Year 9 Pathway C – Key vocabulary list

Appendix 1: Term 1

Unit 1: Proportional reasoning

1:n	Discount	Multiplier	Reduce
Compound interest	Fraction	p.a. (per annum)	Reduction
Decay	Growth	Percentage	Reverse percentage
Decrease	Increase	Profit	Scale
Depreciate	Interest	Proportion	Simplest form
Direct proportion	Loss	Ratio	

Unit 2: Angles and Pythagoras

Alternate	Hexagon (6 sides)	Parallel	Straight line
Angle	Hypotenuse	Pentagon (5 sides)	Sum
Co-interior	Interior angle	Point	Transversal
Corresponding	Irregular	Polygon	Triangle
Decagon (10 sides)	Isosceles	Pythagoras' theorem	Vertex
Exterior angle	Nonagon (9 sides)	Quadrilateral	Vertically opposite
Heptagon (7 sides)	Octagon (8 sides)	Regular	

Angle phrases to learn

- Angles around a point add up to 360°
- Angles on a straight line add up to 180°
- Vertically opposite angles are equal
- Angles in a triangle add up to 180°
- Base angles in an isosceles triangle area equal
- Alternate angles are equal
- Corresponding angles are equal
- Co-interior angles add up to 180°

Year 9 Pathway C – Key vocabulary list

Appendix 1: Term 2

Unit 3: Linear equations

Balance	Equation	Integer	Set of values
Brackets	Expand	Inverse operation	Simplify
Coefficient	Filled circle	Less than <	Simultaneous equations
Collect like terms	Form	Less than or equal to ≤	Solution
Eliminate	Greater than >	Linear	Solve
Empty circle	Greater than or equal to ≥	More than	Substitute
Equals	Inequality	Paired solution	Variable

Unit 4: Calculations

$A \times 10^n$	Evaluate	Power	Square root
Approximate	Exponent	Power of 10	Standard form
Cube	Index	Rationalise	Super-one
Cube root	Index laws	Round	Surd
Decimal place	n^{th} root	Significant figure	Under-estimate
Denominator	Numerator	Simplify	
Estimate	Over-estimate	Square	

Year 9 Pathway C – Key vocabulary list

Appendix 1: Term 3

Unit 5: Graphs

Coordinates	Intersection	Plot	Straight line graph
Coordinate pair	Line	Positive	Substitute
Cubic	Linear	Quadratic	x-axis
Equation	Negative	Reciprocal	y = mx + c
Function	Origin	Simultaneous equations	y-axis
Gradient	Parallel	Solution	y-intercept
Implicit function	Perpendicular	Solve	

Unit 6: Measures

Angle	Composite shape	Mass	Sector
Arc	Cube	Parallelogram	Segment
Arc length	Cuboid	Perimeter	Semi-circle
Area	Cylinder	Perpendicular height	Square
Base	Density	Prism	Trapezium
Chord	Diameter	Quadrant	Triangle
Circle	Height	Radius	Volume
Circumference	Length	Rectangle	

Unit 7: Sequences

1^{st} difference	Generate	n^{th} term	Simplify
2^{nd} difference	Geometric	Position -to-term	Substitute
Coefficient	Index	Power	Term
Common ratio	Linear	Previous term	Term-to-term
Difference	Multiplicative rule	Quadratic	Value
Expression	Multiplier	Ratio	Variable
Formula	Next term	Rule	Verify
Function	Non-linear	Sequence	

Year 9 Pathway C – Key vocabulary list

Appendix 1: Term 4

Unit 8: Probability

A and B	Decimal	Fraction	Probability of A is P(A)
A or B	Equally likely outcomes	Impossible	Relative frequency
At least one	Even chance	Independent	Route
At most one	Event	Likelihood	Sum to 1
Biased	Exactly one	Mutually exclusive	Theoretical probability
Branch	Expected value	Number of trials	Tree diagram
Certain	Experiment	Outcome	Trial
Chance	Experimental probability	Probability	With replacement
Combined event	Fair	Probability of "not A" is P(A')	

Unit 9: Expressions and formulae

Bracket	Equation	Index	Rearrange
Change the subject	Expand	Index laws	Show
Coefficient	Factor	Inverse operations	Square
Collect terms	Factorise	Multiplier	Square root
Common factor	Formula	Power	Subject
Construct	Identically equal to ≡	Proof	
Equal =	Identity	Prove	

Year 9 Pathway C – Key vocabulary list

Appendix 1: Term 5

Unit 10: Trigonometry

Adjacent	Hypotenuse	Right- angle 90°	Tangent (tan)
Alpha α	Inverse operation	Right-angled triangle	Theta θ
Angle	Isosceles	Side	Triangle
$\cos^{-1}$	Length	$\sin^{-1}$	Trigonometry
Cosine (cos)	Opposite	Sine (sin)	Vertex
Diagonal	Ratio	$\tan^{-1}$	

Unit 11: Representing and interpreting data

Axes	Highest value	Lowest value	Running total
Box plot	Horizontal axis	Maximum	Scale
Compare	Interpret	Median	Spread
Cumulative frequency	Interquartile range	Minimum	Upper quartile
Curve	Interval	Plot	Vertical axis
Frequency	Less than	Range	
Greater than	Lower quartile	Reading line	

Year 9 Pathway C – Key vocabulary list

Appendix 1: Term 6

Unit 12: Transformations

Angle	Direction	Line $y = x$	Scale factor
Anticlockwise	Enlarge	Line $y = -x$	Transformation
Centre of enlargement	Enlargement	Object	Translate
Centre of rotation	Image	Reflect	Translation
Clockwise	Line of reflection	Reflection	x-axis
Column vector	Line $x = a$	Rotate	y-axis
Combined transformations	Line $y = b$	Rotation	

Unit 13: Constructions

Angle	Compasses	Line	Perpendicular from a point
Angle bisector	Construct	Midpoint	Perpendicular to a point
Arc	Equidistant	Perpendicular	Ruler
Bisect	Intersect	Perpendicular bisector	