

## YEAR 11 Edexcel GCSE (9-1) Mathematics Foundation

TERM	UNIT / LESSON	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>			
Wk 1 04/09/2023	<b>Baseline Assessment + Feedback</b>	Convert percentages to decimals. Express one number as a percentage of another.	Calculate a percentage profit or loss. Express a given number as a percentage of another in more complex situations.
Revision	14.1 Percentages	Work out percentage increases and decreases.	Find the original amount given the final amount after a percentage <u>increase or decrease</u> .
Wk 2 11/09/2023	14.2 Growth and decay	Write powers of numbers in index form. Relate percentages to decimals.	Find an amount after repeated percentage change. Solve growth and decay problems.
Revision	1.4 Factors and multiples	Understand the meaning of the words prime, factor, multiple and product. List the multiples of a given number.	Recognise 2-digit prime numbers. Find factors and multiples of numbers. Find common factors and common multiples of two numbers. Find the HCF and LCM of two numbers by listing.
Wk 3 18/09/2023	1.6 Index notation	Use simple powers of 10. Convert between metric units. Evaluate numeric expressions with powers.	Find square roots and cube roots. Recognise powers of 2, 3, 4 and 5. Understand surd notation on a calculator.
Revision	1.7 Prime factors	List the factors of numbers; identify which factors are prime. Evaluate numeric expressions with powers.	Write a number as the product of its prime factors. Use prime factor decomposition and Venn diagrams to find the HCF and LCM.
Revision	2.2 Simplifying expressions	Multiply and divide simple terms. Calculate with positive and negative integers. Use index notation.	Use the index laws. Multiply and divide expressions.
Wk 4 25/09/2023	2.5 Expanding brackets	Multiply negative and positive terms. Simplify algebraic expressions. Write simple formulae.	Expand brackets. Simplify expressions with brackets. Substitute numbers into expressions with brackets and powers.
Revision	2.6 Factorising	Find HCFs of number pairs. Multiply a single term over brackets.	Recognise factors of algebraic terms. Factorise algebraic expressions. Use the identity symbol $\equiv$ and the not equals symbol $\neq$ .
Revision	9.2 Linear graphs	Use a function machine. Read scales	Generate and plot coordinates from a rule. Plot straight-line graphs from tables of values. Draw graphs to represent relationships.
Wk 5 02/10/2023	9.3 Gradient	Understand that parallel lines will never meet. Identify which line is steepest.	Find the gradient of a line. Identify and interpret the gradient from an equation. Understand that parallel lines have the same gradient.
Revision	9.4 $y = mx + c$	Understand that in a linear equation, the coefficient of $x$ is the gradient. Understand that parallel lines have the same gradient. Draw a line with a given gradient.	Understand what $m$ and $c$ represent in $y = mx + c$ . Find the equations of straight-line graphs. Sketch graphs given the values of $m$ and $c$ .
Revision	5.2 Solving equations 2	Use all four operations to solve simple, single one-step equations. Work out the outputs of a function machine. Simplify expressions.	Solve two-step equations.
Wk 6 09/10/2023	5.3 Solving equations with brackets	Expand a single bracket, involving positive and negative numbers. Solve two-step equations.	Solve linear equations with brackets. Solve equations with unknowns on both sides.
Revision	5.4 Introducing inequalities	Identify numbers that satisfy an inequality. Use the inequality signs between numbers.	Use correct notation to show inclusive and exclusive inequalities. Solve simple linear inequalities. Write down whole numbers which satisfy an inequality. Represent inequalities on a number line.
Revision	5.5 More inequalities	List integer values that satisfy an inequality.	Solve two-sided inequalities.
Wk 7 16/10/2023	13.4 Venn diagrams	Add and subtracting equivalent fractions. List primes and multiples. Calculate probabilities.	Use Venn diagrams to work out probabilities. Understand the language of sets and Venn diagrams.
Revision	13.5 Tree diagrams	Calculate with fractions. List the possible outcomes for two events. Work out the probability of something not happening. Calculate probabilities.	Use frequency trees and tree diagrams. Work out probabilities using tree diagrams. Understand independent events.
Revision	13.6 More tree diagrams	Calculate with and simplify fractions. Work out probabilities using tree diagrams.	Understand when events are not independent. Solve probability problems involving events that are not independent.