

Year 7 Foundation Scheme of Learning

	Week	Topic	Notes	Forensic Learning Points	
Term 1	1	Initial assessment + feedback			
	2	Sets and Venn diagrams	Drawing Venn diagrams. Introduce some set notation. Inc. union and intersection questions in context	Complete a Venn diagram Venn diagram problem	
	3	Mental and written methods	Column addition/subtraction. Short/long multiplication. Bus stop division. Extend to decimal and fractional remainders		
	4	Powers of 10	Multiply and divide by 10, 100, 1000 by moving numbers in the columns. Inc. changing metric units	Write a fraction as a decimal Write a decimal as a fraction Problem involving fractions, percentages and ratio	
	5	Negative numbers	Four rules of negatives and co-ordinates in 4 quadrants	Identify the coordinates of a point	
	6	Order of operations	BODMAS		
	7	Accuracy	Rounding to a given number of decimal places/significant figures and estimation	Round to the nearest whole number Round a given number to the nearest thousand	
	HALF TERM				
	8	Ratio and proportion	Simplifying ratios and dividing in a given ratio using growing method	Find a fraction from a ratio Word problem involving ratio Problem involving ratio	
	9	Indices	Powers and roots, mentally and using a calculator. Basic index laws.	Simplify an expression involving indices	
	10	Revision, exam, review			
	11	Prime factorisation, HCF and LCM	Prime numbers, factors (factor bugs) and multiples. Product of prime factors, HCF & LCM from lists.	Factorise an expression Write a number as a product of its prime factors	
	12	Algebraic techniques (1)	Substitution (JBE dice substitution activity). Solving one and two step linear equations. Expanding single brackets	Expand an expression Expand three pairs of brackets	
	13	Algebraic techniques (2)	Substitution (JBE dice substitution activity). Solving one and two step linear equations. Expanding single brackets	Solve a linear equation Change the subject of an equation	
14	Fractions and percentages (1)	Recognising equivalent fractions and calculating fractions of amounts. Cover all four calculation rules, inc. mixed and improper fractions. Finding percentages of an amount and express a number as part of a whole as a percentage.	Write a fraction as a decimal Write a decimal as a fraction Problem involving fractions, percentages and ratio		
CHRISTMAS					
Term 2	15	Fractions and percentages (2)	Recognising equivalent fractions and calculating fractions of amounts. Cover all four calculation rules, inc. mixed and improper fractions. Finding percentages of an amount and express a number as part of a whole as a percentage.	Word problem involving fractions, percentages and money Write a fraction as a percentage Problem involving fractions, percentages and ratio	
	16	Probability	Basic probability and sample space diagrams (Great Horse Race activity)	Use a probability scale Use a Venn diagram to find a probability Complete a probability tree diagram	
	17	Perimeter and area (1)	Recap perimeter and area of 2D shapes, including composite shapes. Inc. surface area of cubes, cuboids and		
	18	Perimeter and area (2)	Recap perimeter and area of 2D shapes, including composite shapes. Inc. surface area of cubes, cuboids and triangular prisms	Geometrical problem involving triangles, circles and area Problem involving a heptagon, area and angles	
	19	Volume	Start by counting cubes, leading to calculating volumes of cubes, cuboids and triangular prisms	Word problem involving proportion and volume Find the volume of a cuboid Problem involving a cylinder, volume and ratio	
	20	Numeracy(1)	Topics to be chosen based on the needs of your group. Wordy problems involving simple calculations.	Word problem involving fractions and weight Word problem involving time	
	HALF TERM				
	21	Numeracy (2)	Topics to be chosen based on the needs of your group. Wordy problems involving simple calculations.		
	22	Transformations (1)	Cover all 4 transformations	Reflect a shape in a mirror line	
	23	Transformations (2)	Cover all 4 transformations		
	24	Angle basics	Drawing and measuring angles (inc. terminology: acute, reflex, obtuse, right-angle). Drawing accurate pie charts		
	25	Revision, exam, review			
	26	Angles (1)	Angles round a point, on a line, vertically opposite and in a triangle (inc. isosceles triangles). Extend to parallel lines if possible	Identify congruent triangles Work out the size of an angle that lies on a straight line Problem involving similar triangles	
27	Angles (2)	Angles round a point, on a line, vertically opposite and in a triangle (inc. isosceles triangles). Extend to parallel lines if possible			
EASTER					
Term 3	28	Sequences (1)	Describing term-to-term rule. Finding a given term in a sequence. Nth term. Investigations (Pond Borders and Matchsticks)	Find an expression for the nth term of an arithmetic sequence	
	29	Sequences (2)	Describing term-to-term rule. Finding a given term in a sequence. Nth term. Investigations (Pond Borders and Matchsticks)	Find an expression for the nth term of an arithmetic sequence	
	30	Averages	Mean, median, mode and range. Mean from frequency tables and grouped data	Problem involving the mean	
	31	Inequalities (1)	On a number line and solving (JBE matching activity). Recap solving simple two step equations leading to solving inequalities	Reflect a shape in a mirror line	
	32	Inequalities (2)	On a number line and solving (JBE matching activity). Recap solving simple two step equations leading to solving inequalities		
	HALF TERM				
	33	Revision, exam, review			
	34	Percentage calculations	Review percentages from earlier in the year and extend to percentage increase/decrease and percentage change.	Word problem involving fractions, percentages and money Write a fraction as a percentage Problem involving fractions, percentages and ratio	
	35	Algebra (1)	Continue/recap solving linear equations, extending to the unknown on both sides. Expanding single and double brackets	Solve a linear equation	
	36	Algebra (2)	Continue/recap solving linear equations, extending to the unknown on both sides. Expanding single and double brackets	Solve a linear equation Change the subject of an equation	
	37	Bar charts	Drawing and interpreting bar charts (inc. comparative and dual bar charts)	Write down two things that are wrong with a given bar chart	
	38	Enrichment Week			
	39	Review	Display work/problem solving activities.		