KS4 – Year 11 Long Term Mapping

Subject Intent/ Aims: Subject Intent/ Aims

Pupils will learn to develop knowledge, skills and understanding of mathematical methods and concepts. Pupils will learn how to acquire, select and apply mathematical techniques to solve problems, including the application of Mathematics in real life contexts. Content of the course is split into the following areas: Number, Algebra, Ratio and Proportion, Data Handling, Probability, and Shape, Space and Measure.

The qualification is assessed by three examinations (one non-calculator and two calculator), each examination is worth one third of the overall grade. Pupils will follow the Edexcel/OCR course in GCSE Mathematics.

Term	Foundation Tier Knowledge DfE rEF	Component	Composite	Higher Tier Knowledge	Higher Order Knowledge	Cross curricular links
Autumn 1	N2, N4, N6	Prime numbers	Recap and use the terms odd, even, prime, factor (Divisor), multiple, common factor, common multiple, square, cube and root.	**N2**	apply the four operations, including formal written methods, to integers, decimals and simple fractions (proper and improper), and mixed numbers – all both positive and negative; understand and use place value (e.g. when working with very large or very small numbers, and when calculating with decimals)	Multiplicative reasoning (e.g. recipes)
	N4, N6, N7	Prime numbers / Index Notation	Identify prime numbers. Use positive integer indices.	**N3**	recognise and use relationships between	Proportional reasoning (Science)

					operations, including inverse operations (e.g. cancellation to simplify calculations and expressions); use conventional notation for priority of operations, including brackets, powers, roots and reciprocals	
	N4, N6	Prime numbers	Express a whole number as a product of its prime factors, including using power notation.	**N10**	work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and 7/2 or 0.375 or 3/8); **change recurring decimals into their corresponding fractions and vice versa**	Conversion between hours and minutes (Science, PE)
	N4	Highest Common Factor (HCF) and Lowest Common Multiple (LCM)	Find the HCF and LCM of two whole numbers by listing or from their prime factorisations.	**N4**	use the concepts and vocabulary of prime numbers, factors (divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple, prime factorisation, including using product notation and the unique factorisation theorem	
	N15	Rounding	Understand place value before and after the decimal point. Round answers to stated decimal places.	**N12**	interpret fractions and percentages as operators	Percentage change (Geography)
	N15	Rounding	Understand place value before	**R9**	define percentage as `number	

			and after the decimal point. Round answers to stated significant figures.		of parts per hundred¿; interpret percentages and percentage changes as a fraction or a decimal, and interpret these multiplicatively; express one quantity as a percentage of another; compare two quantities using percentages; work with percentages greater than 100%; solve problems involving percentage change, including percentage increase/decrease and original value problems, and simple interest including in financial mathematics	
	N14	Estimation	Estimate or check, without a calculator, the result of more complex calculations including roots. Use the approximate symbol appropriately.			Use of a calculator (Science)
	N15, N16	Upper and lower bounds	Use inequality notation to write down an error interval for a number or measurement rounded or truncated to a given degree of accuracy. Apply and interpret limits of accuracy.			
	N1, N2, N3, R9	Calculations with fractions. Fractions	Recognise and use equivalence between simple fractions and			Equivalence (Geography)

		of a quantity	mixed numbers. Order integers, fractions, decimals and percentages.			
	N2, N8, N12, R3, R6	Calculations with fractions. Fractions of a quantity	Carry out complex fractional calculations using BIDMAS, including the use of mixed numbers, negative fractions and improper fractions. Calculate fractions of a quantity and express one quantity as a fraction of another.			
	N10, N2	Decimals and fractions	Express a simple fraction as a terminating decimal or vice versa, without a calculator. Understand and use place value in decimals. E.g. 0.4 = 2/5 Use division to convert a simple fraction to a decimal.			Fractional reasoning (Science)
	N2	Division of decimals	Without a calculator, divide a decimal by a decimal.			
Autumn 2	N3, A1, A4	Collecting like terms. Simplifying products and quotients.	Simplify algebraic expressions by collecting like terms and expanding brackets. Simplify algebraic products and quotients. E.g. $2(a + 3b) = 2a + 6b$, $2a + 3a = 5a$, $a \times a \times a = a^3$, $2a \times 3b = 6ab$, $a^2 \times a^3 = a^5$, $3a^3 \div a = 3a^2$.[see also Laws of indices, 3.01c]	**G1**	use conventional terms and notation: points, lines, vertices, edges, planes, parallel lines, perpendicular lines, right angles, polygons, regular polygons and polygons with reflection and/or rotation symmetries; use the standard conventions for labelling and	

					referring to the sides and angles of triangles; draw diagrams from written description	
	A1, A3, A4	Multiplying out brackets	Expand products of two binomials, where all terms are positive. E.g. $(x + 2)(x + 3) = x^2 + 5x + 6$	**G3**	apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles; understand and use alternate and corresponding angles on parallel lines; derive and use the sum of angles in a triangle (e.g. to deduce and use the angle sum in any polygon, and to derive properties of regular polygons)	
	A1, A3, A4	Multiplying out brackets	Expand products of two binomials, including negative and complex algebraic terms. E.g. $(2x + 1)(x - 4) = 2x^2 - 7x - 4$	**N6**	use positive integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5**; estimate powers and roots of any given positive number**	
	A1, A3, A4	Multiplying out of brackets Factorising	Recognise difference of two squares and perfect square expressions. E.g. $a^2 - b^2 = (a + b)(a - b)$, $a^2 + 2ab + b^2 = (a + b)^2$, $a^2 - 2ab + b^2 = (a - b)^2$	**N7**	calculate with roots, and with integer **and fractional** indices	
	G17, G18	Circumference of a	Recap the calculation of	**N9**	calculate with and interpret	Units of measure

		circle	perimeter of rectilinear shapes and composite 2D shapes. Calculate the arc length of a sector of a circle given its angle and radius.		standard form $A \times 10^n$, where $1 \leq A < 10$ and n is an integer	(PE)
	G17, G18	Area of a circle	Recap area of triangles, quadrilaterals and composite 2D shapes. Know and apply the formula area = πr^2 to calculate area of a circle. Calculate the area of a sector of a circle given its angle and radius.	**A8**	work with coordinates in all four quadrants	
	G16	Polyhedra	Calculate the surface area and volume of cuboids and other right prisms (including cylinders).	**A10**	identify and interpret gradients and intercepts of linear functions graphically and algebraically	Calculating amount of material required for a project (DT)
	N8, G17	Pyramids, Cones and spheres	Calculate the surface area and volume of a pyramid (formulae will be given). Calculate the surface area and volume of spheres, cones and simple composite solids (formulae will be given).	**A9**	plot graphs of equations that correspond to straight-line graphs in the coordinate plane; use the form y = mx + c to identify parallel **and perpendicular** lines; find the equation of the line through two given points or through one point with a given gradient	
	A3, A6	Algebraic terminology and	Recognise the difference between an equation and an	**P6**	enumerate sets and	

		proofs	identity, and show algebraic expressions are equivalent. Use algebra to construct arguments.		combinations of sets systematically, using tables, grids, Venn diagrams and tree diagrams	
	A3, A5, A21, R10	Formulate algebraic expressions	Formulate simple formulae and expressions from real-world contexts. E.g. Cost of car hire at £50 per day plus 10p per mile. The perimeter of a rectangle when the length is 2cm more than the width.	**P9**	**calculate and interpret conditional probabilities through representation using expected frequencies with two-way tables, tree diagrams and Venn diagrams**	Real life graphs (Science)
	A2, A5	Substitute numerical values into formulae and expressions	Substitute positive or negative numbers into more complex formulae, including powers, roots and algebraic fractions.	**G15**	measure line segments and angles in geometric figures, including interpreting maps and scale drawings and use of bearings	
	A4, A5	Change the subject of a formula	Rearrange formulae to change the subject, including cases where the subject appears twice, or where a power or reciprocal of the subject appears.			
	G2	Perpendicular bisector. Angle Bisector	Construct the perpendicular bisector and midpoint of a line segment. Construct the bisector of an angle formed from two lines. Use geometric terms such as points, lines, line segments, vertices, parallel lines,			Scale drawing (DT)

			perpendicular lines, acute, obtuse, reflex.			
	G2	Perpendicular from a point to a line	Construct the perpendicular from a point to a line. Construct the perpendicular to a line at a point. Know that the perpendicular distance from a point to a line is the shortest distance to the line.			
	G2	Loci	Know formal names of polygons, including special types of triangles, quadrilaterals, and regular polygons up to eight sides. Recap ruler and compass constructions to construct figures and identify the loci of points. Understand the term 'equidistant'.			
	G2	Loci	Apply constructions techniques to solve real-world problems. Recognise where loci represents 'equidistant' from points or lines.			
	R2, G15	Maps and Scale drawings	Recap angle rules to express degrees of turn from North as a 3 figure bearing.			
	R2, G15	Maps and Scale drawings	Use the scale of a map, and work with bearings in order to			

			interpret scale drawings.			
	R2, G15	Maps and Scale drawings	Use the scale of a map, and work with bearings in order to construct simple scale drawings.			
	R2, G15	Maps and Scale drawings	Construct scaled diagrams from sketches and written instructions using ruler and compass to solve real life problems			
Spring 1	S1	Populations and samples	Define the population in a study and understand the difference between population and sample. Understand what is meant by simple random sampling and bias in sampling.	**A1**	use and interpret algebraic manipulation, including: ● ab in place of a × b ● 3y in place of y + y + y and 3 × y ● a^2 in place of a × a, a^3 in place of a × a × a, a^2b in place of a × a × b ● a/b in place of a ÷ b ● coefficients written as fractions rather than as decimals ● brackets	Sampling (Geography)
	S4, S5	Summary Statistics	Calculate the mode, median, mean and range for ungrouped data.	**A3**	understand and use the concepts and vocabulary of expressions, equations, formulae, identities, inequalities, terms and factors	
	S2	Categorical and	Design tables to classify data.	**A4**	simplify and manipulate	

		numerical data / Summary statistics	Review calculation of averages and range for ungrouped data presented in frequency tables.		algebraic expressions by: ● collecting like terms ● multiplying a single term over a bracket ● taking out common factors ● expanding products of two **or more** binomials ● factorising quadratic expressions of the form $x^2 + bx + c$, including the difference of two squares; **factorising quadratic expressions of the form $ax^2 + bx + c$** ● simplifying expressions involving sums, products and powers, including the laws of indices	
	S2	Categorical and numerical data / Summary statistics	Interpret multiple and composite bar charts. Review calculation of averages and range for ungrouped data presented in bar charts.	**A17**	solve linear equations in one unknown algebraically (including those with the unknown on both sides of the equation); find approximate solutions using a graph	
	S2	Categorical and numerical data / Summary statistics	Interpret and construct Pie Charts. Review calculation of averages and range for ungrouped data presented in Pie Charts.	**A21**	translate simple situations or procedures into algebraic expressions or formulae; derive an equation (or two simultaneous equations), solve the equation(s) and interpret	

					the solution	
	S2	Categorical and numerical data / Summary statistics	Design tables to classify grouped data. Review calculation of averages and range for grouped data presented in frequency tables.	**A19**	solve two simultaneous equations in two variables (linear/linear **or linear/quadratic)** algebraically; find approximate solutions using a graph	
	S4, S5	Summary Statistics	Find modal class, and calculate estimates of the range and median for grouped data, and understand why they are estimates.	**A5**	understand and use standard mathematical formulae; rearrange formulae to change the subject	
	S4, S5	Summary Statistics	Calculate estimates for the mean of grouped data, and understand why they are estimates.			
	N11, R4, R5, R6, R8	Equivalent ratios Ratios and fractions	Find simplified ratio of quantities in the form *a* : *b* or in the form 1 : *n*, taking care to work with constant units of measurement. E.g. 50 cm : 1.5 m = 1 : 3 Interpret a ratio of two parts as a fraction of a whole.			
	R5, R6, R8	Division in a given ratio Solve ratio and proportion problems	Split a quantity into two, three or more parts given the ratio of the parts. Solve simple ratio and proportion problems.			
	R7, R10, R13	Direct proportion	Solve problems involving quantities in direct proportion			Proportion in recipes (DT)

			and recognising proportionality constant.			
	R10, R13	Inverse proportion	Solve simple word problems involving quantities in inverse proportion or simple algebraic proportions. E.g. speed - time contexts where if speed doubles than the time is halved.			
	R10, R13	Inverse proportion	Solve problems involving quantities in inverse proportion and recognising proportionality constant. Use proportionality symbol and constant.			
	R10, R13	Inverse proportion	Recognise that if $y = k/x$, where k is a constant, then y is inversely proportional to x.			
	R10, R13	Direct and Inverse proportion	Investigate contexts that lead to direct or inverse proportion from a variety of contexts.			
	S6	Bivariate data	Plot scatter diagrams for bivariate data, recognise types of correlation and draw a line of best fit by eye.			Finding connections in data (Geography)
	S6	Bivariate data	Use a line of best fit to interpolate and extrapolate from data, and be aware of the limitations of these techniques.			
	S6	Bivariate data	Recognise and interpret correlation within the context of			

			the variables, and appreciate the distinction between correlation and causation.			
	S4	Outliers	Appreciate there may be errors in data from values (outliers) that do not 'fit'. Recognise outliers on a scatter graph.			
Spring 2	R9, N12	Percentage conversions Percentage calculations	Convert between fractions, decimals and percentages. Calculate percentage of a quantity, and express one quantity as a percentage of another, with and without calculator.	**S4**	interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: ● appropriate graphical representation involving discrete, continuous and grouped data, **including box plots** ● appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers, **quartiles and inter-quartile range**)	
	R9, N12	Percentage change	Increase or decrease quantities by a simple percentage and express percentage change as a decimal or fractional multiplier. Apply this to percentage change problems	**G9**	identify and apply circle definitions and properties, including: centre, radius, chord, diameter, circumference, tangent, arc,	

			(including original value problems and simple interest).		sector and segment	
	R9, R16	Growth and decay	Solve problems step-by-step involving multipliers over a given interval, for example further discounts of sales prices. Solve problems step-by-step involving increasing multipliers such as compound interest.	**G10**	**apply and prove the standard circle theorems concerning angles, radii, tangents and chords, and use them to prove related results**	Exponential growth (Science)
	R9, R16	Growth and decay	Solve problems step-by-step involving multipliers over a given interval, for example further discounts of sales prices and depreciation.	**A4**	simplify and manipulate algebraic expressions (including those involving surds and algebraic fractions), solving equations arising from algebraic fractions	
	N6, N7	Index notation	Recap index notation E.g. $2 \times 2 \times 2 \times 2 = 2^4$			
	N6, N7	Index notation	Use negative integer indices to represent reciprocals. Calculate with integer powers E.g. $2^{-1} = 1/2$, $2^{-3} = 1/8$			
	N6, N7	Calculation and estimation of powers and roots	Calculate with integer powers and exact roots. E.g. $2^4 = 16$, $\sqrt{9} = 3$, $\sqrt[3]{8} = 2$ Recognise simple powers of 2, 3, 4 and 5			
	N7, A4	Laws of indices	Know and apply laws of indices. [see also Calculations with numbers in standard form,			

			3.02b, Simplifying products and quotients,6.01c]			
	N9	Calculations with numbers in standard form	Interpret and order numbers expressed in standard form. [see also Laws of Indices, 3.01c]			Expression of large or small quantities (Science: solar distances, numbers of bacteria)
	N9	Calculations with numbers in standard form	Convert numbers to and from standard form [see also Laws of Indices, 3.01c]			
	N9	Calculations with numbers in standard form	Add and subtract big numbers expressed in standard form, without a calculator. [see also Laws of Indices, 3.01c]			
	N9	Calculations with numbers in standard form	Add and subtract small numbers expressed in standard form, without a calculator. [see also Laws of Indices, 3.01c]			
	A3, A17, A21	Linear equations in one unknown	Recap linear equations including those with the unknown on both sides of the equation.			
	A3, A17, A21	Linear equations in one unknown	Recap linear equations including those with brackets and the unknown on both sides of the equation.			
	N1, A3, A22	Symbols Inequalities in one variable	Understand and use the symbols < , >, ≥, ≤ and =. Represent inequalities on a number line using conventional notation of solid or open dots.			

	N1, A3, A22	Inequalities in one variable	Solve linear inequalities in one variable, expressing solutions on a number line using the conventional notation.			
Summer 1	G6, G20	Pythagoras' theorem	Know and apply Pythagoras' theorem to find lengths in right-angled triangles in 2D figures.	**R4**	use ratio notation, including reduction to simplest form	
	G6, G20	Pythagoras' theorem	Know and derive Pythagoras' theorem to find lengths in right-angled triangles in 2D figures.	**R5**	divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio; apply ratio to real contexts and problems (such as those involving conversion, comparison, scaling, mixing, concentrations)	
	G6, G20	Pythagoras' theorem	Apply Pythagoras' theorem in other shapes. E.g. Recognise the diagonal of a rectangle is the hypotenuse etc.	**R6**	express a multiplicative relationship betweeb two quantities as a ratio or a fraction	
	R9, N12	Percentage conversions Percentage calculations	Convert between fractions, decimals and percentages. Calculate percentage of a quantity, and express one quantity as a percentage of another, with and without calculator.	**R7**	understand and use proportion as equality of ratios	
	R9, N12	Percentage change	Increase or decrease quantities	**R8**	relate ratios to fractions and to	

			by a simple percentage and express percentage change as a decimal or fractional multiplier. Apply this to percentage change problems (including original value problems and simple interest).		linear functions	
	R9, R16	Growth and decay	Solve problems step-by-step involving multipliers over a given interval, for example further discounts of sales prices. Solve problems step-by-step involving increasing multipliers such as compound interest.	**G20**	know the formulae for: Pythagoras' theorem $a^2 + b^2 = c^2$, and the trigonometric ratios, sin θ = opposite/hypotenuse, cos θ = adjacent/hypotenuse and tan θ = opposite/adjacent apply them to find angles and lengths in right-angled triangles **and, where possible, general triangles** in two **and three** dimensional figures	
	R9, R16	Growth and decay	Solve problems step-by-step involving multipliers over a given interval, for example further discounts of sales prices and depreciation.	**G21**	know the exact values of sin θ and cos θ for θ = 0°, 30°, 45°, 60° and 90°; know the exact value of tan θ for θ = 0°, 30°, 45° and 60°	
	N6, N7	Index notation	Recap index notation E.g. 2 x 2 x 2 x 2 = 2^4	**G16**	know and apply formulae to calculate: area of triangles, parallelograms, trapezia; volume of cuboids and other right prisms (including	

					cylinders)	
	N6, N7	Index notation	Use negative integer indices to represent reciprocals. Calculate with integer powers E.g. 2^{-1} = 1/2 , 2^{-3} = 1/8	**G17**	know the formulae: circumference of a circle = 2πr = πd, area of a circle = πr^2; calculate: perimeters of 2D shapes, including circles; areas of circles and composite shapes; surface area and volume of spheres, pyramids, cones and composite solids	
	N6, N7	Calculation and estimation of powers and roots	Calculate with integer powers and exact roots. E.g. 24 = 16 , √9 = 3 , $\sqrt[3]{8}$ = 2 Recognise simple powers of 2, 3, 4 and 5	**G18**	calculate arc lengths, angles and areas of sectors of circles	
	N7, A4	Laws of indices	Know and apply laws of indices. [see also Calculations with numbers in standard form, 3.02b, Simplifying products and quotients,6.01c]			
	N9	Calculations with numbers in standard form	Interpret and order numbers expressed in standard form. [see also Laws of Indices, 3.01c]			
	N9	Calculations with numbers in standard form	Convert numbers to and from standard form [see also Laws of Indices, 3.01c]			
	N9	Calculations with numbers in standard form	Add and subtract big numbers expressed in standard form, without a calculator. [see also			

			Laws of Indices, 3.01c]			
	N9	Calculations with numbers in standard form	Add and subtract small numbers expressed in standard form, without a calculator. [see also Laws of Indices, 3.01c]			
Summer 2	G3, G6	Angles at a point / Angles on a line	Know and use the sum of the angles at a point is 360º and that the sum of the angles on a line is 180º		recognise, sketch and interpret graphs of linear functions, quadratic functions, simple cubic functions, the reciprocal function $y = 1/x$ with $x \neq 0$, **exponential functions $y = k^x$ for positive values of k, and the trigonometric functions (with arguments in degrees) y = sin x, y = cos x and y = tan x for angles of any size**	
	G3, G6	Angles between intersecting and parallel lines	Know and use; Vertically Opposite Angles are equal, Alternate Angles between parallel lines are equal, Corresponding Angles between parallel lines are equal.		**know and apply the sine rule $a/\sin A = b/\sin B = c/\sin C$, and cosine rule $a^2 = b^2 + c^2 – 2bc \cos A$, to find unknown lengths and angles**	
	G3, G6	Angles at a point / Angles on a line / Angles between intersecting and parallel lines	Apply angles on a line to find angles in rectilinear figures. Use standard conventions for labelling and refering to sides and angles.		**know and apply Area = 1/2 ab sin C to calculate the area, sides or angles of any triangle**	
	G3, G6	Angles at a point / Angles on a line / Angles between	Apply angles properties to justify results in simple proofs. e.g. The sum of the interior			

		intersecting and parallel lines	angles of a triangle is 180°.			
	G3, G6	Angles in polygons	Derive and use the sum of the exterior angles of a polygon is 360º			
	G3, G6	Angles in polygons	Find and apply the sum of the interior angles of a polygon to find missing angles in irregular and regular polygons.			
	G4, G6	Properties of a triangle	Use basic properties of isosceles, equilateral, and right angled triangles to find lengths and angles in rectilinear figures and in simple proofs.			
	G4, G6	Properties of quadrilaterals	Use basic properties of quadrilaterals to find lengths and angles in rectilinear figures and in simple proofs.			
	N13, R1, G14	Units of measurement	Use and convert standard units of measurement for length, area, volume/capacity, mass, time and money			
	N13, R1, G14	Units of measurement	Use and convert standard units in algebraic contexts.			
	N13, R1, R11, G14	Compound units	Use and convert compound units (e.g. speed, rates of pay, unit pricing, density, pressure).			
	N13, R1, R11, G14	Compound units	Use and convert compound units in algebraic contexts. E.g. If distance is $4x$ and time is $2y$			

			then speed is $2x/y$			

SMSC	British Values	RSHE	Assessment
Cultural: As part of enrichment activities, students will investigate the uses of symmetry and Art in Rangoli and Islamic art. Statistical analysis of data that will enable students to understand results and representations of data in the news. **Spiritual:** Investigating the Fibonacci sequence. Using the findings to link to other curriculum areas e.g. the natural world.	**Democracy.** Use of proportion, ratio, fractions decimals and percentages to describe 'fairness'. Outside speaker delivering a two interactive sessions to key year groups on financial education. One session to ensure students understand the concept of credit and savings, the second to practice how to budget in later life as an adult. **The rule of law.** Interpreting and analysing the accuracy of statistics. Does proportional representation in the UK electoral system ensure a 'fair' result?	**Moral.** Examples of the moral development in mathematics include: • The trip to Bletchley Park shows the work that mathematicians contributed in WWII to help stop the spread of the Nazi ideals, and help the allies win the war. Discussions to take place about Turin, his ideas and how and why he was persecuted due to his sexuality? • History of Maths day for year 7 to show the role of males and females in the development of mathematics through the ages. **Social:** Participation in the UKMT Team Maths challenges across the year group. Participation in regional competitions pending performance. The art of origami and it's links with mathematics.	**Summative** Homework tasks to assess understanding in each area of the curriculum. Half termly assessments to measure progress and areas for improvement in topics covered so far. End of year examination covering all content. **Formative** Frequent WWW/EBI feedback from the class teacher. Self/peer/teacher 'live' marking during lessons to adapt content during a lesson to keep the

			level of challenge high.

Adapted Curriculum Content: Lower ability: Simplify algebraic expressions by collecting like terms and expanding brackets. Simplify algebraic products and quotients. Higher ability: change recurring decimals into their corresponding fractions and vice versa	**Adapted Curriculum Content:** Lower ability: Increase or decrease quantities by a simple percentage and express percentage change as a decimal or fractional multiplier. Higher ability: simplify and manipulate algebraic expressions (including those involving surds and algebraic fractions), solving equations arising from algebraic fractions	**Adapted Curriculum Content:** Lower ability: Solve problems step-by-step involving multipliers over a given interval, for example further discounts of sales prices. Higher ability: solve linear equations in one unknown algebraically (including those with the unknown on both sides of the equation); find approximate solutions using a graph
Adaptive Implementation Practices: KS3 crossover scheme of work	**Adaptive Implementation Practices:** KS3 crossover scheme of work	**Adaptive Implementation Practices:** KS3 crossover scheme of work