

Unit 1: Factors and Powers		
Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
1.1 Prime Factor Decomposition	Prime factor decomposition	M108
	Finding the HCF and LCM using prime factor decomposition	M365
1.2 Laws of Indices	Index rules with positive indices	M608
1.3 Powers of Ten	n/a	
1.4 Calculating and Estimating	Rounding decimals	M431
	Rounding integers using significant figures	M994
	Rounding decimals using significant figures	M131
Unit 2: Working with Powers		
Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
2.1 Simplifying Expressions	Simplifying expressions containing non-linear terms	M949
2.2 More Simplifying	Simplifying expressions using index laws	M120
2.3 Expanding and Factorising	Expanding single brackets and simplifying expressions	M792
	Factorising into one bracket	M100
2.4 Substituting and Solving	Substituting into expressions with multiple operations	M327
	Substituting into algebraic formulae	M208
	Solving equations with the unknown on both sides	M554
	Solving linear equations involving brackets	M902
Unit 3: 2D Shapes and 3D Solids		
Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
3.1 Plans and Elevations	Plans and elevations	M229
3.2 Surface Area of Prisms	Finding the surface area of prisms	M661
3.3 Volume of Prisms	Finding the volume of prisms	M722
3.4 Circumference of a Circle	Identifying parts of circles	M595
	Finding the circumference of circles	M169
3.5 Area of a Circle	Finding the area of circles	M231
3.6 Cylinders	Finding the surface area of cylinders	M936
	Finding the volume of cylinders	M697
3.7 Pythagoras' Theorem	Using Pythagoras' theorem in 2D	M677
Unit 5: Transformations		
Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
5.1 Reflection and Translation	Reflection	M290
	Translation	M139
5.2 Rotation	Rotation	M910
5.3 Enlargement	Enlargement	M178
5.4 More Enlargement	Enlargement by a positive or negative scale factor	U134
5.5 Combining Transformations	Mixed transformations	M881
5.6 2D Shapes and 3D Solids	Finding unknown sides in similar shapes	M324
	Finding the perimeter and area of similar shapes	U630
Unit 6: Fractions, Decimals and Percentages		
Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
6.1 Recurring Decimals	Using recurring decimal notation	M701
	Converting fractions into recurring decimals	M922
6.2 Using Percentages	Finding percentages of amounts with a calculator	M905
	Finding original values in percentage calculations	M528
6.3 Percentage Change &	Percentage change with a calculator	M533
6.4 Repeated Percentage Change		

Unit 8: Probability

Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
8.1 Comparing Probabilities	Writing probabilities as fractions, decimals and percentages	M938
8.2 Mutually Exclusive Events	Probabilities of mutually exclusive events	M755
8.3 Estimating Probability	Expected results from repeated experiments	M206
8.4 Experimental Probability	Calculating experimental probabilities	M332
8.5 Probability Diagrams	Sample space diagrams	M718
	Probabilities from Venn diagrams	M419
8.6 Tree Diagrams	Tree diagrams for independent events	M299
	Tree diagrams for dependent events	M572

Unit 9: Scale Drawings and Measures

Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
9.1 Maps and Scales	Drawing and interpreting scale diagrams	M112
9.2 Bearings	Measuring and drawing bearings	M260
	Calculating bearings	M416
9.3 Scales and Ratio	Drawing and interpreting scale diagrams	M112
9.4 Congruent and Similar Shapes	Understanding congruence	M124
	Understanding similarity	M377
	Congruent triangles	U866
9.5 Solving Geometry Problems	Finding unknown sides in similar shapes	U578

Unit 10: Graphs

Textbook Sub-Unit	Sparx Independent Learning Topic & Code	
10.1 Plotting Linear Graphs	Plotting straight line graphs	M932
10.2 The Gradient &	Finding equations of straight line graphs	M544
10.3 $y = mx + c$	Interpreting equations of straight line graphs	M888
	Finding equations of real-life straight line graphs	M205
	Finding the equation of a straight line from its gradient and a point	U477
10.4 Parallel and Perpendicular Lines	Equations of parallel lines	U377
	Equations of parallel and perpendicular lines	U898
10.5 Inverse Functions	n/a	
10.6 Non-linear Graphs	Interpreting real-life graphs	M771