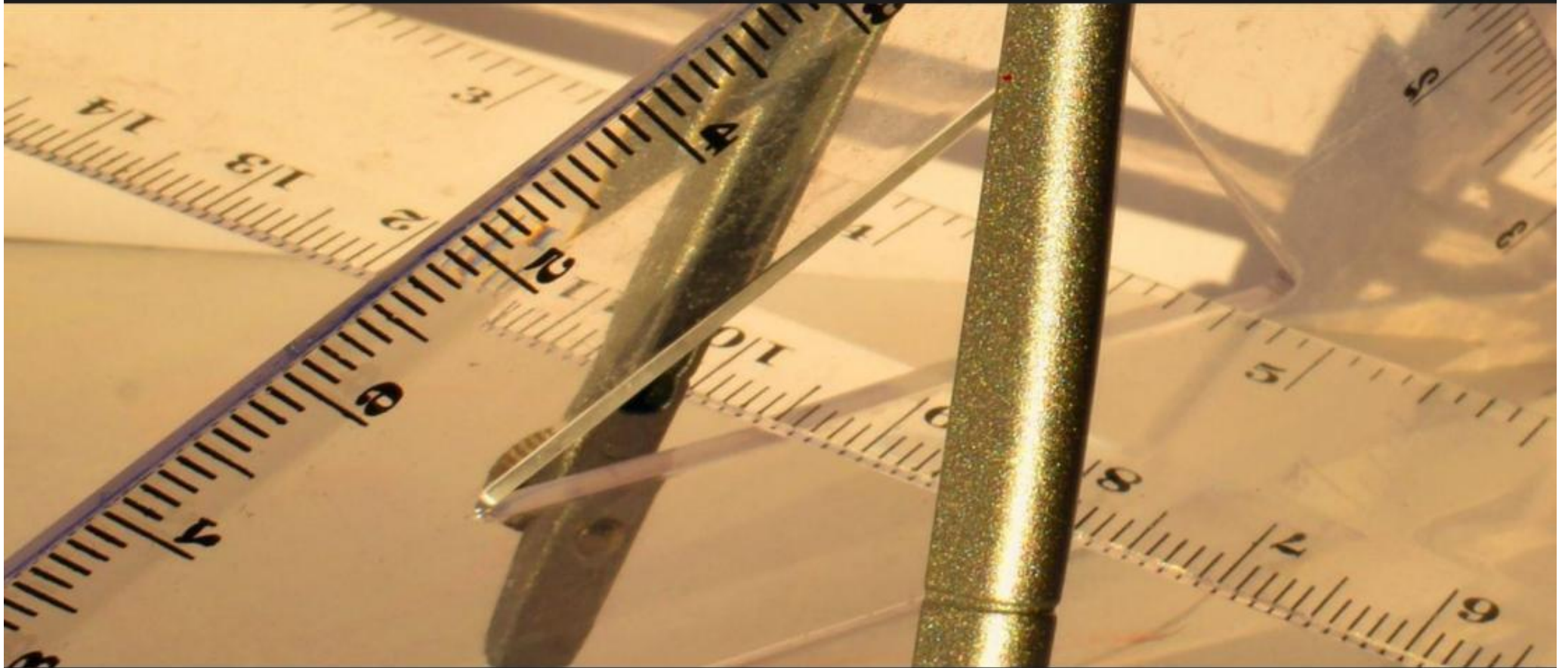


MATHS



Curriculum Aims, Delivery & Content

Year 7 Maths Curriculum

This document provides an overview of the key topics your child will study in Year 7.

Term	Block	Unit	Topics	Sparx Code	R	A	G	Revision Tracker	
Term 1	Number sense and calculations	Number sense	Using number lines	M763					
			Integer place value	M704					
			Decimal place value	M522					
			Ordering negative numbers	M527					
			Rounding integers	M111					
			Rounding decimals	M431					
		Baseline Assessment							
		Adding and subtracting	Adding integers	M928					
			Adding decimals	M429					
			Subtracting integers	M347					
			Subtracting decimals	M152					
		Multiplying	Multiplying and dividing by 10, 100 and 1000	M113					
			Multiplying using place value	M911					
			Using a written method to multiply integers	M187					
			Using a written method to multiply decimals	M803					
		Dividing	Dividing numbers into equal groups	M462					
			Using a written method to divide integers	M354					
			Dividing with remainder	M873					
			Dividing by integers to get a decimal answer	M262					
		Calculating with negative numbers	Using a written method to divide by decimals	M491					
			Adding and subtracting with negative numbers	M106					
		Order of operations	Multiplying and dividing with negative numbers	M288					
			Calculating with roots and powers	M135					
			Using the correct order of operations	M521					
			Using the commutative laws	M952					
				Using the associative laws	M409				
Half Term									
Expressions and equations	Expressions	Algebraic notation	M813						
		Algebraic terminology	M830						
		Simplifying expressions containing a single variable	M795						
		Simplifying expressions containing multiple variables	M531						
		Simplifying expressions containing non-linear terms	M949						
	Substitution	Substituting into expressions with one operation	M417						
		Substituting into expressions with multiple operations	M327						
		Substituting into algebraic formulae	M208						
	Solving equations	Substituting into real-life formulae	M979						
		Solving equations with one step	M707						
Measures	Time	Solving equations of the form $ax+b=c$	M634						
		Solving equations of the form $x/a+b=c$	M647						
		Converting units of time	M515						
		Using clocks	M892						
		Calculating with time	M627						
	Measures	Using timetables	M963						
		Using calendars	M747						
		Estimating and measuring length, mass and capacity	M828						
		Converting units of length, mass and capacity	M774						
		Using appropriate units	M487						
Term 1 Assessment									
Christmas Holiday									

Term	Block	Unit	Topics	Sparx Code	R	A	G	Revision Tracker	
Term 2	2D Shapes	Line and shape properties	Line properties	M814					
			Shape properties	M276					
			Symmetry	M523					
	Perimeter and area	Perimeter	Finding perimeters using grids	M920					
			Finding the perimeter of rectangles and simple shapes	M635					
			Finding the perimeter of compound shapes	M690					
		Area	Finding areas using grids	M900					
			Finding the area of rectangles	M390					
			Finding the area of compound shapes	M269					
			Finding the area of triangles	M610					
			Finding the area of compound shapes containing	M996					
	Coordinates	Coordinates and shapes	Reading and plotting coordinates	M618					
			Solving shape problems involving coordinates	M230					
	Factors, multiples and primes	Factors and multiples	Finding the lowest common multiple	M227					
			Finding factors and using divisibility tests	M823					
			Finding the highest common factor	M698					
		Primes	Finding prime numbers	M322					
			Prime factor decomposition	M108					
	Half Term								
	Fractions	Writing and comparing fractions	Finding fractions of shapes	M158					
			Constructing fractions	M939					
			Finding equivalent fractions	M410					
			Simplifying fractions	M671					
Ordering fractions			M335						
Converting between mixed numbers and improper		M601							
Adding and subtracting fractions	Adding and subtracting fractions	M835							
	Adding and subtracting mixed numbers	M931							
Brackets	Single brackets	Using the distributive law	M637						
		Expanding single brackets	M237						
		Expanding single brackets and simplifying expressions	M792						
		Factorising into one bracket	M100						
Term 2 Assessment									
Easter Holiday									

To prepare for their assessments, students are encouraged to:

1. Use the **Red**, **Amber**, **Green** 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	Block	Unit	Topics	Sparx Code	R	A	G	Revision Tracker	
Term 3	Angles	Angles	Types of angles	M502					
			Estimating angles	M541					
			Measuring angles	M780					
			Drawing angles	M331					
		Finding unknown angles	Angles on a line and about a point	M818					
			Vertically opposite angles	M163					
	Angles in triangles		M351						
	Handling data and statistical diagrams	Averages and range	Calculating the range	M328					
			Calculating the median	M934					
			Finding the mode	M841					
			Calculating the mean	M940					
		Tables and charts	Interpreting frequency tables and two-way tables	M899					
			Drawing and interpreting tally charts	M597					
			Drawing and interpreting pictograms	M644					
			Drawing bar charts	M480					
			Interpreting bar charts	M738					
		Collecting and presenting data	Collecting and recording data using tables	M945					
			Finding averages from frequency tables	M127					
			Choosing suitable averages and solving problems	M440					
	Half Term								
	Proportion	Proportion word problems	Solving proportion problems	M478					
	End of Year Assessment								
	Fractions, decimals and percentages	Multiplying and dividing fractions	Reciprocals	M216					
Multiplying fractions			M157						
Dividing fractions			M110						
Multiplying with mixed numbers			M197						
Dividing with mixed numbers			M265						
Fractions of amounts		Fractions of amounts without a calculator	M695						
		Fractions of amounts with a calculator	M694						
Fractions, decimals and percentages		Converting between fractions and decimals	M958						
		Converting between fractions, decimals and	M264						
		Ordering fractions, decimals and percentages	M553						
		Writing numbers as percentages of other numbers	M235						
Probability	Theoretical probability	Using probability phrases	M655						
		Writing probabilities as fractions	M941						
		Writing probabilities as fractions, decimals and	M938						
		Probabilities of mutually exclusive events	M755						
		Sample space diagrams	M718						
Term 3 Assessment									

Year 8 Maths Curriculum

This document provides an overview of the key topics your child will study in Year 8. A copy is also available in your child's Learning Journey book.

Term	Block	Unit	Topics	Sparx Code	R	A	G	Revision Tracker	
Term 1	Percentages	Percentages of amounts	Finding percentages of amounts without a calculator Finding percentages of amounts with a calculator	M437 M905					
		Percentage change	Percentage change without a calculator Percentage change with a calculator	M476 M533					
	Money	Calculating with money	Value for money	M681					
	Indices	Index laws	Index rules with positive indices	M608					
			Index rules with negative indices	M150					
			Simplifying expressions using index laws	M120					
			Simplifying algebraic fractions by cancelling common factors	M568					
	Equations	Solving equations	Solving equations of the form $(x+a)/b=c$	M401					
			Solving linear equations involving brackets	M902					
			Solving equations with the unknown on both sides	M554					
			Solving equations with the unknown in the denominator	M387					
			Constructing and solving equations	M957					
	Half Term								
	Sequences	Term-to-term rules	Term-to-term rules for numerical sequences	M381					
			Term-to-term rules for sequences of patterns	M241					
		Position-to-term rules	Substituting into position-to-term rules	M166					
			Position-to-term rules for arithmetic sequences Position-to-term rules for sequences of patterns	M991 M866					
	Ratio	Ratio	Writing and simplifying ratios	M885					
			Writing ratios in the form 1:n	M543					
			Converting between ratios, fractions and percentages	M267					
			Using equivalent ratios to find unknown amounts	M801					
		Scale diagrams	Sharing amounts in a given ratio	M525					
	Drawing and interpreting scale diagrams		M112						
	Term 1 Assessment								
	Christmas Holidays								

To prepare for their assessments, students are encouraged to:

1. Use the **Red**, **Amber**, **Green** 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.

Year 9 Maths Curriculum

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

Term 1

Term 1

Term	Block	Unit	Topics	Sparx Code	R	A	G
	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 **Red**, **Amber**, **Green** 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				
Compound measures	Speed and rates	Interpreting equations of straight line graphs	U669				
		Calculating with speed	U151				
Motion-time graphs	Distance-time graphs	Calculating with rates	U256				
		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 3

Term	Block	Unit	Topics	Sparx Code	R	A	G	
Term 3	Quadratic graphs	Plotting and interpreting quadratic graphs	Plotting graphs of quadratic functions Interpreting graphs of quadratic functions Solving quadratic equations graphically	U989 U667 U601				
	Angles and bearings	Angles	Combining angle facts Angles on parallel lines Using quadrilateral properties to find angles Angles in polygons	U655 U826 U329 U427				
		Bearings	Measuring and drawing bearings Calculating bearings	U525 U107				
	Transformations	Transforming shapes	Translation Reflection Rotation Enlargement by a positive scale factor Mixed transformations	U196 U799 U686 U519 M881				
	Similarity and congruence	Similarity	Understanding similarity Finding unknown sides in similar shapes	U551 U578				
		Congruence	Understanding congruence Congruent triangles Constructing triangles	U790 U866 U187				
	Half Term							
	End of Year Assessment							
	Handling data and statistical diagrams	Averages and range	Calculating the range Calculating the median Finding the mode Calculating the mean Finding averages from diagrams	M328 M934 M841 M940 U854				
			Scatter graphs	Plotting scatter graphs Interpreting scatter graphs Using lines of best fit	U199 U277 U126			
		Collecting and presenting data	Types of data Presenting data and making conclusions Comparing populations using diagrams Choosing suitable averages and solving problems	U322 U571 U520 U717				
			Grouped data	Interpreting frequency tables with grouped data Finding averages from grouped data Drawing and interpreting frequency polygons	U312 U877 U840			
		Vectors	Column vectors	Understanding column vectors Adding and subtracting column vectors Multiplying column vectors by a scalar Identifying parallel vectors	U632 U903 U564 U660			
		Term 3 Assessment						