

Quality of Education: Curriculum is planned and sequenced so that new **knowledge** and **skills** build on what has been taught before and towards its clearly defined end points.

SUBJECT: Proportional Reasoning		CURRICULUM PROGRESSION PATHWAYS			CL: Miss Z. Bradshaw		
<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>	<u>Year 11</u>	KS5 (Level 3) A-level Mathematics/Core Mathematics	Further Education and training	Careers
<p>NP3 Stretching vectors to represent 'scaling'; repeated addition and subtraction; multiplying to move between two numbers</p> <p>NP4 Repeated multiplication and growing jumps, placing surds approximately on the line</p> <p>NP7 Placing fractions on the line, fraction of a whole</p> <p>NP8 Placing percentages on the line, double number lines, percentage of a whole</p>	<p>NP10 Proportional reasoning - recipes, best buys, direct and indirect; percentage multipliers</p> <p>NP11 Ratio</p> <p>A5 Formulae from a context of direct proportion</p> <p>A6 Gradient</p>	<p>A9 Contextual graphs, including those of direct proportion</p> <p>A10 Gradient</p> <p>GM4 Enlargements and similar shapes</p> <p>GM5 Trigonometric ratios</p> <p>GM6 Area and circumference of a circle</p> <p>NP13 Reverse percentages, direct and indirect proportion graphically and algebraically</p>	<p>GM8 Length, area and volume ratios</p> <p>NP15 Exponential growth</p>	<p>NP16 Algebraic methods with proportion; exponential growth</p> <p>A15 Exponential functions</p> <p>A16 Estimating gradient</p>	<p>AS PURE - Unit 4 Graph Transformation - Stretches, SF</p> <p>AS PURE UNIT 5 Gradients + Equations of Straight Lines</p> <p>AS PURE Unit 11 Representing Vectors</p> <p>AS PURE Unit 12 Differentiation, Gradients and Rates of Change</p> <p>A2 PURE Unit 9 Rates of Change</p> <p>AS PURE Unit 14 + A2</p> <p>STATS Unit 1 Exponential Modeling and Functions</p> <p>AS STATS Unit 2 Interpolation and Coding Data</p> <p>AS MECH Unit 9+ 11</p>		

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