

Year 9                      Unit 1 Base Arithmetic                      Level                      6

Chapter	Target	Standard	Academic	Express
1.1	Binary Numbers	6	6	6
1.2	Adding and Subtracting Binary Numbers	6	6	6
1.3	Multiplying Binary Numbers	6	6	6
1.4	Other Bases	6	6	6
	Level	6	6	6

Year 9                      Unit 2 Basic Operations                      Level                      5

Chapter	Target	Standard	Academic	Express
2.1	Place Value	4	4	4
2.2	Addition and Subtraction	4	4	5
2.3	Multiplication and Division	4	5	6
2.4	Problems in context	4	5	5/6
	Level	4	5	5/6

Year 9                      Unit 3 Indices and Standard Form                      Level                      7

Chapter	Target	Standard	Academic	Express
3.1	Index Notation	7	7	7
3.2	Laws of Indices	7	7	7
3.3	Negative Indices	7	7	7
3.4	Standard Form			8
3.5	Fractional Indices			8
	Level	7	7	7/8

Year 9                      Unit 4 Fractions and Percentages                      Level                      6

Chapter	Target	Standard	Academic	Express
4.1	Equivalent Fractions	4	5	6
4.2	Fractions of Quantities	5	5	5
4.3	Operations with fractions	5/6	6	6/7
4.4	Fraction, Decimal, % equivalents	4/5	6	5
4.5	Percentage increase and decrease		6	6/7
	Level	5	6	6

Year 9                      Unit 5 Linear graphs and Equations                      Level                      7

Chapter	Target	Standard	Academic	Express
5.1	Co-ordinates	4	4	
5.2	Straight line Graphs	6	6	6
5.3	Linear Graphs	6	7	7
5.4	Parallel and perpendicular lines			7
5.5	Simultaneous Equations			7
5.6	Equations in Context			
	Level	6	7	7

Year 9                  Unit 6 Probability          Level 6

Chapter	Target	Standard	Academic	Express
6.1	Probability Scale	4		
6.2	Probability of a single event	5	5	5
6.3	Probability of two events		6	6
6.4	Theoretical and Experimental probabilities	5	6	7
	Level	5	6	6/7

Year 9                  Unit 7 Transformations          Level 7

Chapter	Target	Standard	Academic	Express
7.1	Shapes		4	4
7.2	Translations	6	6	6
7.3	Enlargements	6	6/7	7
7.4	Reflections	6	6/7	7
7.5	Rotations	6	6	7
7.6	Combining Transformations			7
	Level	6	6	7

Year 9                  Unit 8 Statistical Diagrams          Level 7

Chapter	Target	Standard	Academic	Express
8.1	Data collection, extraction and presentation	5/6	5	
8.2	Statistical Measures		7	7
8.3	Plotting scatter diagrams	6	6	7
8.4	Lines of Best fit	6/7	6/7	6/7
8.5	Equations of the line of best fit			7
	Level	6	6	7

Year 9                  Unit 9 Area, Perimeter and Volume          Level 6

Chapter	Target	Standard	Academic	Express
9.1	2D Shapes	4	4	4
9.2	Area of Special Shapes	5/6	5/6	5/6
9.3	Perimeter of Special Shapes	5/6	5/6	5/6
9.4	Surface area and volume of 3D Shapes		6	6
	Level	5	6	6

Year 9

Unit 10 Sequences

Level 6

Chapter	Target	Standard	Academic	Express
10.1	Constant differences	4/5	4/5	
10.2	Finding the formula for a Linear Sequence		7	7
10.3	Second Difference and quadratic sequences		6	7
10.4	Special sequences		6	7
	Level	4/5	6	7

Year 9

Unit 11 Algebraic manipulation

Level 7

Chapter	Target	Standard	Academic	Express
11.1	Equations, Formulae and Identities	6	7	7
11.2	Simplifying expressions	6	6	6
11.3	Factorising		8	8
11.4	Using Formulae	7		7
	Level	6	7	7

Year 9

Unit 12 Constructions and Loci

Level 6

Chapter	Target	Standard	Academic	Express
12.1	Recap: Angles and Scale drawing	4/5	6	6
12.2	Constructions	5	6	6
12.3	Loci	6	6/7	7
	Level	5	6	6/7

Year 9

Unit 13 Graphs, Equations

Level 7/8

Chapter	Target	Standard	Academic	Express
13.1	Linear Inequalities	6	6	7
13.2	Graphs of quadratic functions			7
13.3	Graphs of cubic and reciprocal functions		7	7/8
13.4	Solving non-linear equations		7	7/8
13.5	Quadratic Inequalities			7/8
13.6	Equations of perpendicular lines			7/8
	Level	6	7	8

Year 9

Unit 14 Estimation and Approximation

Level 7

Chapter	Target	Standard	Academic	Express
14.1	Rounding	6/7	6/7	6/7
14.2	Estimation	5	6/7	7
14.3	Calculator	6	6	7
14.4	Error propagation			7/8
	Level	6	7	7/8

Year 9

## Unit 15 Trigonometry

Level 8

Chapter	Target	Standard	Academic	Express
15.1	Pythagoras Theorm	7	7	7
15.2	Trigonometric functions		8	8
15.3	Calculating Sides		8	8
15.4	Calculating Angles		8	8
	Level	7	8	8+

Year 9

## Unit 16 Cumulative Frequency

Level 6/8

Chapter	Target	Standard	Academic	Express
16.1	Averages	5	5/6	6
16.2	Grouped data	6	6	6/7
16.3	Cumulative Frequency		8	8
16.4	Box and Whisker plots			8
	Level	6	6/8	8

Year 9

## Unit 17 Quadratic Functions

Level 7/8

Chapter	Target	Standard	Academic	Express
17.1	Quadratic Expressions		7/8	7/8
17.2	Quadratic Equations: factorisation		7/8	7/8
17.3	Quadratic Equations: Completing the square			8
	Level			

Year 9

## Unit 18 Sampling

Level 8

Chapter	Target	Standard	Academic	Express
18.1	Random Samples		8	8+
18.2	Sampling techniques		8	8+
18.3	Stratified Random Samples		8	8+
	Level		8	