Key Stage 3 Mathematics Curriculum Map

Year 7

Term	Substantive Knowledge (Intent) This is the specific, factual content for the topic, which should be connected into a careful sequence of learning.	Disciplinary Knowledge (Skills) (Implementation) This is the action taken within a particular topic in order to gain substantive knowledge.	Assessment opportunities (Impact) What assessments will be used to measure student progress? Evidence of how well students have learned the intended content.
Term 1 A (Autum)	**Chapter 1: Positive Real Numbers** • 1.1 Place values and rounding integers • 1.2 Addition • 1.3 Subtraction • 1.4 Multiplication • 1.5 Division • 1.6 Index notation square roots & cube roots • 1.7 Order of operations & using a calculator • 1.8 Factors and multiples **Chapter 2: Negative Real Numbers** • 2.1 Negative numbers and the number line • 2.2 Addition and subtraction of integers • 2.3 Multiplication, division, and combined operations of integers	Chapter 1: Positive Real Numbers • Recognise the place values of an integer • Round a number to the nearest 10, 100 or 1000 • Add, subtract, multiply and divide two positive integers • Relate addition and subtraction • Relate multiplication and division • Understand the meaning of square, cube, square root and cube root of a number • Understand index notation • Apply the order of operations in calculations • Use calculators to apply operations • Identify multiples and factors of a number • Apply the above concepts to solve daily life problems Chapter 2: Negative Real Numbers • Recognise the use of negative numbers in the real world • Represent numbers on a number line • Identify integers and perform the four operations on them.	• Year 7 baseline test • In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 1.1: 1931, 1352, 1840 1.2: 1020, 1908, 1986 1.3: 1028, 1908, 1986 1.4: 1914, 1916, 1774 1.5: 1905, 1917, 1041, 1775 1.6: 1053 1.7: 1167, 1932, 1933 1.8: 1035, 1032 2.1: 1069, 1776 2.2: 1068 2.3: 1068

Term 1 B (Autum)	**Chapter 3: Introduction to Algebra** • 3.1 Letters to Represent Integers • 3.2 Substituting Numbers for Letters • 3.3. Writing Algebraic Expressions and Formulae • 3.4 Like Terms and Unlike Terms • 3.5 Addition and Subtraction of Linear Expressions • 3.6 Expressions with Brackets **Chapter 4: Simple Equations** • 4.1 Equations in One Variable • 4.2 Equations in One Variable with Brackets • 4.3 Writing Equations to Solve Problems	Chapter 3: Introduction to Algebra • Use letters to represent integers • Interpret simple algebraic notations • Substitute integers into simple expressions and formulae • Write simple expressions and formulae • Simplify expressions by collecting like terms • Add and subtract linear expressions • Expand a single bracket Chapter 4: Simple Equations • Understand the concept of equations and balancing • Solve simple equations in one variable • Solve simple equations involving brackets • Write simple equations in one variable to solve problems	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 3.1: 1982, 1158, 1179 3.2: 1187, 1186 3.3: 1158 3.4: 1179 3.5: 1179 3.6: 1247, 1150 4.1: 1925, 1154 4.2: 1925, 1928 4.3: 1158

Term 2 A (Spring)	**Chapter 5: Fractions** • 5.1 Quantities as Fractions • 5.2 Equivalent Fractions and Comparing Fractions • 5.3 Addition and Subtraction of Fractions and Mixed Numbers • 5.4 Multiplication of Fractions • 5.5 Division of Fractions and Mixed Numbers • 5.6 Rational Numbers and Using a Calculator	Chapter 5: Fractions • Use fraction notation and express one quantity as a fraction of another • Convert between improper fractions and mixed numbers • Identify equivalent fractions, simplify fractions and compare fractions • Find the reciprocal of a number • Perform the four operations on fractions and on mixed numbers • Calculate fractions of quantities • Apply fractions in practical situations • Identify fractions as rational numbers	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 5.1: 1220, 1062, 1019 5.2: 1042, 1075, 1771 5.3: 1017, 1074 5.4: 1841, 1046, 1768, 1047, 1769, 1074 5.5: 1046, 1040, 1074 5.6: 1933
Term 2 B (Spring)	**Chapter 6: Decimals** • 6.1 Place values, ordering and rounding of decimals numbers • 6.2 Addition and subtraction of decimals • 6.3 Multiplication of decimals • 6.4 Division of a decimal by a whole number • 6.5 Mental calculation and conversion between units • 6.6 Division of a decimal by a decimal • 6.7 Rational numbers and real numbers **Chapter 7: Percentages** • 7.1 Meaning of a percentage • 7.2 Percentage of a quantity • 7.3 Reducing and increasing a quantity by a percentage	Chapter 6: Decimals • Interpret decimals and write decimals in order of size • Round decimals to the nearest integer • Use the four operations with decimals • Convert between units of measure • Convert between decimals and fractions • Solve real-life problems using decimals • Identify recurring decimals and real numbers Chapter 7: Percentages • Define percentage as 'number of parts per hundred' • Interpret a percentage as a fraction or a decimal • Convert a fraction or a decimal to a percentage • Recognise percentages greater than 100% • Compare two quantities using percentages • Express one quantity as a percentage of another • Find a percentage of a quantity using multiplication. Reduce or increase a quantity by a percentage	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 6.1: 1076, 1072, 1004 6.2: 1380, 1381, 1007 6.3: 1011, 1382 6.4: 1008 6:5 1013, 1091 6.6: 1923 6.7: 1773, 1016, 1063 7.1: 1030, 1962, 1963, 1029, 1015 7.2: 1030, 1031, 1962, 1963 7.3: 1060, 1073, 1302

Term 3 A (Summer)	**Chapter 8: Angles, Parallel Lines & Triangles** • 8.1 Points, lines, and angles • 8.2 Angles • 8.3 Parallel lines and transversals • 8.4 Triangles **Chapter 9: Transformations, Symmetry and Congruence** • 9.1 Transformations • 9.2 Symmetry • 9.3 Congruence **Chapter 10: Perimeter and Area of Triangles and Circles** • 10.1 Perimeter and Area of a Triangle • 10.2 Circumference of a Circle • 10.3 Area of a Circle • 10.4 Perimeter and Area Problems	Chapter 8: Angles, Parallel Lines & Triangles • Describe a point, a line, a line segment, a ray, and a plane • Construct lines, line segments and angles using geometry software • Identify different types of angles • Recognise the properties of vertically opposite angles, angles on a straight line and angles at a point • Recognise the properties of angles formed by parallel lines and transversals • Find unknown marked angles in a diagram using the above properties • Classify triangles based on their sides and angles • Understand the general properties of sides and angles of a triangle • Construct triangles where three sides are given Chapter 9: Transformations, Symmetry and Congruence • Translate, rotate and reflect 2D shapes • Describe transformations in vector form • Combine transformations • Recognise and describe reflection symmetry of 2D shapes • Recognise and describe rotation symmetry of 2D shapes • Understand the idea of congruence • Match the sides and angles of two congruent shapes Chapter 10: Perimeter and Area of Triangles and Circles • Find the perimeter and area of a triangle • Find the circumference and area of a circle • Find the perimeter and area of a semicircle and a quarter of a circle	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 8.1: n/a 8.2: 1081, 1847, 1989, 1990, 1082 8.3: 1109 8.4: 1130, 1082, 1090 9.1: 1843, 1127, 1113, 1115, 1839 9.2: 1230, 1114, 1116 9.3: 1148 10.1: 1110, 1129 10.2: 1088 10.3: 1083 10.4: 1129, 1088, 1083

		• Find a length given the perimeter or area of a shape • Solve problems involving perimeters and areas of composite plane figures formed by rectangles, squares, triangles and circles	
Term 3 B (Summer)	**<u>Chapter 11: Surface Area and Volume of Cuboids, including Cubes</u>** • 11.1 Nets of Cuboids, including Cubes • 11.2 Surface Area of Cuboids, including Cubes • 11.3 Volumes of Cuboids, including Cubes **<u>Chapter 12: Collecting, Organising & Displaying Data</u>** • 12.1 Collection of Data • 12.2 Organisation of Data • 12.3 Pictograms, Vertical Line Charts and Bar Charts	<u>Chapter 11: Surface Area and Volume of Cuboids, including Cubes</u> • Draw nets of cuboids, including cubes • Calculate the surface area of cuboids, including cubes • Calculate the volume of cuboids, including cubes • Solve problems involving volume and surface area of cuboids, including cubes <u>Chapter 12: Collecting, Organising & Displaying Data</u> • Recognise different methods of collecting data • Identify and write appropriate survey questions • Organise data • Create frequency tables • Construct, analyse and interpret pictograms, vertical line charts, bar charts and compound bar charts.	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 11.1: 1106, 1107 11.2: 1107 11.3: 1137 12.1: 1248, 1249 12.2: 1385, 1235, 1193 12.3: 1193, 1205

Key Stage 3 Mathematics Curriculum Map

Year 8

Term	Substantive Knowledge (Intent) This is the specific, factual content for the topic, which should be connected into a careful sequence of learning.	Disciplinary Knowledge (Skills) (Implementation) This is the action taken within a particular topic in order to gain substantive knowledge.	Assessment opportunities (Impact) What assessments will be used to measure student progress? Evidence of how well students have learned the intended content.
Term 1 A (Autum)	**Chapter 1: Factors and Multiples** • 1.1 Primes, Prime Factorisation and Index Notation • 1.2 Highest Common Factor (HCF) • 1.3 Lowest Common Multiple (LCM) • 1.4 Prime Factorisation and Roots **Chapter 2: Approximation and Estimation** • 2.1 Rounding Numbers to Decimal Places • 2.2 Rounding Numbers to Significant Figures • 2.3 Estimation	Chapter 1: Factors and Multiples • Recognise prime numbers • Express a composite number as a product of its prime factors • Represent the prime factorisation of a number in index notation • Find the highest common factor (HCF) of a group of numbers by using prime factorisation • Find the lowest common multiple (LCM) of a group of numbers by using prime factorisation • Understand the use of prime factorisation to find the square root and cube root of a number Chapter 2: Approximation and Estimation • Round numbers to a required number of decimal places • Round numbers to a required number of significant figures • Estimate quantities (numbers and measures) to an appropriate degree of accuracy • Estimate the results of computation • Be aware of rounding errors in the intermediate steps of calculations	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 1.1: 1032, 1044 1.2: 1032, 1044 1.3: 1034, 1035 1.4: n/a 2.1: 1001, 1004, 1840 2.2: 1005 2.3: 1002, 1043, 1968, 1969

Term 1 B (Autum)	**Intent** **Chapter 3: Ratio, Rate and Speed** • 3.1 Integer Ratios • 3.2 All Kinds of Ratios • 3.3 Scale Plans and Maps • 3.4 Rate • 3.5 Speed **Chapter 4: Working with Percentages** • 4.1 Simple Interest and Reverse Percentages • 4.2 Percentage Increase and Decrease • 4.3 Repeated Percentage Changes	Chapter 3: Ratio, Rate and Speed • Use ratio notation • Compare quantities by ratio • Describe the relationship between ratio and fraction • Divide a quantity in a given ratio • Solve problems involving ratio • Understand and use the scale of a plan or a map • Solve problems involving rate in daily life • Recognise the relationships between distance, time and speed • Recognise the concepts of constant speed and average speed • Write speed in different units and convert it from one unit to another • Solve problems involving speed Chapter 4: Working with Percentages • Calculate simple interest • Solve problems involving reverse percentage • Calculate percentage increase and decrease in quantities • Calculate repeated percentage change • Calculate compound interest • Solve problems involving growth and depreciation	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 3.1: 1038, 1052 3.2: 1039 3.3: 1103, 1117 3.4: 1243 3.5: 1121 4.1: 1237 4.2: 1302 4.3: 1073, 1238, 1239
Term 2 A (Spring)	**Intent** **Chapter 5: Algebraic Expressions, Formulae and Proof** • 5.1 Use of Letters in Algebra • 5.2 Evaluation of Algebraic Expressions and Formulae • 5.3 Algebraic Expressions in the Real World • 5.4 Simplification of Linear Expressions	Chapter 5: Algebraic Expressions, Formulae and Proof • Use letters to represent numbers or variables • Interpret algebraic notations • Evaluate algebraic expressions and formulae • Express real-world situations in algebraic terms • Simplify linear expressions • Factorise an algebraic expression by using common factors	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes:

	• 5.5 Factorisation by Using Common Factors • 5.6 Proof **<u>Chapter 6: Equations and Inequalities in One Variable</u>** • 6.1 Simple Linear Equations in One Variable • 6.2 Equations Involving Brackets • 6.3 Simple Fractional Equations • 6.4 Forming Linear Equations to Solve Problems • 6.5 Inequality Relationships • 6.6 Solving Inequalities	• Prove a statement algebraically <u>Chapter 6: Equations and Inequalities in One Variable</u> • Understand the concepts of equations and the solution of an equation • Solve linear equations in one variable • Solve linear equations in one variable involving brackets • Solve simple fractional equations • Formulate linear equations in one variable to solve problems • Understand the concept and properties of linear inequalities • Solve simple linear inequalities • Solve simple problems involving inequalities	5.1: 1158, 1178, 1179 5.2: 1158, 1186, 1187 5.3: 1158 5.4: 1247 5.5: 1155 5.6: 1938 6.1: 1154 6.2: 1928 6.3: 1929 6.4: n/a 6.5: n/a 6.6: n/a
Term 2 B (Spring)	**<u>Intent</u>** **<u>Chapter 7: Coordinates and Linear Functions</u>** • 7.1 Cartesian Coordinate System • 7.2 Idea of a Function • 7.3 Linear Functions and their Graphs • 7.4 Gradients of Linear Graphs **<u>Chapter 8: Number Patterns</u>** • 8.1 Number Patterns and Sequences • 8.2 General Term of a Sequence	<u>Chapter 7: Coordinates and Linear Functions</u> • Construct the Cartesian coordinate system in two dimensions and state the coordinates of points on it • Recognise the idea of functions • Plot a graph of a set of ordered pairs as a representation of a relationship between two variables • Recognise linear functions in the form of y = mx + c and draw their graphs • Find the gradient of a linear graph <u>Chapter 8: Number Patterns</u> • Recognise number patterns and sequences • Find the terms of a sequence using a term-to-term rule	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 7.1: 1092, 1093 7.2: n/a 7.3: 1395, 1396 7.4: 1153, 1312, 1314 8.1: 1173 8.2: 1165, 1945

		• Recognise arithmetic and geometric sequences • Find terms of a sequence using a position-to-term rule • Find the formula for the general (nth) term of a sequence • Solve problems involving number patterns and sequences	
Term 3 A (Summer)	**Intent** **Chapter 9: Angles In Quadrilaterals & Polygons** • 9.1 Quadrilaterals • 9.2 Polygons **Chapter 10: Perimeter and Area Of Parallelograms and Trapezia** • 10.1 Area of Parallelograms • 10.2 Area of Trapezia • 10.3 Perimeter and Area of Composite Plane Figures	Chapter 9: Angles In Quadrilaterals & Polygons • Classify special quadrilaterals on the basis of their properties • Recognise the properties of special quadrilaterals • Recognise the properties of polygons, including symmetry properties Chapter 10: Perimeter and Area Of Parallelograms and Trapezia • Calculate the area of a parallelogram • Calculate the area of a trapezium • Solve problems involving perimeters and areas of composite plane figures	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 9.1: 1102 9.2: 1100, 1320 10.1: 1108 10.2: 1128 10.3: n/a
Term 3 B (Summer)	**Intent** **Chapter 11: Volume and Surface Area of Prisms and Cylinders** • 11.1 Views and Nets of Three-dimensional (3D) Shapes • 11.2 Volume and Total Surface Area of Prisms • 11.3 Volume and Total Surface Area of Cylinders • 11.4 Volume and Surface Area of Composite Solids **Chapter 12: Statistical Graphs** • 12.1 Line Graphs • 12.2 Pie Charts	Chapter 11: Volume and Surface Area of Prisms and Cylinders • Visualise and draw sketches of three-dimensional shapes from different views • Visualise and draw the nets of prisms and cylinders • Calculate the volume and surface area of prisms • Calculate the volume and surface area of cylinders • Convert between cm2 and m^2, and between cm^3 and m^3 • Solve problems involving volume and surface area of composite solids Chapter 12: Statistical Graphs	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 11.1: 1098, 1106 11.2: 1107, 1139 11.3: 1107, 1138 11.4: 1138, 1139 12.1: 6018 12.2: 1207

	• 12.3 Use and Misuse of Statistical Graphs • 12.4 Scatter Graphs	• Construct, analyse and interpret line graphs • Construct, analyse and interpret pie charts • Describe the purposes and appropriateness of use of the different forms of statistical representation, including pictograms and bar charts • Explain why a given statistical diagram can lead to misinterpretation of data • Construct, analyse and interpret scatter graphs • Describe types of correlation for a scatter graph • Draw a line of best fit on a scatter graph and use it to estimate data values • Find the equation of a given line of best fit • Identify and explain outliers	12.3: 1251 12.4: 1213

Key Stage 3 Mathematics Curriculum Map

Year 9

Term	Substantive Knowledge (Intent) This is the specific, factual content for the topic, which should be connected into a careful sequence of learning.	Disciplinary Knowledge (Skills) (Implementation) This is the action taken within a particular topic in order to gain substantive knowledge.	Assessment opportunities (Impact) What assessments will be used to measure student progress? Evidence of how well students have learned the intended content.
Term 1 A (Autum)	**Chapter 1: Indices and Standard Form** • 1.1 Positive Indices and Laws of Indices • 1.2 Zero and Negative Indices • 1.3 Standard Form **Chapter 2: Proportion** • 2.1 Direct Proportion • 2.2 Inverse Proportion **Chapter 3: Linear Equations in Two Variables** • 3.1 Changing the Subject of a Formula • 3.2 Linear Equations in Two Variables • 3.3 Solving Simultaneous Linear Equations in Two Variables by the Graphical Method • 3.4 Solving Simultaneous Linear Equations in Two Variables by the Substitution Method • 3.5 Solving Simultaneous Linear Equations in Two Variables by the Elimination Method • 3.6 Solving Problems Using Simultaneous Equations	Chapter 1: Indices and Standard Form • State and apply the laws of indices • Simplify an expression involving indices • State and apply the definitions of zero and negative indices • Express and compare numbers in standard form • Calculate using numbers in standard form Chapter 2: Proportion • Understand the concepts of direct proportion and inverse proportion • Determine whether two quantities are in direct proportion or inverse proportion from a graph, a table or an equation connecting the two quantities • Solve practical problems involving direct proportion and inverse proportion Chapter 3: Linear Equations in Two Variables • Rearrange a formula to change the subject • Understand the properties of a linear equation in two variables • Draw the graph of a linear equation in two variables	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 1.1: 1033 1.2: 1951 1.3: 1051, 1049, 1050 2.1: 1948 2.2: 1949, 1048 3.1: 1170, 1171 3.2: 1396 3.3: 1319 3.4: n/a 3.5: 1176, 1175, 1174 3.6: n/a

		• Understand the concept of simultaneous equations and their solutions • Solve simultaneous linear equations in two variables using the graphical method, the substitution method, and the elimination method • Recognise the approximate nature of the graphical method • Apply simultaneous linear equations in two variables to solve problems	
Term 1 B (Autum)	**<u>Chapter 4: Quadratic Expressions</u>** • 4.1 Quadratic Expressions • 4.2 Expansion of the Product of Algebraic Expressions • 4.3 Factorisation of ax2 + bx + c • 4.4 Special Products of Algebraic Expressions • 4.5 Factorisation by Using Special Products of Algebraic Expressions **<u>Chapter 5: Non-Linear Graphs</u>** • 5.1 Graphs for Constant Rates of Change • 5.2 Quadratic Graphs • 5.3 Exponential, Reciprocal and Piece-wise Graphs	<u>Chapter 4: Quadratic Expressions</u> • Manipulate quadratic expressions • Expand the product of two linear algebraic expressions • Factorise quadratic expressions of the form ax2 + bx + c using the multiplication frame • Expand and factorise algebraic expressions using special products <u>Chapter 5: Non-Linear Graphs</u> • Interpret and draw distance–time graphs, velocity–time graphs and other graphs that show rates of change • Use graphs for rates of change to solve problems • Interpret and draw the graph of a quadratic function y = ax2 + bx + c • State the properties of quadratic graphs • Interpret and draw exponential, reciprocal and piece-wise graphs • State the properties of exponential and reciprocal graphs	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 4.1: n/a 4.2: 1150 4.3: 1157, 1156 4.4: 1150 4.5: 1157 5.1: 1322 5.2: 1168, 1959 5.3: n/a

Term 2 A (Spring)	**Chapter 6: Geometric Construction & Loci** • 6.1 Perpendicular Bisectors, Perpendicular Lines and Angle Bisectors • 6.2 Construction of Triangles and Quadrilaterals • 6.3 Loci **Chapter 7: Pythagoras' Theorem** • 7.1 Pythagoras' Theorem • 7.2 Applying Pythagoras' Theorem to Solve Problems • 7.3 Converse of Pythagoras' Theorem	Chapter 6: Geometric Construction & Loci • Construct perpendicular bisectors and angle bisectors using a pair of compasses and a ruler • Recognise the properties of perpendicular bisectors and angle bisectors • Construct a perpendicular to a line from a point or at a given point using a pair of compasses and a ruler • Construct triangles and quadrilaterals using a pair of compasses, a ruler and a protractor • Construct and describe loci for the paths of points on a plane Chapter 7: Pythagoras' Theorem • State Pythagoras' Theorem • Apply Pythagoras' Theorem to solve problems involving right-angled triangles • Apply the converse of Pythagoras's Theorem to determine whether a triangle has a right angle • Recognise and use the perpendicular distance from a point to a line as the shortest distance to the line	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 6.1: 1089 6.2: 1090, 1089 6.3: 1147 7.1: 1112 7.2: 1112 7.3: n/a
Term 2 B (Spring)	**Chapter 8: Congruence, Similarity and Enlargement** • 8.1 Congruent Triangles • 8.2 Similarity • 8.3 Enlargement of a Plane Figure • 8.4 Scale Drawing **Chapter 9: Trigonometry and Bearings** • 9.1 Finding Unknown Sides in a Right-angled Triangle • 9.2 Finding Unknown Angles in a Right-angled Triangle • 9.3 Bearings	Chapter 8: Congruence, Similarity and Enlargement • State the conditions for two triangles to be congruent • Identify congruent triangles • Solve problems involving congruence • Understand the idea of similarity • State the properties of similar polygons • Solve problems involving similarity • Enlarge a plane figure by a scale factor • Interpret scale drawings Chapter 9: Trigonometry and Bearings • State the definitions of trigonometric ratios (sine, cosine and tangent) of acute angles	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 8.1: 1148 8.2: 1119 8.3: 1099 8.4: 1117 9.1: 1133

		• Use trigonometric ratios to find unknown sides and angles in right-angled triangles • Apply the trigonometric ratios to solve problems • Measure and calculate bearings • Solve problems involving bearings	9.2: 1131 9.3: 1086
Term 3 A (Summer)	**<u>Chapter 10: Volume & Surface Area Of Pyramids & Cones</u>** • 10.1 Pyramids • 10.2 Cones <u>Chapter 11: Data Analysis</u> • 11.1 Mean and Range • 11.2 Median • 11.3 Mode	<u>Chapter 10: Volume & Surface Area Of Pyramids & Cones</u> • Visualise the idea of surface areas of pyramids and cones using nets • Find the surface areas and volumes of pyramids and cones • Find the surface areas and volumes of composite solids involving prisms, cylinders, pyramids, and cones <u>Chapter 11: Data Analysis</u> • Calculate the mean, median, mode and range of ungrouped data • Calculate the mean of grouped data • Make comparisons between sets of data	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 10.1: n/a 10.2: n/a 11.1: 1254, 1201 11.2: 1203 11.3: 1200, 1192
Term 3 B (Summer)	**<u>Chapter 12: Probability</u>** • 12.1 Introducing Probability • 12.2 Probability of Single Events • 12.3 Probabilities of Simple Combined Events • 12.4 Mutually Exclusive Events **<u>Chapter 13: Sets and Venn Diagrams</u>** • 13.1 Introducing Sets • 13.2 Venn Diagrams and Complement of A Set • 13.3 union and Intersection Of Sets	<u>Chapter 12: Probability</u> • Understand probability as a measure of chance • Define the terms sample space, outcome and event • List the sample space for a simple chance situation • Find the probability of a single event • Calculate the probability of a simple combined event using a sample space diagram • Identify mutually exclusive events • Understand and apply the addition of probabilities for two mutually exclusive events <u>Chapter 13: Sets and Venn Diagrams</u> • use set language and set notation to describe a set of objects, its elements, and its subsets	• In class teacher assessment through Q&A • End of chapter mini test (with peer marking) • Chapter revision exercise via textbook • End of term review exercises via textbook • End of term formal assessments • Mastery homework with use of mymaths.co.uk • Mymaths topic codes: 12.1: 1209, 1210 12.2: 1210 12.3: 1199 12.4: n/a 13.1: n/a 13.2: n/a 13.3: 1921, 1922, 1262

		• draw Venn diagrams to represent sets and their elements • define complement of a sets and represent it using a Venn diagram • define union and intersection of two sets and represent them using a Venn diagram • find probabilities using a Venn diagram	