

YEAR 10 Edexcel GCSE (9-1) Mathematics Higher				
TERM	UNIT / LESSON	HOURS	PRIOR KNOWLEDGE	LEARNING INTENTIONS
<b>Key: Italic specification references are assumed prior knowledge and are covered in the prior knowledge check rather than the main teaching.</b>				
AUTUMN	1 Number	13	<p>Have a firm grasp of place value and be able to order integers and decimals and use the four operations.</p> <p>Know integer complements to 10 and to 100, multiplication facts to <math>10 \times 10</math>, strategies for multiplying and dividing by 10, 100 and 1000.</p> <p>Have encountered squares, square roots, cubes and cube roots and have knowledge of classifying integers.</p>	
Wk 1 04/09/2023	<b>Baseline Assessment + Feedback</b>		<p>Multiply numbers in a similar format to questions later in the section.</p> <p>List possible outcomes from two events.</p>	Work out the total number of ways of performing a series of tasks.
	1.1 Number problems and reasoning			
	1.2 Place value and estimating		<p>Estimate the value of a square root.</p> <p>Round numbers to a specified degree of accuracy.</p> <p>Apply the four operations.</p>	<p>Estimate an answer.</p> <p>Use place value to answer questions.</p>
Wk 2 11/09/2023	1.3 HCF and LCM		<p>Multiply prime factors together.</p> <p>List the factors of a number.</p>	<p>Write a number of the product of its prime factors.</p> <p>Find the HCF and LCM of two numbers.</p>
	1.4 Calculating with powers (indices)		<p>Work out simple powers.</p> <p>Apply the four operations.</p>	<p>Use powers and roots in calculations.</p> <p>Multiply and divide using index laws.</p> <p>Work out a power raised to a power.</p>
Wk 3 18/09/2023	1.5 Zero, negative and fractional indices		<p>Convert between fractions and decimals.</p> <p>Use the laws of indices for positive indices.</p>	<p>Use negative indices.</p> <p>Use fractional indices.</p>
Wk 4 25/09/2023	1.6 Powers of 10 and standard form		<p>Multiply by powers of 10 when the number is written as an ordinary number and not an index.</p> <p>Review different ways to divide by 10.</p> <p>Use negative indices.</p>	<p>Write a number in standard form.</p> <p>Calculate with numbers in standard form.</p>
Wk 5 02/10/2023	1.7 Surds		<p>Review the meaning of the dot in the recurring notation.</p> <p>Identify the missing multiple which practices the skills of searching for a perfect square factor.</p>	<p>Understand the difference between rational and irrational numbers.</p> <p>Simplify a surd.</p> <p>Rationalise a denominator.</p>
	2 Algebra	13	<p>Use negative numbers with the four operations and recall and use hierarchy of operations and understand inverse operations.</p> <p>Use a calculator for decimals and negative numbers.</p> <p>Use index laws numerically.</p> <p>Use and interpret algebraic notation.</p> <p>Set up and solve simple equations.</p> <p>Recall the definitions of geometric and arithmetic sequences.</p>	
Wk 6 09/10/2023	2.1 Algebraic indices		<p>Recognise that squaring and taking the square roots, and cubing and taking the cube root, are inverse operations.</p> <p>Calculate with powers.</p>	Use the rules of indices to simplify algebraic expressions.
Wk 7 16/10/2023	<b>CHECK, STRENGTHEN, EXTEND + REVISION</b> <b>END OF TOPIC TEST (NUMBER)</b>			