

Year 9 H	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
<b>Topic/Theme/Focus</b>	<p>In this unit students will become confident working with fractions, decimals and percentages.</p> <p>They will learn fundamental knowledge such as:            Four operations with fractions including mixed numbers.            Dividing a decimal by a decimal without a calculator.            Percentage increase and decrease.            Find an original amount following a percentage change.            Convert between FDP.            Write ratios in the form 1:n and n:1.            Share in a ratio and find one part given the other or difference.            Solve problems involving ratio and proportion.</p>	<p>In this unit students will deepen their understanding of probability.</p> <p>They will learn fundamental knowledge such as:            Use the addition law for mutually exclusive event.            Find the probability of an event not happening.            Use the product rule for finding the number of outcomes.            Using Sample Space diagrams to list the outcomes of events.            Draw and use tree diagrams.</p>	<p>In this unit students will further develop their understanding of number.</p> <p>They will learn fundamental knowledge such as:            Using place value to answer questions.            Round answers to an appropriate level of accuracy.            Find the HCF and LCM of two numbers.            Use powers and roots in calculations.            Multiply and divide using index laws.            Simplify surds.            Rationalise a simple denominator.</p>	<p>In this unit students will build on their knowledge of algebra from KS3.</p> <p>They will learn fundamental skills such as:            Know and apply the laws of indices.            Expand and factorise a single bracket.            Expand two brackets.            Factorise simple quadratics.            Set up and solve linear equations including with fractions.            Substitute into formulae including negatives, powers and roots.            Rearrange formulae.            Generate sequences from the nth term including quadratics.            Find the formula for the nth term of a linear sequence.</p>	<p>In this unit students will develop their understanding of angles and triangles.</p> <p>They will learn fundamental knowledge such as:            Understand and use angle properties in triangles and quadrilaterals.            Find missing angles using corresponding, alternate and co-interior.            Use Pythagoras' theorem.            Use Trigonometry in right angled triangles.</p>	<p>In this unit students will build on their knowledge of Linear graphs.</p> <p>They will learn fundamental knowledge such as:            Interpret the gradient and intercept from <math>y = mx+c</math>.            Find the midpoint.            Find the length of a line segment.            Sketch graphs.            Find the equation of a line including parallel and perpendicular including perpendicular bisector.            Draw quadratic graphs and identify the roots.</p>
<b>Corbett Maths Videos</b>	121-141, 142-146, 234, 235, 238, 239, 240, 269-271e	244-253, 383, 380	211-214, 216, 218-220, 222-229, 278, 279a, 300-303, 305, 306, 307	7, 8, 9, 13, 18, 19, 20, 110, 113, 115, 117, 286-290, 375, 388a-388c	25, 28 – 35, 37 – 39, 231, 257, 260, 261, 329-331	186, 187, 189, 190, 192, 193, 194, 195, 196, 197, 198, 263, 264
<b>Key vocabulary</b>	Numerator, Denominator, Reciprocal, Multiplier, Ratio	Mutually exclusive, Exhaustive, Independent, Relative frequency	Index, product, Factor, Multiple, Inverse, Surd, Rationalise, Irrational, Denominator.	Expression, Term, Substitute, Solve, Quotient	Edge, Vertices, Alternate, Corresponding, Co-interior, Hypotenuse, Sine, Cosine, Tangent	Parallel, Coordinate, Gradient, Intercept, Parabola, perpendicular, bisector, roots