CURRICULUM CORE KNOWLEDGE PLAN

SUBJECT: Mathematics YEAR GROUP: Year 9 DATE: HT1

Term and unit	Core knowledge	Core vocabulary	Revisiting prior knowledge	Links to Walney Ways & Employability skills/Careers
Autumn Term 1.1 – Straight Line Graphs (2 weeks)	• Identify lines parallel to the axes, y = x and y = -x • Use a table of values • Compare gradients • Compare intercepts • Understand and use y = mx+c • Write an equation in the form y = mx+c • Find the equation of a line from a graph • Interpret gradient and intercepts of real-life graphs • **Model real-life graphs involving inverse proportion** • **Explore perpendicular lines** **Bold = higher content**	Axis Parallel Horizontal Vertical Equation Graph Intercept Straight line Linear Function Positive Negative Steep Slope Coordinate Gradient Rearrange Interpret Curve Asymptote Product Reciprocal		

Autumn Term 1.2 – Forming and Solving Equations (2 weeks)	• Solve one and two step equations and inequalities • Solve one and two step equations and inequalities with brackets • Inequalities with negative numbers • Solve equations with unknowns on both sides • Solve inequalities with unknowns on both sides • Solve equations and inequalities in context • Substituting into formulae and equations • Rearranging formulae (one-step) • Rearranging formulae (two-step) • **Rearrange complex formulae including brackets and squares** **Bold = Higher content**	Equation Solution Inequality Unknown Greater/less than Solve Inverse Expand Satisfy Reverse Balance Coefficient Check Substitute Form Variable Subject Square Root		
Autumn Term 1.3 – Testing Conjectures (2 weeks)	• Factors, multiples and primes • Always sometimes, never true • Show that…. • Conjectures about number • Expand a pair of binomials • Conjectures with algebra • Explore the 100 grid • **Expand three binomials** **Bold = higher content**	Factor Multiple Prime Odd Even Common Express Conjecture Verify Demonstrate Prove		

		Counterexample Term Expand Factorise Expression Binomial Quadratic Simplify		