



**Lanark Grammar School
Mathematics Department**

**National 4 Applications of
Maths
Course Outline**

Skills and Understanding	Suggested Resources (Core - N4 lifeskills Textbook)	Video
Percentages (3 Periods)		
Percentage of an amount Non-Calculator (including 15%, 6% etc)	Worksheet	https://corbettmaths.com/2012/08/20/percentages-of-amounts-non-calculator/
Percentage of an amount Calculator	24	https://corbettmaths.com/2013/02/15/percentages-of-an-amount-calculator/
Percentage increase and decrease	26	https://corbettmaths.com/2012/08/21/increasing-or-decreasing-by-a-percentage/
Numeracy Assessment 3	31	
Tolerance (4 Periods)		
Introduction to tolerance	191	https://www.youtube.com/watch?v=Vysi-sPoNds
Writing in tolerance notation	193	
Measure Assessment 4	195	
Income (7 Periods)		
Hourly Rate	198	https://www.youtube.com/watch?v=fgT1Pe7YXlk
Weekly, Monthly, Annual	200	https://www.youtube.com/watch?v=liYVhXfchJI
Wage rise/fall	202	https://www.youtube.com/watch?v=QdjXiyGUnNk
Commission and bonuses	203 & 206	https://www.bbc.co.uk/bitesize/guides/zdq39j6/revision/3

Overtime	204	https://www.bbc.co.uk/bitesize/guides/zdq39j6/revision/4
Payslips - Gross Pay and Net Pay	208	https://www.bbc.co.uk/bitesize/guides/zdq39j6/revision/1
Finance Assessment 1	211	
Summer Break		
Foreign Exchange (2 Periods)		
Converting Pounds to Foreign Currency	212	https://corbettmaths.com/2016/01/03/exchange-rates/
Converting Foreign Currency to Pounds	214	
Finance Assessment 2	216	
Banking (6 Periods)		
Simple Interest and borrowing money	217 & 221	https://www.youtube.com/watch?v=Y2OHH6goRbk
Debit and Credit Cards	219	
Finance Assessment 3	223	
Comparing Prices (6 Periods)		
Buying	224	
Services	226	
Rates and contracts	228	
Finance Assessment 4	229	
Budgeting (5 Periods)		
Budgeting	230	https://www.bbc.co.uk/bitesize/guides/znbnm39/revision/1
Managing a Budget Tasks	231	https://www.bbc.co.uk/bitesize/guides/znbnm39/revision/2
Finance Assessment 5	235	
Flexible Time for Revision		
Finance Assessment		
September Weekend		

Comparing Data Sets (4 Periods)		
Mean	236	https://corbettmaths.com/2012/08/02/the-mean/
Median	237	https://corbettmaths.com/2012/08/02/the-median/
Mode	237	https://corbettmaths.com/2013/12/21/the-mode-video56/
Range	236	https://corbettmaths.com/2012/08/02/the-range-video/
Compare - Context, Comparison and Conclusion	238	
Statistics Assessment 1	240	
Graphs, Charts and Tables 1 (4 Periods)		
Interpreting Graphs Revision - Bar, Line, Pie charts		https://corbettmaths.com/2012/08/10/reading-bar-charts/
		https://corbettmaths.com/2013/05/25/interpreting-pie-charts/
Interpreting Scattergraphs		https://corbettmaths.com/2012/08/10/scatter-graphs/
Interpreting Stem-and-leaf		https://corbettmaths.com/2012/08/02/reading-stem-and-leaf-diagrams-video/
Interpreting Tables		https://corbettmaths.com/2017/09/24/reading-tables/
Numeracy Assessment 11	96	
Graphs, Charts and Tables 2 (5 Periods)		
Drawing Frequency Tables, Bar and Line Graphs	241	https://corbettmaths.com/2013/05/07/tally-charts-corbettmaths/
		https://corbettmaths.com/2013/04/15/drawing-bar-charts/
		https://corbettmaths.com/2013/05/22/line-graphs/
Constructing Pie Charts	246	https://corbettmaths.com/2013/02/27/drawing-a-pie-chart/
Drawing Stem-and-leaf diagrams	250	https://corbettmaths.com/2012/08/02/drawing-stem-and-leaf-diagrams/

Statistics Assessment 2	252	
October Break		
Scattergraphs (3 Periods)		
Drawing Scatter Graphs	254	https://corbettmaths.com/2012/08/10/scatter-graphs/
Line of Best Fit	256	https://corbettmaths.com/2012/08/10/scatter-graphs/
Statistics Assessment 3	260	
Probability (2 Periods)		
Calculating probability	261	https://corbettmaths.com/2013/06/15/probability/
Statistics Assessment 4	263	
SQA SOLAR: FORMATIVE SUPPORT - FINANCE		
Flexible Time for Revision		
Statistics Assessment		
S4-6 Tracking Report Due		
Gradients (3 Periods)		
Gradient - calculation and comparing	105	https://corbettmaths.com/2013/05/15/gradient-of-a-line/
Geometry Assessment 1	110	
Perimeter (5 Periods)		
Perimeter	111	https://corbettmaths.com/2012/08/02/perimeter/
Parts of a circle	113	https://corbettmaths.com/2013/12/21/parts-of-the-circle-video-61/
Circumference of a circle	115	https://corbettmaths.com/2013/12/21/circumference-video-60/
Perimeter of composite shapes	118	https://corbettmaths.com/2012/08/02/perimeter-of-a-semi-circle/
Geometry Assessment 2	119	
S4-6 Parents Evening		

Area 1 (4 Periods)		
Revision - Area of a rectangle and right angled triangle	120	https://corbettmaths.com/2013/12/20/area-of-a-rectangle-video-45/
Area of any triangle	124	https://corbettmaths.com/2013/12/20/area-of-a-triangle-video-49/
Composite Areas	126	https://corbettmaths.com/2013/03/26/area-of-an-l-shape/
		https://corbettmaths.com/2012/08/02/area-of-compound-shapes/
Geometry Assessment 3	128	
Area 2 (5 Periods)		
Parallelogram	135	https://corbettmaths.com/2013/12/21/area-of-a-parallelogram-video-44/
Square Numbers	140	https://corbettmaths.com/2012/08/11/1336/
		https://corbettmaths.com/2012/08/11/1337/
Area of a circle	140	https://corbettmaths.com/2013/12/22/area-of-a-circle-video-40-and-59/
Geometry Assessment 5	143	
S4-6 Parents Evening		
Volume (5 Periods)		
Cube and Cuboid (revision)	144	https://corbettmaths.com/2012/08/09/volume-of-cuboids-and-cubes/
Capacity	146	https://corbettmaths.com/2014/01/16/metric-units-for-capacity/
Volume of a prism	147	https://corbettmaths.com/2013/04/20/volume-of-a-prism/
Volume of a cylinder	149	https://corbettmaths.com/2013/02/15/volume-of-a-cylinder/
Geometry Assessment 6	152	
Pythagoras (6 Periods)		
Squares and Square roots	153	https://corbettmaths.com/2012/08/11/1337/

		https://corbettmaths.com/2012/08/11/1338/
Pythagoras - Formula	154	https://corbettmaths.com/2012/08/19/pythagoras-video/
Problems	158	
Calculating a 'smaller' side	160	https://corbettmaths.com/2012/08/19/pythagoras-video/
Pythagoras Problems - further	162	https://corbettmaths.com/2013/06/22/pythagoras-rectangles-and-isosceles-triangles/
Gradient & Pythagoras problems	Worksheet	
Geometry Assessment 7	164	
Christmas Break		
Flexible Time for Revision		
Geometry Assessment		
Time & Timetables (2 Periods)		
12 & 24 hour times and intervals	165	https://corbettmaths.com/2013/10/24/calculations-involving-time/
Interpreting Timetables	166	https://corbettmaths.com/2012/08/10/timetables/
Measure Assessment 1	169	
Rules and Formulae (3 Periods)		
Formulae expressed in words	170	
Formulae expressed in symbols	172	
Measure Assessment 2	175	
S4-6 Prelims		
Scale Drawings 1 (3 Periods)		
Enlargements	129	https://corbettmaths.com/2012/08/19/enlargements/
Basic Scale Drawings	131	https://corbettmaths.com/2013/11/13/maps-scales/
Geometry Assessment 4	134	

Scale Drawings 2 (4 Periods)		
The compass (revision)	178	
Three figure bearings and scale drawings	179	https://www.youtube.com/watch?v=Jy-IAUOO3MU&list=PLtCeaeJ34A5IO_VcVDTyOPt4_wsPxp2DD&index=11
Measure Assessment 3	183	
Problem Solving (4 Periods)		
Shelf Stacking	Worksheet	
Packing Boxes	Worksheet	https://www.youtube.com/watch?v=-LmLvBuLnwg
S4-6 Full Report Due		
SQA SOLAR: FORMATIVE SUPPORT - GEOMETRY		
Flexible Time for Revision		
Measure Assessment		
AVU Revision		
Added Value Unit or National 4 Numeracy Assessment Catch-up		Prelim Week (w.b. 20th Jan)
N4 or N5 Numeracy Unit		
Spring Break		
Flexible Time for Revision		
N4 or N5 Numeracy Assessment		