

Year 8 Intermediate Scheme of Learning

	Week	Topic	Notes	
Term 1	1	Indices	Inc. fractional and negative indices	
	2	Standard form	Writing and calculating in standard form inc problem solving	
	3	Angles	Parallel lines and interior/exterior angles of polygons. Use $180(n-2)$ method for angle sum	
	4	Simple and compound interest	Inc. use of multipliers	
	5	Expanding and factorising quadratics	Extend to expanding triple brackets	
	6	Solving quadratics (1)	By factorising and using the quadratic formula	
	7	Solving quadratics (2)	By factorising and using the quadratic formula	
	8	Probability	Sample space diagrams, two-way tables and tree diagrams	
	HALF TERM			
	9	Revision, exam, review		
	10	Probability	relative frequency, expected outcomes	
	11	Averages from tables	Inc. grouped data and median from a table	
	12	Displaying data	Stem and leaf diagrams (inc. finding median) and scatter graphs	
	13	Circumference, area and volume (1)	Area and circumference of circles and sectors. Cover volume and surface area of cylinders	
	14	Circumference, area and volume (2)	Area and circumference of circles and sectors. Cover volume and surface area of cylinders	
15	Sequences	Recap nth term of linear and introduce quadratic sequences		
CHRISTMAS				
Term 2	16	Linear graphs (1)	Drawing linear graphs and use of $y = mx + c$, using table method and the gradient/intercept method. <i>Extend to finding the equation when only given two points and focus on problem solving.</i>	
	17	Linear graphs (2)	Drawing linear graphs and use of $y = mx + c$, using table method and the gradient/intercept method. <i>Extend to finding the equation when only given two points and focus on problem solving.</i>	
	18	Surds (1)	Inc. rationalising denominators	
	19	Surds (2)	Inc. rationalising denominators	
	20	Revision, exam, review		
	21	Ratio	Focus on problem solving - wordy questions and conjoined problems	
	HALF TERM			
	22	Percentages (1)	Review basic percentages. Interest calculations, reverse percentages, percentage change.	
	23	Percentages (2)	Review basic percentages. Interest calculations, reverse percentages, percentage change.	
	24	Calculating with fractions	Cover all four calculation rules, inc. mixed and improper fractions	
	25	Algebraic fractions (1)	Start with the basics of simplifying, but extend to adding/subtracting/multiplying/dividing	
	26	Algebraic fractions (2)	Start with the basics of simplifying, but extend to adding/subtracting/multiplying/dividing	
	27	Similarity (1)	Find missing side lengths. Extend to area and volume scale factors	
28	Similarity (2)	Find missing side lengths. Extend to area and volume scale factors		
EASTER				
Term 3	29	Direct and inverse proportion	From a table. Inc. squares and roots	
	30	Pie charts	Drawing and interpreting pie-charts	
	31	Recurring decimals to fractions	Change recurring decimals to fractions where the denominator is not 1/9, 1/99	
	32	Pythagoras and trigonometry	Recap Pythagoras (from year 7) and lead into SOHCAHTOA. Focus on problem solving	
	HALF TERM			
	33	Revision, exam, review		
	34	Pythagoras and trigonometry	Continue work on SOHCAHTOA, inc. bearings	
	35	Inequalities	On a number line and solving. Extend to graphical inequalities (horizontal and vertical lines)	
	36	Simultaneous equations (1)	Inc. solving graphically	
	37	Simultaneous equations (2)	Inc. solving graphically	
	38	Enrichment Week		
39	Review	Display work/problem solving activities		