CambridgeMATHS NSW Stage 5 Year 10 Core & Standard Paths

Every section of every chapter mapped to the NSW Syllabus

Key:

Consolidating Stage 4	The Pathway to Standard book provides ample opportunities to consolidate prior learning
Stage 4 plus Stage 5 Core	Some sections begin in Stage 4 then progress to Stage 5 Core
Stage 5 Core	The treatment of Stage 5 Core is somewhat slower and gentler than the Core & Advanced/Extension Paths book
Stage 5 Core and Stage 5 Path	There are only 6 topics identified as 'Path topics for Standard'. They are mostly in the Year 10 book
Extending beyond Stage 5 Core and Path Topics for Standard	These sections cover extra concepts which are somewhat useful for Stage 6 Standard

	Chapter 1 Financial mathematics	
1A	Review of percentages	Consolidating Stage 4
1B	Applying percentages	Consolidating Stage 4
1C	Income	Stage 5 Core: *Financial Mathematics A*
1D	The PAYG income tax system	Stage 5 Core: *Financial Mathematics A*
1E	Using a budget to manage income and expenditure	Extending beyond Stage 5
1F	Simple interest	Stage 5 Core: *Financial Mathematics A*
1G	Compound interest and depreciation	Stage 5 Core: *Financial Mathematics B*
1H	Investments and loans	Stage 5 Core: *Financial Mathematics B*
1I	Using spreadsheets for investments, loans and depreciation	Stage 5 Core: *Financial Mathematics B*
	Chapter 2 Measurement	
2A	Converting units of measurement	Consolidating Stage 4
2B	Accuracy of measuring instruments	Stage 5 Core: *Numbers of any magnitude*
2C	Perimeter	Consolidating Stage 4
2D	Circumference and arc length	Consolidating Stage 4
2E	Area of triangles and quadrilaterals	Consolidating Stage 4
2F	Area of circles and sectors	Consolidating Stage 4
2G	Surface area of prisms	Stage 5 Core: *Area and surface area A*
2H	Surface area of cylinders	Stage 5 Core: *Area and surface area A*
2I	Volume of prisms and cylinders	Stage 5 Core: *Volume A*
2J	Further problems involving prisms and cylinders	Stage 5 Core: *Area and surface area A* and *Volume A*
2K	Surface area of pyramids and cones	Stage 5 Path (Stan/Adv): *Area and surface area B*
2L	Volume of pyramids and cones	Stage 5 Path (Stan/Adv): *Volume B*
2M	Volume and surface area of spheres	Stage 5 Path (Stan/Adv): *Area and surface area B and Volume B*
	Chapter 3 Algebraic expressions	
3A	Algebraic expressions	Consolidating Stage 4
3B	Simplifying algebraic expressions	Consolidating Stage 4
3C	Expanding algebraic expressions	Consolidating Stage 4
3D	Expanding binomial products	Stage 5 Core: *Algebraic techniques A*
3E	Factorising algebraic expressions	Consolidating Stage 4
3F	Simplifying algebraic fractions: Multiplication and division	Stage 5 Core: *Algebraic techniques A*
3G	Simplifying algebraic fractions: Addition and subtraction	Stage 5 Core: *Algebraic techniques A*
3H	Index laws for multiplying and dividing	Stage 5 Core: *Indices A*
3I	Powers of powers, powers of fractions and the zero index	Stage 5 Core: *Indices A*
3J	Negative indices, algebraic bases	Extending: Stage 5 Path (Adv): *Indices B*
3K	Scientific notation and significant figures	Stage 5 Core: *Numbers of any magnitude*
	Chapter 4 Probability	
4A	Review of probability	Consolidating Stage 4
4B	Venn diagrams	Extending: Stage 5 Path (Adv): *Probability B*
4C	Two-way tables	Extending: Stage 5 Path (Adv): *Probability B*
4D	Using arrays for two-step experiments	Stage 5 Core: *Probability A*
4E	Using tree diagrams	Stage 5 Core: *Probability A*
4F	Dependent events and independent events	Stage 5 Core: *Probability A*
	Chapter 5 Single variable and bivariate statistics	
5A	Collecting data	Stage 5 Core and Stage 5 Path (Stan/Adv) Data analysis C
5B	Column graphs and histograms	Consolidating Stage 4
5C	Dot plots and stem-and-leaf plots	Consolidating Stage 4
5D	Mean, median, mode and range	Stage 4 plus Stage 5 Core: *Data analysis A*
5E	Quartiles and outliers	Stage 5 Core: *Data analysis A*
5F	Box plots	Stage 5 Core: *Data analysis A*
5G	Standard deviation	Stage 5 Core: *Data analysis A*
5H	Displaying and analysing time-series data	Consolidating Stage 4
5I	Bivariate data and scatter plots	Stage 5 Core: *Data analysis B*
5J	Line of best fit by eye	Stage 5 Core: *Data analysis B*
	Chapter 6 Linear relationships, hyperbolas, parabolas and exponentials	
6A	Interpreting straight-line graphs	Consolidating Stage 4
6B	Distance–time graphs	Consolidating Stage 4
6C	Graphing straight lines	Consolidating Stage 4
6D	Exploring gradient	Stage 5 Core: *Linear relationships A*
6E	Rates from graphs	Stage 5 Core: *Linear relationships B*
6F	y = mx + c and special lines	Stage 5 Core: *Linear relationships A* and *B*
6G	Parallel lines and perpendicular lines	Stage 5 Core: *Linear relationships A* and *B*
6H	Graphing straight lines using intercepts	Extending: Stage 5 Path (Adv): *Linear Relationships C*
6I	Linear modelling	Stage 5 Core: *Linear relationships B*
6J	Direct variation	Stage 5 Path (Stan/Adv): *Variation and rates A*
6K	Inverse variation	Stage 5 Path (Stan/Adv): *Variation and rates A*
6L	Exploring parabolas	Stage 5 Core: *Non-linear relationships A and B*
6M	Exploring exponential graphs	Stage 5 Core: *Non-linear relationships A and B*
6N	Exponential growth and decay	Stage 5 Core: *Non-linear relationships A and B*
	Chapter 7 Properties of geometrical figures and networks	
7A	Parallel lines	Consolidating Stage 4
7B	Triangles	Consolidating Stage 4
7C	Quadrilaterals	Extending: Stage 5 Path (Ext): *Properties of geometrical figures B*
7D	Polygons	Extending: Stage 5 Path (Ext): *Properties of geometrical figures B*
7E	Similarity and scale drawings	Stage 5 Core: *Properties of geometrical figures A*

7F	Applying similar triangles	Stage 5 Core: *Properties of geometrical figures A*
7G	Introduction to networks	Stage 5 Path (Stan):Introduction to networks
7H	Isomorphic and planar graphs	Stage 5 Path (Stan):Introduction to networks
7I	Trails, paths and Eulerian circuits	Stage 5 Path (Stan):Introduction to networks
7J	Shortest path problems	Extending beyond Stage 5
	Chapter 8 Trigonometry	
8A	Reviewing Pythagoras' theorem	Consolidating Stage 4
8B	Finding the length of a shorter side	Consolidating Stage 4
8C	Applications of Pythagoras' theorem	Stage 4 plus Stage 5 Core: *Trigonometry B*
8D	Trigonometric ratios	Stage 5 Core: *Trigonometry A*
8E	Finding unknown side lengths	Stage 5 Core: *Trigonometry A*
8F	Solving for the denominator	Stage 5 Core: *Trigonometry A*
8G	Finding unknown angles	Stage 5 Core: *Trigonometry A*
8H	Angles of elevation and depression	Stage 5 Core: *Trigonometry B*
8I	Direction and bearings	Stage 5 Core: *Trigonometry B*
8J	Applications in three dimensions	Stage 5 Path (Stan/Adv): *Trigonometry C*
8K	The sine rule	Stage 5 Path (Stan/Adv): *Trigonometry C*
8L	The cosine rule	Stage 5 Path (Stan/Adv): *Trigonometry C*
8M	Area of a triangle	Stage 5 Path (Stan/Adv): *Trigonometry C*
	Chapter 9 Equations and formulas	
9A	Linear equations with pronumerals on one side	Consolidating Stage 4
9B	Equations with brackets, fractions and pronumerals on both sides	Stage 5 Core: *Equations A*
9C	Solving equations of the form ax^2 = c	Consolidating Stage 4
9D	Using formulas	Stage 5 Core: *Equations A*
9E	Solving simultaneous equations graphically	Extending: Stage 5 Path (Adv): *Equations C*
9F	Solving simultaneous equations using substitution	Extending: Stage 5 Path (Adv): *Equations C*
9G	Solving simultaneous equations using elimination	Extending: Stage 5 Path (Adv): *Equations C*

Contents are subject to change prior to publication