

Pearson Edexcel Level 1/Level 2 GCSE (9 – 1) in Mathematics (1MA1)

This is a Three-year Scheme of Work starting in Year 9 and split into two tiers.

Unit		Foundation level – Year 9	Estimated hours
<u>1</u>	a	Integers and place value	6
	b	Decimals	5
	c	Indices, powers and roots	7
	d	Factors, multiples and primes	6
<u>2</u>	a	Algebra: the basics	8
	b	Expanding and factorising single brackets	6
	c	Expressions and substitution into formulae	7
<u>3</u>	a	Tables	7
	b	Charts and graphs	7
	c	Pie charts	4
	d	Scatter graphs	6
<u>4</u>	a	Fractions	7
	b	Fractions, decimals and percentages	4
	c	Percentages	7
<u>5</u>	a	Equations	7
	b	Inequalities	5
	c	Sequences	7
<u>6</u>	a	Properties of shapes, parallel lines and angle facts	10
	b	Interior and exterior angles of polygons	6
Foundation level – Year 10			
<u>7</u>	a	Statistics and sampling	4
	b	The averages	6
<u>8</u>	a	Perimeter and area	10
	b	3D forms and volume	6
<u>9</u>	a	Real-life graphs	9
	b	Straight-line graphs	6
<u>10</u>	a	Transformations I: translations, rotations and reflections	6
	b	Transformations II: enlargements and combinations	8
<u>11</u>	a	Ratio	6
	b	Proportion	6
<u>12</u>		Right-angled triangles: Pythagoras and trigonometry	6
<u>13</u>	a	Probability I	5
	b	Probability II	9
<u>14</u>		Multiplicative reasoning	7
<u>15</u>	a	Plans and elevations	6
	b	Constructions, loci and bearings	10
Foundation level – Year 11			
<u>16</u>	a	Quadratic equations: expanding and factorising	5
	b	Quadratic equations: graphs	4
<u>17</u>		Circles, cylinders, cones and spheres	7
<u>18</u>	a	Fractions and reciprocals	5
	b	Indices and standard form	6
<u>19</u>	a	Similarity and congruence in 2D	7
	b	Vectors	7
<u>20</u>		Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations	5

Unit		Higher level – Year 9	Estimated hours
<u>1</u>	a	Calculations, checking and rounding	7
	b	Indices, roots, reciprocals and hierarchy of operations	8
	c	Factors, multiples and primes	6
	d	Standard form and surds	6
<u>2</u>	a	Algebra: the basics	8
	b	Setting up, rearranging and solving equations	8
	c	Sequences	6
<u>3</u>	a	Averages and range	7
	b	Representing and interpreting data	8
	c	Scatter graphs	5
<u>4</u>	a	Fractions	8
	b	Percentages	8
	c	Ratio and proportion	8
<u>5</u>	a	Polygons, angles and parallel lines	8
	b	Pythagoras' Theorem and trigonometry	8
<u>6</u>	a	Graphs: the basics and real-life graphs	7
	b	Linear graphs and coordinate geometry	10
	c	Quadratic, cubic and other graphs	8
Higher level – Year 10			
<u>7</u>	a	Perimeter, area and circles	8
	b	3D forms and volume, cylinders, cones and spheres	8
	c	Accuracy and bounds	6
<u>8</u>	a	Transformations	8
	b	Constructions, loci and bearings	8
<u>9</u>	a	Solving quadratic and simultaneous equations	8
	b	Inequalities	6
<u>10</u>		Probability	10
<u>11</u>		Multiplicative reasoning	8
<u>12</u>		Similarity and congruence in 2D and 3D	8
<u>13</u>	a	Graphs of trigonometric functions	6
	b	Further trigonometry	10
<u>14</u>	a	Collecting data	6
	b	Cumulative frequency, box plots and histograms	7
Higher level – Year 11			
<u>15</u>		Quadratics, expanding more than two brackets, sketching graphs, graphs of circles, cubes and quadratics	8
<u>16</u>	a	Circle theorems	7
	b	Circle geometry	6
<u>17</u>		Changing the subject of formulae (more complex), algebraic fractions, solving equations arising from algebraic fractions, rationalising surds, proof	8
<u>18</u>		Vectors and geometric proof	10
<u>19</u>	a	Reciprocal and exponential graphs; Gradient and area under graphs	8
	b	Direct and inverse proportion	8