

Preliminary Course for Intermediate Students

✓ the sections from the diagnostic test that you get correct

✓ the statements that you no longer need to revise

✓ the sections you feel confident about before you start

✓ after revising a section

This is tested via Q1 on the Diagnostic Test

		Ma2 Number & Algebra - Intermediate		I PASSED !!!		
	NC Ref	Things I Can Do	I can do this	Diagnostic Test	Revised	Done
iNA1	2a 2d	Order Positive and Negative Whole Numbers and Decimals				
iNA2	3a	Use Place Value to Multiply/Divide by 10's & to work out Simple Calculations				
iNA3	2a	Round Large Numbers to the Nearest 10, 100, or 1000				
iNA4	1d	Estimate Answers to Basic Sums				
iNA5	3a	Reverse Calculations including using Number Machines				
iNA6	4a	Calculate with Exchange and Conversion Rates				
iNA7	4a	Use Division to Solve Value for Money & Simple Ratio Style Problems				
iNA8	3b	Use BODMAS to Calculate Simple Sums				
iNA9	2b	Use Index Form & Understand the Words Square, Positive Square Root & Cube				
iNA10	3c	Write a Fraction as a Decimal and Visa-Versa Extra: Know which fractions written as decimals terminate				
iNA11	3c	Write Fractions or Decimals as %'s and Vice-Versa				
iNA12	3c	Write X as a Fraction of Y				
iNA13	3c	Calculate the Fraction and % of an Amount				
iNA14	2c	Order Fractions & Find a Fraction In-Between two Fractions				
iNA15	5a	Simplify Simple Expressions using Letters				
iNA16	5d	Simple Substitutions into Formula				
iNA17	1f	Generate Simple Algebraic Expressions from Word Problems or from Patterns				
iNA18	6b	Write down Coordinates including Midpoints using Positive/Negative Numbers				
		Ma3 Shape & Space - Intermediate		I PASSED !!!		
	NC Ref	Things I Can Do	I can do this	Diagnostic Test	Revised	Done
iSS1	2a 2b	Calculate Angles on Straight Lines, at Points, in Δ 's & involving Parallel Lines				
iSS2	2c	Know the Properties of the Quadrilaterals				
iSS3	4a	Know the Metric/Imperial Approximate Conversions				
iSS4	3b	Recognise Lines of Symmetry and Calculate Orders of Rotational Symmetry				
iSS5	4d	Calculate Area of Rectangles, Parallelograms, Triangles & Trapeziums				
iSS6	4d	Calculate Area and Circumference of Circles				
iSS7	2d	Calculate Angles in Polygons				
iSS8	2h 4b	Construct Triangles and Regular Polygons (from inscribed circles)				
iSS9	2i	Draw Front, Plan and Elevation Views of 3-D Shapes				
iSS10	2i	Draw Nets of 3-D Shapes				
iSS11	2b	Explain Basic Geometric Facts				
		Ma4 Handling Data - Intermediate		I PASSED !!!		
	NC Ref	Things I Can Do	I can do this	Diagnostic Test	Revised	Done
iHD1	4a	Draw Pie Charts				
iHD2	4a	Draw Stem and Leaf Diagrams				
iHD3	4d	Simple Probabilities & the Probability of an event NOT occurring				

The question numbers in the Diagnostic Test correspond to these numbers!

Main Course for Intermediate Students

✓ the sections from the diagnostic test that you get correct

✓ the sections you feel confident about before you start.

✓ after revising a section

✓ the statements that you no longer need to revise

• This is tested via Q1 on the Diagnostic Test

		Ma2 Number & Algebra - Intermediate				
		Things I Can Do	I can do this	I PASSED !!!		
NC Ref			Diagnostic Test	Revised	Done	
NA1	2a	Calculate Highest Common Factors & Least Common Multiples				
NA2	2a 3a	Know What a Prime Number is & Write Whole Numbers as the Product of Primes				
NA3	3a	Calculate with Negative Numbers with & without a Calculator using $+-\times\div$				
NA4	5a 5g	Substitute Numbers into a Formula				
NA5	2b 5d 3a	Know & Use the Index Laws (for Numbers and Letters)				
NA6	3h	Round to a Given Number of Significant Figures				
NA7	2b 3h 3m 3r	Write Numbers in Standard Index Form & Understand the Calculator Display				
NA8	3f 2f	i) Simplify Ratio ii) Divide a Quantity in a Given Ratio				
NA9	3d	Calculate with Fractions with & without a calculator using $+-\times\div$				
NA12	3e 3j 3k 3t	Solve Simple % Problems and Compound Interest Problems				
NA13	3e 3j 3s	Solve Reverse Percentage Problems				
NA14	3l 5h	Solve Direct Proportion Problems				
NA16	5b	Expand Brackets i) Single ii) Double				
NA17	5b	Factorise Expressions i) Linear ii) Quadratic				
NA19	5e	Set Up Simple Equations (Linear)				
NA20	5e 5f	Solve Simple Equations (Linear) i) Basic ii) with Brackets iii) 'Over One' Equations				
NA21	5g	Change the Subject of a Formula i) Basic ii) where the Power of the Subject Appears & Equations iii) where the Subject occurs Twice				
NA22	5j	Solve Simple Linear Inequalities				
NA23	5j	Solve Several Linear Inequalities in Two Variables & find the Solution Set				
NA24	6a	Continue Common Sequences				
NA25	5m	Solve Problems using Trial & Improvement Methods				
NA26	5k	Solve Quadratic Equations by Factorisation				
NA28	5h 5i	Solve Simultaneous Linear Equations				
NA30	6a	Describe The n^{th} term of a Sequence				
NA31	6b	Understand the Straight Line Equation $y = mx + c$				
NA32	6c	Know when Lines are Parallel				
NA33	6d	Understand i) a Distance-Time Graph ii) a Velocity-Time Graph				
NA34	6e 6f	Plot Quadratics & Cubics				
NA35	3a 6f	Understand the Word Reciprocal, Plot the Reciprocal Function and Recognise the Shape of the Graph of the Reciprocal Function				

The question numbers in the Diagnostic Test correspond to these numbers!

The learning statements that are not for Intermediate students have NOT been included. They are NA10, NA11, NA15, NA18, NA27, NA29, NA36 and NA37. Also statements NA12, NA14, NA32 have been shortened removing those parts not suitable for intermediate students.

		Ma3 Shape & Space - Intermediate	I can do this	I PASSED !!!		
NC Ref	Things I Can Do	Diagnostic Test		Revised	Done	
SS1	2f 3e	Calculate lengths using Pythagoras' theorem				
SS2	2g	Calculate lengths & \angle s using trigonometry for right angled Δ s				
SS6	2g 4a	Draw/Sketch/Interpret a Diagram using Bearings				
SS7	2i	Calculate the Surface Area of Prisms & Cylinders				
SS8	2i 4d	Calculate the Volume of Prisms & Cylinders				
SS9	2h	Know basic Circle Properties Know & Use the Circle Theorems The Circle Properties are: i) that tangent and radii are perpendicular ii) tangents from an external point are equal in length iii) the perpendicular from the centre to a chord, bisects the chord The Circle Theorems are: i) angle subtended by an arc at the centre of a circle is twice the angle subtended at any point on the circumference ii) the angle subtended at the circumference by a semicircle is a right angle iii) angles in the same segment are equal iv) opposite angles of a cyclic quadrilateral sum to 180 degrees				
SS12	4c	Draw Basic Constructions i) equilateral triangle ii) perpendicular bisector iii) the perpendicular from a point to a line iv) the angle bisector				
SS13	6h	Construct Basic Loci i) The fixed distance from a single point : Circle ii) The equidistance from two lines (or nearer to one line than another): Perpendicular Bisector iii) The equidistance from two points (or nearer one point than another): Angle Bisector iv) The fixed distance from a line: Race Track				
SS14	3a 3b	Describe the Transformations; Reflections/Rotations/Translations Notes: Rotation from any point & calculate the angle of rotation. Translation as a vector.				
SS15	3c 3b	Describe & construct Enlargements of objects using positive & fractional scale factors				
SS16	2g	Calculate lengths in similar triangles				
SS18	3d	Decide if a Formula is a Perimeter, Area or Volume by considering Dimensions				
SS19	4a	Calculate Compound Measures like Speed & Density				
SS20	4d	Convert between Volume Measures including cm^3 and m^3				

The learning statements that are not for Intermediate students; SS3, SS4, SS5, SS10, SS11, SS17, and SS21 have NOT been included.
Also statements SS7, SS8, SS9, SS13 and SS15 have been shortened removing those parts not suitable for intermediate students.

		Ma4 Handling Data - Intermediate	I can do this	I PASSED !!!		
NC Ref	Things I can do	Diagnostic Test		Revised	Done	
HD1	5f 4i	Recognise Positive, Negative & Zero Correlation using lines of best fit. <i>Note also covered in this section is drawing lines of best fit.</i>				
HD2	4b 4h	i) Estimate Probability using Relative Frequency ii) Use Tree Diagrams				
HD3	2c 2d	Describe Random, Stratified Sampling, Bias & Primary & Secondary Data <i>Tested via:</i> i) Identify possible sources of Bias ii) Describe the difference between Primary & Secondary Data				
HD4	4e	Basic Statistical Calculations Mean/Median/Mode/Range/Quartiles <i>Tested via:</i> i) Calculate the Mean for large data sets with Grouped Data ii) Calculate the Median/Mode/Range for ungrouped data in a table iii) Calculate Quartiles for ungrouped data. (Tabulated or not).				
HD5	4f	Calculate Moving Averages				
HD6	4a	Produce Cumulative Frequency Tables & Diagrams				
HD7	4a	Interpret or Draw Box Plots				

The learning statements that are not for Intermediate students; HD8 and HD9 have NOT been included.
Also statements HD2 and HD3 have been shortened removing those parts not suitable for intermediate students.