Year 9 Maths Curriculum

This document provides an overview of the key topics your child will study in Year 9.

Term 1

Term	Block	Unit	Topics	Sparx Code	R	A	G
Term 1	Percentages	Percentage change	Percentage change without a calculator	U773			
			Percentage change with a calculator	U671			
			Finding original values in percentage calculations	U286			
			Finding the percentage an amount has been changed by	U278			
			Simple interest calculations	U533			
	Probability	Theoretical and experimental probability	Using probability phrases	M655			
			Writing probabilities as fractions	M941			
			Writing probabilities as fractions, decimals and percentages	M938			
			Probabilities of mutually exclusive events	M755			
			Sample space diagrams	M718			
			Expected results from repeated experiments	U166			
			Calculating experimental probabilities	U580			
			Frequency trees	U280			
	Standard form	Calculations with standard form	Multiplying and dividing numbers in standard form	U264			
			Adding and subtracting numbers in standard form	U290			
			Standard form with a calculator	U161			
	Inequalities	Linear inequalities	Solving inequalities with the unknown on both sides	U738			
			Solving double inequalities	U145			
			Constructing and solving inequalities	U337			
	Half Term						
	Quadratic equations	Factorising and solving quadratic equations	Factorising quadratic equations of the form x^2+bx+c	U178			
			Factorising the difference of two squares	U963			
			Factorising to solve quadratic equations of the form x^2+bx+c=0	U228			
	Formulae	Rearranging formulae	Changing the subjects of formulae with one step	U675			
			Changing the subjects of formulae with two or more steps	U181			
	Constructions	Constructing bisectors and perpendicular lines	Constructing bisectors of angles	U787			
			Constructing perpendicular bisectors and lines	U245			
	Circles	Circles and cylinders	Finding the arc length of sectors	U221			
			Finding the area of sectors	U373			
			Finding the surface area of cylinders	U464			
			Finding the volume of cylinders	U915			
	Term 1 Assessment						
	Christmas Holidays						

To prepare for their assessments, students are encouraged to:

1. Use the **R**ed, **A**mber, **G**reen columns to rate their confidence in each topic.

2. **Use the Sparx codes** to access helpful videos and practice questions, focusing on areas that need further revision. Once the Sparx task is completed, students should tick it off on their revision tracker.

Term 2

Term	Block	Unit	Topics	Sparx Code	R	A	G
Term 2	Rounding	Error intervals	Finding error intervals	U657			
			Truncating decimals	U108			
			Finding error intervals for truncated numbers	U301			
	3D shapes	Representations of 3D shapes	Plans and elevations	U743			
	Pythagoras' theorem	Pythagoras' theorem in 2D	Using Pythagoras' theorem in 2D	U385			
			Applying Pythagoras' theorem in 2D	U828			
	Ratio and proportion	Ratio	Writing and simplifying ratios	U687			
			Sharing amounts in a given ratio	U577			
		Proportion word problems	Solving direct proportion word problems	U721			
			Solving inverse proportion word problems	U357			
			Currency conversion	U610			
			Half Term				
	Linear graphs	Plotting graphs and finding equations	Plotting straight line graphs	U741			
			Finding equations of straight line graphs	U315			
			Interpreting equations of straight line graphs	U669			
	Compound measures	Speed and rates	Calculating with speed	U151			
			Calculating with rates	U256			
	Motion-time graphs	Distance-time graphs	Plotting distance-time graphs	U403			
			Interpreting distance-time graphs	U914			
			Calculating speed from distance-time graphs	U462			
			Plotting distance-time graphs using speeds	U966			
	Term 2 Assessment						
	Easter Holidays						

Term 3

Term	Block	Unit	Topics	Sparx Code	R	A	G
Term 3	Quadratic graphs	Plotting and interpreting quadratic graphs	Plotting graphs of quadratic functions	U989			
			Interpreting graphs of quadratic functions	U667			
			Solving quadratic equations graphically	U601			
	Angles and bearings	Angles	Combining angle facts	U655			
			Angles on parallel lines	U826			
			Using quadrilateral properties to find angles	U329			
			Angles in polygons	U427			
		Bearings	Measuring and drawing bearings	U525			
			Calculating bearings	U107			
	Transformations	Transforming shapes	Translation	U196			
			Reflection	U799			
			Rotation	U696			
			Enlargement by a positive scale factor	U519			
			Mixed transformations	M881			
	Similarity and congruence	Similarity	Understanding similarity	U551			
			Finding unknown sides in similar shapes	U578			
		Congruence	Understanding congruence	U790			
			Congruent triangles	U866			
			Constructing triangles	U187			
	Half Term						
	End of Year Assessment						
	Handling data and statistical diagrams	Averages and range	Calculating the range	M328			
			Calculating the median	M934			
			Finding the mode	M841			
			Calculating the mean	M940			
			Finding averages from diagrams	U854			
		Scatter graphs	Plotting scatter graphs	U199			
			Interpreting scatter graphs	U277			
			Using lines of best fit	U128			
		Collecting and presenting data	Types of data	U322			
			Presenting data and making conclusions	U571			
			Comparing populations using diagrams	U520			
			Choosing suitable averages and solving problems	U717			
		Grouped data	Interpreting frequency tables with grouped data	U312			
			Finding averages from grouped data	U877			
			Drawing and interpreting frequency polygons	U840			
	Vectors	Column vectors	Understanding column vectors	U632			
			Adding and subtracting column vectors	U903			
			Multiplying column vectors by a scalar	U564			
			Identifying parallel vectors	U660			
	Term 3 Assessment						