

**Year 8 Foundation Scheme of Learning**

	Week	Topic	Notes	
Term 1	1	Indices	Laws of indices, extend to negative indices	
	2	Standard form	Writing and calculating in standard form	
	3	Prime factorisation, HCF and LCM	Product of prime factors. Extend to using Venn diagrams to find HCF and LCM	
	4	Percentages	Percentage of amounts, percentage increase/decrease using multipliers	
	5	Expanding and simplifying	Recap simplifying expressions, expanding single and double brackets	
	6	Angles (1)	Angles around a point, in a triangle, in quadrilaterals. Extend to angles in parallel lines and interior/exterior angles in polygons	
	7	Angles (2)	Angles around a point, in a triangle, in quadrilaterals. Extend to angles in parallel lines and interior/exterior angles in polygons	
	<b>HALF TERM</b>			
	8	Numeracy and Investigations	Topics to be chosen based on the needs of your group. Wordy problems involving simple calculations.	
	9	<b>Revision, exam, review</b>		
	10	Solving equations (1)	Solving one and two step equations. Inc. expand brackets first. Extend to unknown on both sides	
	11	Solving equations (2)	Solving one and two step equations. Inc. expand brackets first. Extend to unknown on both sides	
	12	Rearranging formulae	Inc. where the subject is in more than one term if possible	
	13	Sequences	Generating sequences and nth term of linear sequences, inc sequences going down too	
	14	Calculating with fractions (1)	Simplifying fractions. Fractions of amounts. Converting between improper fractions and mixed numbers. Four rules with fractions, extend to include mixed numbers if possible	
15	Calculating with fractions (2)	Simplifying fractions. Fractions of amounts. Converting between improper fractions and mixed numbers. Four rules with fractions, extend to include mixed numbers if possible		
<b>CHRISTMAS</b>				
Term 2	16	Using negative numbers	Four rules with negative numbers	
	17	Substitution	Inc forming expressions. Substituting with negatives if possible too	
	18	Circles (1)	Circumference and area of circles. Inc. key terminology. Use of circle terminology. Focus on problem solving questions.	
	19	Circles (2)	Circumference and area of circles. Inc. key terminology. Use of circle terminology. Focus on problem solving questions.	
	20	<b>Revision, exam, review</b>		
	21	Linear graphs	Drawing horizontal and vertical lines (knowing the equations). Calculating gradients and $y = mx + c$	
	<b>HALF TERM</b>			
	22	Similarity	Inc. forming algebraic equations to solve	
	23	Probability	Recap adding/subtracting fractions then probability trees with independent and dependent events	
	24	Quadratics (1)	Recap expanding double brackets extending to expanding triple brackets (extension). Factorising double brackets. Solve quadratic equations by factorising	
	25	Quadratics (2)	Recap expanding double brackets extending to expanding triple brackets (extension). Factorising double brackets. Solve quadratic equations by factorising	
	26	Ratio (1)	Sharing in a given ratio, given one ratio, getting a fraction from a ratio. Combining ratios	
	27	Ratio (2)	Sharing in a given ratio, given one ratio, getting a fraction from a ratio. Combining ratios	
28	Pythagoras	Recap from year 7. Inc. problem solving such as diagonal of a rectangle		
<b>EASTER</b>				
Term 3	29	Inequalities	Drawing on a number line and solving	
	30	Numeracy and Investigations	Topics to be chosen based on the needs of your group. Wordy problems involving simple calculations.	
	31	Averages (1)	Recap mean, median, mode and range. Mean of frequency data and grouped data. Median of frequency data.	
	32	Averages (2)	Recap mean, median, mode and range. Mean of frequency data and grouped data. Median of frequency data.	
	<b>HALF TERM</b>			
	33	<b>Revision, exam, review</b>		
	34	Displaying data (1)	Two-way tables and stem and leaf diagrams (inc. finding median from a stem and leaf diagram). Scatter graphs and correlation. Can look at time series graphs as an extension.	
	35	Displaying data (2)	Two-way tables and stem and leaf diagrams (inc. finding median from a stem and leaf diagram). Scatter graphs and correlation. Can look at time series graphs as an extension.	
	36	Proportionality	Inc. both direct and inverse proportion problems	
	37	Simple and compound interest	Including use of multipliers	
	38	<b>Enrichment Week</b>		
39	Review	Display work/problem solving activities		