

Subject: Maths			
Exam Board: Edexcel Maths			
Year Group	Unit 1	Unit 2	Unit 3
7	 Understand place value and their use in written and mental methods Apply effective mental and written methods of multiplication and division Perform calculations with negative numbers and understand the uses of negative numbers in context Recognise and use relationships between operations, such as factors, multiples, primes, and inverses Identify and find prime numbers, prime decomposition, LCM and HCF Calculate percentages of amounts 	 Understand equivalent fractions and perform calculations involving fractions Find equivalent fractions, decimals and percentages, and use them to compare proportional values Use algebraic notation correctly to set up and derive equations and formulae. Recognise equations, identities and formulae. Use and interpret the collection of like terms, multiplication rules and expanding brackets to simplify algebraic expressions Use inverse operations to rearrange or solve equations Recognise terms, expressions and sequences, and substitute values including decimals, fractions and negatives 	 Calculate the perimeter of a range of shapes Calculate the area of a range of shapes Accurately draw, measure and name the 3 types of angles Use geometric reasoning to find missing angles in 2D shapes Interpret statistical data through calculating the mean, median, mode and range Understand how to collect and organise data Construct and interpret a range of graphs Find and contextualise statistical measures using graphs





	Ratio & Proportion		
8	 Understand and execute the order of operations Negative Numbers Apply rounding to estimate the answer to a calculations Identify and find powers and roots Identify and find prime numbers, prime decomposition, LCM and HCF Understand equivalent fractions and perform calculations involving fractions Recognise and use relationships between units of measurement and compound measures 	 Calculate the area of a range of shapes Understand the use of pi and apply it to calculate the area and circumference of circles Use and determine the nth term of a linear sequence Simplify algebraic expressions by collecting like terms, expanding and factorising Use algebraic manipulation to solve multi-step equations including unknowns on both sides and change the subject of a formulae Apply algebraic skills to plot linear and quadratic graphs Understand and solve linear inequalities 	 Find percentages of amounts and percentage increase/decrease using multipliers Understand and use the relationship between ratio and proportion and proportional reasoning Find unknown angles in parallel lines "Use protractor and compasses to accurately construct triangles and quadrilaterals Use a straight edge and compass to form constructions" Understand how to identify congruent and similar shapes "Represent and use 3D shapes in 2D form to calculate surface area Calculate the volume of prisms" Interpret statistical data through calculating the mean, median, mode and range Find and contextualise statistical measures





			 Use probability rules to describe chance Use probability rules to describe chance
9	 Apply rounding to estimate the answer to a calculation Identify and find prime numbers, prime decomposition, LCM and HCF Using Index Laws ands Standard Form Understand equivalent fractions and perform calculations involving fractions Convert between fractions, decimals and percentages Calculating percentage increase, decrease, reverse, simple interest and compound interest 	 Ratio and proportion Probability Simplify algebraic expressions by collecting like terms, expanding and factorising Use algebraic manipulation to solve multi-step equations including unknowns on both sides and change the subject of a formulae Understand and solve linear inequalities Substitution, further algebraic manipulations Use and determine the nth term of a linear sequence Apply algebraic skills to plot linear graphs Apply algebraic skills to plot quadratic, cubic and reciprocal graphs and circles 	 Representing data Calculate area and perimeter of shapes including triangles, quadrilaterals and circles Represent and use 3D shapes in 2D form to calculate surface area and volume of prisms Identify and calculate angles in polygons & unknown angles in parallel lines Using Pythagoras Theorem Understanding and using trigonometric ratios Transformations





10 (Foundation)	 Integers and place value Decimals Indices, powers and roots Indices and Standard form Algebra the basics Expressions and substitution into formulae FDP Percentages 	 Tables, Charts and graphs Pie Charts Scatter graphs Equations and Inequalities Sequences Properties of shapes, parallel lines and angle facts. Interior and exterior angles of polygons. 	 Real Life Graphs Straight Line Graphs Statistics, sampling and the averages Ratio Proportion Pythagoras and Trigonometry Plans and Elevations Constructions, loci and bearings
Y10 (Crossover)	 Calculating, checking and rounding Indices, roots, reciprocals and hierarchy of operations Factors, multiples, primes, standard form and surds Algebra 'the basics' 	 Sequences Fractions and Percentages Ratio and proportion Polygons angles and parallel lines Pythagoras and trigonometry Averages and Range Representing and interpreting data and scatter graphs 	 Graphs, the basics and real life graphs Linear graphs and coordinate geometry Quadratic, cubic and other graphs Perimeter, area and circles 3D forms, volumes Accuracy and bounds Solving Quadratic and Simultaneous Equations Inequalities Probability Transformations and Constructions





			 Similarity and Congruence
10 (Higher)	 Calculating, checking and rounding Indices, roots, reciprocals and hierarchy of operations Factors, multiples, primes, standard form and surds Algebra 'the basics' 	 Sequences Fractions and Percentages Ratio and proportion Polygons angles and parallel lines Pythagoras and trigonometry Averages and Range Representing and interpreting data and scatter graphs Graphs, the basics and real life graphs Linear graphs and coordinate geometry Quadratic, cubic and other graphs 	 Perimeter, area and circles 3D forms, volumes, cylinders, cones and spheres. Accuracy and bounds Solving Quadratic and Simultaneous Equations Inequalities Probability Multiplicative Reasoning Transformations and Constructions Similarity and Congruence
11 (Foundation)	 Multiplicative Reasoning Quadratic Equations, expanding and factorising. Quadratic equations: graphs Circles, cylinders, cones and spheres Fractions and reciprocals Indices and standard form Transformations Similarity and Congruence in 	 Review and Revision in advance of exams 	 Review and Revision in advance of exams





	 2D Vectors Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations. 		
Y11 (Crossover)	 Multiplicative Reasoning Equations and Graphs Changing the subject of more complex formulae Algebraic fractions Rationalising surds Further Statistics; cumulative frequency Proportion and Graphs 	 Review and Revision in advance of exams 	 Review and Revision in advance of exams
11 (Higher)	 Changing the subject of more complex formulae, solving equations from algebraic fractions, rationalising surds, proof Advanced Trigonometry Further Statistics Circle Theorems 	 Review and Revision in advance of exams 	 Review and Revision in advance of exams





Vectors and Geometric Proof	
 Proportion and Graphs 	



Aspiration - Integrity - Pride