Year 7 Big Picture – Mathematics

Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 6 weeks
Content 7.01 Numerical Skills 7.02 Order of operations 7.03 Introduction to Algebra	**Content** 7.04 Primes, Factors and Multiples 7.05 Expanding and Factorising 1 7.06 Addition and Subtraction 7.07 Perimeter	**Content** 7.08 Mean 7.09 Multiplication and Division 7.10 Area of Triangles and Quadrilaterals
Assessment Objectives This is the knowledge, application and skills assessed by the Big Test: • Understand and use place value for decimals • Calculate with negative numbers • Estimate calculations by rounding. • Solve calculations requiring understanding of B-I-DM-AS (know that the inverse of squaring is 'square rooting') • Introduce the concept of algebra • Simplify expressions and manipulate expressions through simple one step rearranging • Substitute positive and negative integers into expressions • Solve simple one step equations **Unit test (marked by teacher)** Unit test 7.02 **Unit test (Self-assessment)** Unit test 7.03 **Feedforward and Intervention** Students to complete the questions where they made errors (in purple pen)	**Assessment Objectives** This is the knowledge, application and skills assessed by the Big Test: • Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple • Simplify and manipulate algebraic expressions to maintain equivalence by multiplying a single term over a bracket or by taking out common factors • Use Addition and Subtraction, including formal written methods, applied to integers & decimals • Calculate and solve problems involving perimeters of rectangles and compound shapes (not circles) • Converting metric units of length **Unit test (marked by teacher)** Unit test 7.05 **Unit tests (Self-assessment)** Unit tests 7.04, 7.07 **Feedforward and Intervention** Students to complete the questions where they made errors (in purple pen)	**Assessment Objectives** This is the knowledge, application and skills assessed by the Big Test: • Describe, interpret and compare observed distributions of a single variable through the use of the mean • Use Multiplication and Division, including formal written methods, applied to integers & decimals • Derive and apply formulae to calculate and solve problems involving area of triangles, rectangles and parallelograms • Converting metric units of area **Big test (marked by teacher)** Big Test 1 **Unit tests (Self-assessment)** Unit tests 7.08, 7.10 **Feedforward and Intervention** Students to complete the questions where they made errors (in purple pen)
Year 7 Baseline Test **ATL Data capture**	**ATL Data capture**	**Big Test 1** **Data capture – Big test % and ATL**

Year 7 Big Picture – Mathematics

Spring 2 6 weeks	Summer 1 5 weeks	Summer 2 7 weeks
Content 7.11 Fraction Manipulation 7.12 Adding and Subtracting fractions 7.13 Comparing and Ordering fractions 7.14 Fractions of amounts	**Content** 7.15 Polygons 7.16 Angles 7.17 Coordinates	**Content** 7.18 Time EOY Revision
Assessment Objectives This is the knowledge, application and skills assessed by the Big Test: • Express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1 • Use addition and subtraction, including formal written methods, applied to proper and improper fractions, and mixed numbers • Compare and order fractions by creating common denominators • Interpret fractions as operators	**Assessment Objectives** This is the knowledge, application and skills assessed by the Big Test: • Derive, describe and illustrate properties of triangles, quadrilaterals and other plane figures [for example: describe, sketch and draw regular polygons, and other polygons that are reflectively and rotationally symmetric equal lengths and angles] using appropriate language and technologies • Apply the properties of angles at a point, angles at a point on a straight line, angles in polygons, vertically opposite angles • Read and plot coordinates in all 4 four quadrants and use coordinates to develop algebraic relationships • Find midpoints • Understand how coordinates link to basic graphs of y=a, x=a, y=x and y=-x	**Assessment Objectives** This is the knowledge, application and skills assessed by the Big Test: • Using clocks • Convert between analogue and digital time • Calculate with time and use timetables and use calendars • Convert units of time • EOY Revision programme- Revision of key topics • Preparation for UL tests
Unit test (marked by teacher) Unit test 7.12 **Unit tests (Self-assessment)** Unit tests 7.11, 7.13 **Feedforward and Intervention** Students to complete the questions where they made errors (in purple pen)	**Unit test (marked by teacher)** Unit test 7.16 **Unit tests (Self-assessment)** Unit tests 7.15, 7.17 **Feedforward and Intervention** Students to complete the questions where they made errors (in purple pen)	**EOY test (marked by teacher)** EOY Paper 1 and Paper 2 **Unit tests (Self-assessment)** Unit test 7.18 **Feedforward and Intervention** Students to complete the questions where they made errors (in purple pen)

Year 7 Big Picture – Mathematics

ATL Data capture	**ATL Data capture**	**Year 7 UL EOY test (Big Test 2)** **Data capture – Big test and ATL**