Portchester Community School Mathematics Programme of Study 2019-20

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Number and place value The four operations Multiples, factors and primes, HCF, LCM BIDMAS	Fractions Percentages Use of a calculator Expressions, formulae and linear equations Cost of Christmas	Measures 2D and 3D Shapes Area Probability Design a Farm	Sequences Angle facts Constructions of shapes Design a Sports Field	Indices and roots Co-ordinates Linear functions 3D Shapes Volume of a cuboid	Transformations Average child Ratio
8	The four operations including place value Multiples, factors, powers, primes, BIDMAS Fractions	Percentages Ratio Expressions and formulae Use of a Calculator	Perimeter, Area and Volume Solving equations and inequalities	Sequences Angle Facts Constructions Bearings and Scale	Graphs Probability Plans and Elevations	Transformations Statistics
9	Number Review Algebra Review Area and Perimeter Sequences	Fractions, Decimals and Percentages (including growth and decay) Ratio and Proportion	Coordinates and Linear Graphs Equations Averages Scatter graphs	Angles Pythagoras' Theorem Trigonometry introduction	Constructions and Loci Scale Drawing Bearings Transformations	Statistics Probability 2D representation of 3D shapes
10	**Higher:** Fractions including Algebraic Fractions Rounding Area and Perimeter Coordinates and Linear Graphs	**Higher:** Percentages Polygons Scale Drawing and Bearings Algebra Review Quadratic Equations and Graphs Rearranging Formulae	**Higher:** Volume 2D representation of 3D shapes Linear Equations Simultaneous Equations Probability	**Higher:** Factors and Multiples Ratio and Proportion Congruence and Similarity Inequalities	**Higher:** Indices Pythagoras' Theorem and Trigonometry Further Equations and Graphs Geometry and Measures Review	**Higher:** Transformations Collecting and Representing Data Statistical Measures Circle Theorems
10	**Foundation:** Number Review (1) Rounding Measures Area and Perimeter Sequences	**Foundation:** Number Review (2) Angles Properties of Polygons Algebra Review and Extension Graphs	**Foundation:** Fractions, Decimals and Percentages Calculating with Percentages Volume Growth and Decay	**Foundation:** Scatter Graphs Transformations Equations Inequalities Scale Drawing and Bearings	**Foundation:** Indices Pythagoras' Theorem Real Life Graphs	**Foundation:** Statistical Measures Simultaneous Equations Revision

11	**Higher:** Surds Number recap Functions Further Quadratic Equations Rearranging Formulae Identities Probability (inc Venn Diagrams)	**Higher:** Direct and Inverse Proportion Vectors Iteration Trigonometry Revision for Mocks	**Higher:** Real Life Graphs Gradients and Rates of Change Sketching Graphs Transformation of Functions Quadratic Sequences	**Higher:** Circles Review Equation of a Circle Area under a Curve Statistics Review Exponential Growth and Decay	**Higher:** Revision	**Higher:** Revision
	Foundation: Basic Number Review Standard Index Form Probability Sketching Graphs Quadratic Graphs Circumference and Area of a Circle	**Foundation:** 2D and 3D shapes Algebra and Graphs Direct and inverse Proportion Revision for Mocks	**Foundation:** Congruence and Similarity Trigonometry Vectors	**Foundation:** Revision	**Foundation:** Revision	**Foundation:** Revision

GCSE Mathematics Specification