

Year 11 Curriculum Overview [2022-2023]
Subject – Maths- Foundation (sets sky/dwn/pmn)

	Knowledge & Understanding			Literacy Skills Opportunities for developing literacy skills	Employability Skills [if any]	Assessment Opportunities
	Composites	Components [includes understanding of KEY concepts & subject specific vocab]	Formal Retrieval [if any]			
HT1	Number Operations and Integers	<ul style="list-style-type: none"> • Four Rules • Definitions and terms • Prime Numbers • HCF and LCM • Priority of Operations • Inverse operations • Linear equations in one unknown 	<ul style="list-style-type: none"> • Maths box skills check • 10 questions once per week • Mathsbox skills check 20 questions • HWK- once a week • Weekly retrieval chart current and long-term skills 	<ul style="list-style-type: none"> • Key words – learned and understood • Encourage use of subject language • Questioning • Pupil explanations and reasoning • Engage with worded exam questions 	<ul style="list-style-type: none"> • Jobs that require basic number skills • Hairdressers • Retail • Education 	Sam testing
	Fractions, Decimals and Percentages	<ul style="list-style-type: none"> • Equivalent fractions • Percentage conversions Ordinality • Decimals and fractions • Addition, subtraction and multiplication of decimals • Division of decimals • Calculations with fractions • Calculations with fractions • Fractions of a quantity • Percentage change • Percentage change 				Sam testing
	Ratio, Proportion and Rates of change	<ul style="list-style-type: none"> • Equivalent ratios, ratios and fractions • Division in a given ratio • Direct proportion • Inverse proportion 			Sam testing	
	Indices and Surds	<ul style="list-style-type: none"> • Laws of indices Calculation and estimation of powers and roots • Standard form • Calculations with numbers in Standard form • Exact calculations 				

HT2	Approximation And Estimation	<ul style="list-style-type: none"> • Rounding • Estimation • Estimation • Upper and lower bounds 	<ul style="list-style-type: none"> • Maths box skills check • 10 questions once per week • Mathsbox skills check 20 questions • HWK- once a week • Weekly retrieval chart current and long-term skills 	<ul style="list-style-type: none"> • Key words – learned and understood • Encourage use of subject language • Questioning • Pupil explanations and reasoning • Engage with worded exam questions 	<ul style="list-style-type: none"> • Medical • Computing 	Sam testing
	Statistics	<ul style="list-style-type: none"> • Populations and samples • Summary statistics • Summary statistics • Categorical and numerical data • Categorical and numerical data • Misrepresenting data Outliers • Bivariate data 				
	Probability	<ul style="list-style-type: none"> • The probability scale • Relative frequency • Relative frequency and probability • Relative frequency and probability • Equally likely outcomes and probability • Sample spaces • Enumeration • Venn diagrams and sets • Tree diagrams • The addition law of probability 				
	Basic Geometry	<ul style="list-style-type: none"> • 2D shapes • Polyhedra and other solids • Properties of quadrilaterals • 3-dimensional solids • Circle nomenclature • Geometrical instruments • Plans and elevations • Perpendicular bisector • Angle bisector • Angles at a point • Angles in polygons 				

		<ul style="list-style-type: none"> • Properties of a triangle • Symmetry 				
HT3	Algebra	<ul style="list-style-type: none"> • Algebraic terminology and proofs • Algebraic terminology and proofs • Multiplying out brackets • Factorising • Formulate algebraic expressions • Substitute numerical values into formulae and expressions • Recall and use standard formulae • Use kinematics formulae • Change the subject of a formula 			<ul style="list-style-type: none"> • Builders • Architect • Working in Construction 	Sam testing Half term test
	Graphs, Equations and Functions	<ul style="list-style-type: none"> • Linear equations in one unknown • Linear equations in one unknown • Quadratic equations • Simultaneous equations • Approximate solutions using a graph • Inequalities in one variable • Functions • Generate terms of a sequence • Generate terms of a sequence • Special sequences • Special sequences • Graphs of equations and functions • Polynomial functions • Straight line graphs, parallel and perpendicular lines • Graphs of real-world contexts Gradients 	<ul style="list-style-type: none"> • Maths box skills check • 10 questions once per week • Mathsbox skills check 20 questions • HWK- once a week • Weekly retrieval chart current and long-term skills 	<ul style="list-style-type: none"> • Key words – learned and understood • Encourage use of subject language • Questioning • Pupil explanations and reasoning • Engage with worded exam questions 	<ul style="list-style-type: none"> • Data analyst • Statistician 	Sam testing
	Mensuration	<ul style="list-style-type: none"> • Units of measurement • Units of measurement • Compound units • Maps and scale drawings • Perimeter of rectilinear shapes. Area of a triangle • Area of a parallelogram Area of a Trapezium • Circumference of a circle. Area of a circle 			<ul style="list-style-type: none"> • Builders • Architect • Construction 	Sam testing

		<ul style="list-style-type: none"> • Perimeter of composite shapes Area of composite shapes • Polyhedra • Cones and spheres Pyramids • Pythagoras' theorem • Trigonometry in right-angled triangles Exact trigonometric ratios 				
	Congruence and Similarity	<ul style="list-style-type: none"> • Reflection • Rotation • Translation • Enlargement • Congruent triangles • "Vector arithmetic Column vectors' • Similar triangles • Similar shapes 				
HT4	Revision		<ul style="list-style-type: none"> • Maths box skills check • 10 questions once per week • Mathsbox skills check 20 questions • HWK- once a week • Weekly retrieval chart current and long-term skills 	<ul style="list-style-type: none"> • Key words – learned and understood • Encourage use of subject language • Questioning • Pupil explanations and reasoning • Engage with worded exam questions 	<ul style="list-style-type: none"> • Chef • Retail • Builders • Architect 	<p>Sam testing</p> <p>End of term test</p>
HT5	Revision		<ul style="list-style-type: none"> • Flashback 4 – once per week • Mathsbox skills check 10 questions – once per week • Mathsbox skills check 	<ul style="list-style-type: none"> • Key words – learned and understood • Encourage use of subject language • Questioning • Pupil explanations and reasoning 	<ul style="list-style-type: none"> • Statistician • Gaming 	Sam testing

			20 questions HWK – once a week	<ul style="list-style-type: none"> Engage with worded exam questions 		
HT6	Revision		<ul style="list-style-type: none"> Maths box skills check 10 questions once per week Mathsbox skills check 20 questions HWK- once a week Weekly retrieval chart current and long-term skills 	<ul style="list-style-type: none"> Key words – learned and understood Encourage use of subject language Questioning Pupil explanations and reasoning Engage with worded exam questions 	<ul style="list-style-type: none"> Scientists 	Sam testing