation Formula Unknowns Algebra Linear number sequences Nth term

				Enumerate possibilities of combinations of two variables			
	Week 2 **Fractions (including decimals and percentages)**	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Compare and order fractions, including fractions >1 Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction[for example, ³⁄₈] Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	WALT: 1a. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination 1b. Compare ad order fractions 1c. Associate a fraction with division and calculate decimal fraction equivalents 1d. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	I can use common factors to simplify fractions. I can compare and order fractions. I know how to calculate decimal equivalents I can recall and use decimal equivalences		Coloured cubes, scissors	Bar model Division Multiplication Vinculum Denominator Numerator equivalent
	Week 3 **Measurement**	Solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate Use, read, write and convert between standard units, converting measurements of	WALT: 1a. Solve problems involving the calculation and conversion of units of measure 1b. Use, read, write and convert between	I can read, write and convert between standard units I can solve problems Involving calculation of units. I can solve problems Involving the conversion of units.			Convert Conversion decimal notation calculation

		length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places	standard units.				
	Week 4 Ratio and Proportion	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 the relative sizes of two quantities ,where missing values can be found by using integer multiplication and division facts Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. Solve problems involving similar shapes where the same scale factor is known or can be found.	WALT: 1a Solve problems involving the calculation of percentages 1b. Solve problems involving the relative sizes of two quantities 1c. Solve problems involving unequal sharing and grouping 1d. Solve problems involving similar shapes where the same scale factor is known or can be found.	I can solve problems involving percentages I can solve problems involving the calculation of equations I can solve problems involving the relative sizes of two quantities.		Number rods Multiplication square	Scale factor Scaling Unit fractions Percentage Quantities integer

	Week 5 **Geometry: properties of shapes** **Geometry: position and direction**	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 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	WALT: 1a. Draw 2-D shapes using given dimensions and angles 1b. Recognise, describe and build simple 3-D shapes, including making nets. 1c. Compare and classify geometric shapes. 1d. Illustrate and name parts of circles. 1d. Describe positions on the full coordinate grid	I can use given dimensions to draw 2D shapes. I can build simple 3D shapes I can compare and classify geometric shapes I can illustrate and name parts of a circle. I can describe on a full quadrant		Compass Protractors 3 D nets 3 D shapes	Dimension Angles Nets Geometric Properties Radius Diameter Circumference Coordinate Quadrant Translate Axes reflect
	Week 6 Measurement	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimeters (cm³) and cubic metres (m³) and extending to other	WALT: Calculate, estimate and compare volume of cubes and cuboids using standard units,	I can compare and calculate volume of cubes in standard units. I can estimate the volume of cubes using standard units.			Volume Cubes Standard units Cubic metres/centimetres Mm³

		units,[for example, mm^3 and km^3] Solve problems involving similar shapes where the scale factor is known or can be found.					
	Ratio and proportion						
Spring 2	Week 1						
	Week 2						
	Week 3						
	Week 4						
	Week 5						
	Week 6						