

Year 9 Foundation Current Progress

	1. Number	2. Algebra	3. Graphs, Tables & Charts	4. Fractions & Percentages	5. Equations, inequalities & sequences	6. Angles	7. Averages & Range	8. Perimeter, Area & Volume 1	9. Graphs
Core knowledge:	1.1 Calculations 1.2 Decimal numbers 1.3 Place value 1.4 Factors and multiples 1.5 Squares, cubes and roots 1.6 Index notation 1.7 Prime factors	2.1 Algebraic expressions 2.2 Simplifying expressions 2.3 Substitution 2.4 Formulae 2.5 Expanding brackets 2.6 Factorising 2.7 Using expressions and formulae	3.1 Frequency tables 3.2 Two-way tables 3.3 Representing data 3.4 Time series 3.5 Stem and leaf diagrams 3.6 Pie charts 3.7 Scatter graphs 3.8 Line of best fit	4.1 Working with fractions 4.2 Operations with fractions 4.3 Multiplying fractions 4.4 Dividing fractions 4.5 Fractions and decimals 4.6 Fractions and percentages 4.7 Calculating percentages 1 4.8 Calculating percentages 2 4.9 Problem-solving	5.1 Solving equations 1 5.2 Solving equations 2 5.3 Solving equations with brackets 5.4 Introducing inequalities 5.5 More inequalities 5.6 Using formulae 5.7 Generating sequences 5.8 Using the nth term of a sequence	6.1 Properties of shapes 6.2 Angles in parallel lines 6.3 Angles in triangles 6.4 Exterior and interior angles 6.5 More exterior and interior angles 6.6 Geometrical problems	7.1 Mean and range 7.2 Mode, median and range 7.3 Types of average 7.4 Estimating the mean 7.5 Sampling	8.1 Rectangles, parallelograms and triangles 8.2 Trapezia and changing units 8.3 Area of compound shapes 8.4 Surface area of 3D solids 8.5 Volume of prisms 8.6 More volume and surface area	9.1 Coordinates 9.2 Linear graphs 9.3 Gradient 9.4 $y = mx + c$ 9.5 Real-life graphs 9.6 Distance–time graphs 9.7 More real-life graphs

Edexcel Unit	SparxMaths Strand/Sub strand	SparxMaths Topic	Topic code	R	A	G
1. Number	Number/Place value	Understanding and ordering integers	U600			
	Number/Negative numbers	Ordering negative numbers	U947			
	Number/Operations	Adding and subtracting integers	U417			
	Number/Negative numbers	Adding and subtracting with negative numbers	U742			
	Number/Operations	Multiplying and dividing with place value	U735			
	Number/Operations	Using a written method to multiply integers	U127			
	Number/Operations	Using a written method to divide integers	U453			
	Number/Negative numbers	Multiplying and dividing with negative numbers	U548			
	Number/Rounding	Rounding integers	U480			
	Number/Place value	Understanding and ordering decimals	U435			
	Number/Place value	Using number lines	U922			
	Number/Operations	Adding and subtracting decimals	U478			
	Number/Operations	Using a written method to multiply decimals	U293			
	Number/Operations	Using a written method to divide with decimals	U868			
	Number/Rounding	Rounding decimals	U298			

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	Number/Rounding	Truncating decimals	U108			
	Number/Rounding	Rounding integers using significant figures	U731			
	Number/Rounding	Rounding decimals using significant figures	U965			
	Number/Rounding	Estimating calculations	U225			
	Number/Roots and powers	Calculating with roots and powers	U851			
	Number/Index rules	Index rules with positive indices	U235			
	Number/Index rules	Index rules with negative indices	U694			
	Number/The order of operations	Using the correct order of operations	U976			
	Number/Number skills	Using a calculator	U926			
	Number/Factors, multiples and primes	Finding factors and using divisibility tests	U211			
	Number/Factors, multiples and primes	Finding prime numbers	U236			
	Number/Factors, multiples and primes	Finding the lowest common multiple (LCM)	U751			
	Number/Factors, multiples and primes	Finding the highest common factor (HCF)	U529			
	Number/Factors, multiples and primes	Prime factor decomposition	U739			
	Number/Factors, multiples and primes	Find the HCF & LCM using prime factor decomposition	U250			
2. Algebra	Algebra/Algebraic notation	Using algebraic notation	U613			
	Algebra/Simplifying expressions	Simplifying expressions by collecting like terms	U105			
	Algebra/Simplifying expressions	Simplifying expressions using index laws	U662			
	Algebra/Substituting into expressions & formulae	Substituting into expressions	U201			
	Algebra/Substituting into expressions & formulae	Substituting into algebraic formulae	U585			
	Algebra/Substituting into expressions & formulae	Substituting into real-life formulae	U144			
	Algebra/Brackets	Expanding single brackets	U179			
	Algebra/Brackets	Factorising into one bracket	U365			
3. Graphs, Tables & Charts	Statistics/Collecting and presenting data	Collecting and recording data using tables	U120			
	Ratio, Proportion and Rates of Change/Time	Reading, converting and calculating with time	U902			
	Statistics/Frequency tables	Interpreting frequency tables and two-way tables	U981			
	Statistics/Frequency tables	Interpreting frequency tables with grouped data	U312			
	Algebra/Graphs and coordinates	Reading and plotting coordinates	U789			
	Statistics/Tally charts and pictograms	Drawing and interpreting tally charts	U653			
	Statistics/Tally charts and pictograms	Drawing and interpreting pictograms	U506			
	Statistics/Bar charts	Drawing bar charts	U363			
	Statistics/Bar charts	Interpreting bar charts	U557			
	Statistics/Line graphs	Drawing line graphs	U590			
	Statistics/Line graphs	Interpreting line graphs	U193			
	Statistics/Stem-and-leaf diagrams	Drawing stem-and-leaf diagrams	U200			

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	Statistics/Stem-and-leaf diagrams	Interpreting stem-and-leaf diagrams	U909			
	Statistics/Pie charts	Drawing pie charts	U508			
	Statistics/Pie charts	Interpreting pie charts	U172			
	Statistics/Scatter graphs	Plotting scatter graphs	U199			
	Statistics/Scatter graphs	Interpreting scatter graphs	U277			
	Statistics/Scatter graphs	Using lines of best fit	U128			
4. Fractions & Percentages	Number/Fractions and mixed numbers	Finding fractions of shapes	U679			
	Number/Fractions and mixed numbers	Constructing fractions	U163			
	Number/Fractions and mixed numbers	Finding equivalent fractions	U704			
	Number/Fractions and mixed numbers	Simplifying fractions	U646			
	Number/Fractions and mixed numbers	Ordering fractions	U746			
	Number/Fractions and mixed numbers	Convert between mixed numbers and improper fractions	U692			
	Number/Fractions and mixed numbers	Adding and subtracting fractions	U736			
	Number/Fractions and mixed numbers	Adding and subtracting mixed numbers	U793			
	Number/Fractions and mixed numbers	Multiplying fractions	U475			
	Number/Fractions and mixed numbers	Multiplying with mixed numbers	U224			
	Number/Fractions and mixed numbers	Dividing fractions	U544			
	Number/Fractions and mixed numbers	Dividing with mixed numbers	U538			
	Number/Fractions and percentages of amounts	Finding fractions of amounts without a calculator	U881			
	Number/Fractions, decimals and percentages	Converting between fractions, decimals & percentages	U888			
	Number/Fractions, decimals and percentages	Ordering fractions, decimals and percentages	U594			
	Number/Fractions, decimals and percentages	Writing numbers as percentages of other numbers	U925			
	Number/Fractions and percentages of amounts	Finding percentages of amounts without a calculator	U554			
	Number/Percentage change	Percentage change without a calculator	U773			
	Number/Fractions and percentages of amounts	Finding percentages of amounts with a calculator	U349			
	Number/Percentage change	Percentage change with a calculator	U671			
	Number/Percentage change	Simple interest calculations	U533			
5. Equations, inequalities & sequences	Algebra/Algebraic notation	Using algebraic notation	U613			
	Algebra/Solving equations	Solving equations with one step	U755			
	Algebra/Solving equations	Solving equations with two or more steps	U325			
	Algebra/Solving equations	Solving equations with the unknown on both sides	U870			
	Algebra/Solving equations	Constructing and solving equations	U599			
	Algebra/Substituting into expressions & formulae	Substituting into algebraic formulae	U585			
	Algebra/Graphs and coordinates	Plotting straight line graphs	U741			

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	Algebra/Inequalities	Reading and drawing inequalities on number lines	U509			
	Algebra/Inequalities	Solving single inequalities	U759			
	Algebra/Inequalities	Solving inequalities with the unknown on both sides	U738			
	Algebra/Inequalities	Solving double inequalities	U145			
	Algebra/Inequalities	Constructing and solving inequalities	U337			
	Number/Rounding	Finding error intervals	U657			
	Number/Rounding	Finding error intervals for truncated numbers	U301			
	Algebra/Sequences	Special sequences	U680			
	Algebra/Sequences	Term-to-term rules	U213			
	Algebra/Sequences	Substituting into position-to-term rules	U530			
	Algebra/Sequences	Position-to-term rules for arithmetic sequences	U498			
	Algebra/Sequences	Position-to-term rules for sequences of patterns	U978			
	Algebra/Sequences	Position-to-term rules for geometric sequences	U958			
6. Angles	Geometry/Angles	Understanding, measuring and drawing angles	U447			
	Geometry/Line and shape properties	Line and shape properties	U121			
	Geometry/Angles	Angles on a line and about a point	U390			
	Geometry/Angles	Vertically opposite angles	U730			
	Geometry/Angles	Angles on parallel lines	U826			
	Algebra/Graphs and coordinates	Solving shape problems involving coordinates	U889			
	Geometry/Angles	Angles in triangles	U628			
	Geometry/Angles	Angles in quadrilaterals	U732			
	Geometry/Angles	Combining angle facts	U655			
	Geometry/Angles	Using quadrilateral properties to find angles	U329			
	Geometry/Geometric proofs	Geometric proofs with angle facts	U471			
	Geometry/Angles	Angles in polygons	U427			
7. Averages & Range	Statistics/Collecting and presenting data	Types of data	U322			
	Statistics/Collecting and presenting data	Sampling and bias	U162			
	Statistics/Collecting and presenting data	Collecting and recording data using tables	U120			
	Statistics/Averages and range	Calculating the range	U526			
	Statistics/Averages and range	Calculating the median	U456			
	Statistics/Averages and range	Finding the mode	U260			
	Statistics/Averages and range	Calculating the mean	U291			
	Statistics/Averages and range	Finding averages from frequency tables	U569			
	Statistics/Averages and range	Finding averages from grouped data	U877			
	Statistics/Averages and range	Finding averages from diagrams	U854			

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	Statistics/Collecting and presenting data	Comparing populations using diagrams	U520			
	Statistics/Averages and range	Choosing suitable averages and solving problems	U717			
8. Perimeter, Area & Volume 1	Ratio, Proportion & Rates of Change/Measures	Estimating and measuring	U102			
	Ratio, Proportion & Rates of Change/Measures	Converting units of length, mass and capacity	U388			
	Ratio, Proportion & Rates of Change/Measures	Converting units of area	U248			
	Ratio, Proportion & Rates of Change/Time	Reading, converting and calculating with time	U902			
	Ratio, Proportion & Rates of Change/Measures	Using appropriate units	U497			
	Geometry/Area and perimeter	Mixed problems: Finding the area and perimeter of simple shapes	U993			
	Geometry/Area and perimeter	Finding the area of compound shapes	U970			
	Geometry/Area and perimeter	Finding the perimeter of compound shapes	U351			
	Geometry/Area and perimeter	Finding the area of triangles	U945			
	Geometry/Area and perimeter	Finding area of compound shapes containing triangles	U575			
	Geometry/Area and perimeter	Finding the area of trapeziums	U265			
	Geometry/Area and perimeter	Finding the area of parallelograms	U424			
	Geometry/Surface area	Finding the surface area of cubes and cuboids	U929			
	Geometry/Surface area	Finding the surface area of prisms	U259			
	Geometry/Surface area	Finding the surface area of pyramids	U871			
	Geometry/Line and shape properties	Properties of 3D shapes	U719			
	Geometry/Nets, plans and elevations	Nets of 3D shapes	U761			
	Geometry/Volume	Finding the volume of cubes and cuboids	U786			
	Geometry/Volume	Finding the volume of prisms	U174			
9. Graphs	Algebra/Graphs and coordinates	Reading and plotting coordinates	U789			
	Algebra/Graphs and coordinates	Calculating midpoints	U933			
	Algebra/Functions	Substituting into functions	U637			
	Algebra/Graphs and coordinates	Solving shape problems involving coordinates	U889			
	Algebra/Real-life graphs	Plotting linear real-life graphs	U652			
	Algebra/Motion-time graphs	Plotting distance-time graphs	U403			
	Algebra/Motion-time graphs	Interpreting distance-time graphs	U914			
	Algebra/Motion-time graphs	Plotting velocity-time graphs	U937			
	Algebra/Motion-time graphs	Calculating speed from distance-time graphs	U462			
	Algebra/Motion-time graphs	Plotting distance-time graphs using speeds	U966			
	Algebra/Graphs and coordinates	Plotting straight line graphs	U741			
	Algebra/Graphs and coordinates	Finding equations of straight-line graphs	U315			
	Algebra/Real-life graphs	Finding equations of linear real-life graphs	U862			

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	Algebra/Graphs and coordinates	Interpreting equations of straight-line graphs	U669			
	Algebra/Graphs and coordinates	Find the equation of a straight line from its gradient & a point	U477			