Department Curriculum and Assessment Outline

Maths Department: **Year 7 Set 1** **Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Data	Can you display data in a compound and dual bar chart and in a 2 way table? Can you find find the mean from a frequency table? Can you calculate the angles and draw a pie chart for data? Can you draw a scatter diagram, take estimates from a line of best fit and describe the correlation? Do you understand when to use an appropriate average: describing their advantages and dis-advantages	Check Up, Strengthen & Review, followed by: Data Handling assessment at end of Topic	**Analysing and Displaying Data:** **Two way tables, compound & dual bar charts.** **Averages and mean from a frequency table.** **Grouping Data, pie charts, scatter diagrams, correlation & lines of best fit.**
Term 1	Number	What are the first 10 prime numbers? Can you find the factors and multiples of a number? Can you find the HCF & LCM of 2 numbers? Can you carry out a several stage calculation using BIDMAS? Can you cube and square positive & negative numbers? Can you find the square & cube roots of numbers? Can you use a method for long multiplication?	Check Up, Strengthen & Review, followed by: Number assessment at end of Topic	**Factors, Multiples, Primes, HCF, LCM, using venn diagrams; powers and root; BIDMAS; methods for long division and multiplication; simplifying, adding, subtracting, multiplying and dividing with fractions and mixed numbers.**

		Do you know how to write a remainder in short division as a decimal /fraction? Do you know the correct order for division? Do you know the rules for adding/subtracting/multiplying/dividing negative numbers? Do you know how to use the 4 operations with fractions & mixed numbers?		
Term 1	Algebra	Can you simplify expressions ? Can you write an expression and substitute into it? Can you expand a bracket and factorise? Can you Write a formula and substitute into it?	Check Up, Strengthen & Review, followed by: Algebra assessment at end of Topic	**Writing Expressions; simplifying by collecting like terms, multiplying & dividing: powers.** **Substitution of positive numbers, including expressions involving powers and roots.** **Write & use formulae.** **Expand single bracket & factorise.**
Term 2	Angles	Can you solve an angle problem stating angle facts used? Can you describe any quadrilateral using its specific properties? Can you prove that the sum of the angles in a triangle and a quadrilateral? Can you identify and use corresponding and alternate angles?	Check Up, Strengthen & Review, followed by: Angle assessment at end of Topic	**Angle facts.** **Angles with parallel lines.** **Angles in isosceles triangles, equilateral triangles.** **Quadrilaterals : properties & angles.** **Angles in Polygons: interior and exterior.**
Term 2	Fractions	Can you perform all 4 operations on fractions and mixed numbers, giving your answer in its most simplest form? Can you convert between simple fractions, decimals and percentages?	Check Up, Strengthen & Review, followed by: Fraction assessment at end of Topic	**Simplify fractions, order fractions, convert between improper and mixed . Add, subtract, multiply and divide including mixed no's.** **Calculate fractions of amounts.** **Fraction, decimal and percentage equivalents.**
Term 2	Equations	Can you form and solve any linear equation?	Check Up, Strengthen & Review, followed by: Equations assessment at end of Topic	**Solve 2 step equations** **Equations xs both sides & brackets.** **Form & solve equations.**
Term 3	Multiplicative Reasoning	Can you use proportional reasoning to solve a problem? Can you use a ratio to solve problems involving sharing or finding quantities	Check Up, Strengthen & Review, followed by:	**Multiplicative reasoning:** **Simplify, sharing** **Ratios. Writing as fractions.** **Proportional reasoning, unitary method.**

			Multiplicative Reasoning assessment at end of Topic	

Term 3	Decimals & Percentages	Can you perform the 4 operations with decimals? Can you convert between fractions, decimals & percentages? Can you calculate a percentage increase/decrease?	Check Up, Strengthen & Review, followed by: Decimals assessment at end of Topic	**Ordering, rounding decimals.** **+, -, x ÷ decimals** **Equivalence fr, dec, %s** **Calculating percentages of amounts calc & non-calc.** **Increases/decreases.**
Term 3	Perimeter, Area & Volume	Can you calculate the surface area and the volume of a cuboid? Can you find the area of a trapezium and a parallelogram? Can you convert between measures of volume & area?	Check Up, Strengthen & Review, followed by: Perimeter, Area, Volume assessment at end of Topic	**Perimeter, area, volume.** **Surface area of cubes/cuboids & nets. Volumes of cuboids**

Department Curriculum and Assessment Outline

Maths Department: **Year 7 Set 2: Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Data	Can you calculate the mean, median, mode & range? Can you complete a tally chart for grouped data? Can you represent data in appropriate charts?	Check Up, Strengthen & Review, followed by: Data assessment at end of Topic	**Representing Data:** **Pictograms, reading frequency tables, bar charts.** **Grouping data,** **Averages**
Term 1	Number	Can you identify all the factors & the first 10 multiples of a number ? Can you perform all 4 operations for 3 digit and larger numbers? Can you use BIDMAS in a calculation with 2 or more opertaions?	Check Up, Strengthen & Review, followed by: Number assessment at end of Topic	**Column addition & subtraction.** **Times tables & division with remainders. X & ÷ by 10, 100, 1000.** **BIDMAS no powers or brackets.** **Napiers Bones, simple bus stop.** **Factors & multiples, common factors.** **Negative Numbers: ordering, simple use of a scale .**
Term 1	Algebra	Can you write, simplify and substitute into an expression/formula? Can you find the inverse of a function machine?	Check Up, Strengthen & Review, followed by: Algebra assessment at end of Topic	**Function machines.** **Write expressions.** **Collect like terms.** **Simple substitution.** **Write & use formulae.**
Term 2	Angles	Can you identify an angle using 3 letters and name it? Can you identify parallel and perpendicular lines? Can you solve a problem involving angles and state the angle facts used?	Check Up, Strengthen & Review, followed by: Algebra assessment at end of Topic	**Angle Notation** **Measuring, estimating & drawing angles.** **Angles on a straight line, triangle, around a point.**

Term 2	Fractions & Percentages	Can you find a fraction of an amount? Can you find equivalent fractions and order a set of fractions? Can you find 10 % and 1% of a number and use this to calculate multiple amounts?	Check Up, Strengthen & Review, followed by: Fractions & Percentages assessment at end of Topic	**Shading fractions, notation.** **Equivalence, fractions of amounts.** **Add & subtract, same denom.** **Percentages as out of 100 & as decimals.** **Find 10 % s & 1%s.**
Term 2	Graphs	Can you plot & read co-ordinates? Can you take a reading from a graph? Can you complete a table of values & plot a straight line graph?	Check Up, Strengthen & Review, followed by: Graphs assessment at end of Topic	**Co-ordinates** **Graphs of functions** **Real Life graphs**
Term 3	Transformations		Check Up, Strengthen & Review, followed by: Transformations assessment at end of Topic	**Simple transformations:** **Reflecting in a line of symmetry.** **Translation, rotation.** **Congruency**
Term 3	Decimals Measures	Can you use the 4 operations with decimals numbers? Can you round a decimal to a given number of dp? Can you identify what particular units are used to measure and convert between metric units?	Check Up, Strengthen & Review, followed by: Decimals assessment at end of Topic	**Decimals: +,- x, ÷, ordering.** Metris units
Term 3	Perimeter, Area, Volume	Can you identify different triangles & use their angle & side properties? Can you name polygons? Can you identify the symmetries of different shapes? Can you calculate the area & perimeter of a compound shape?	Check Up, Strengthen & Review, followed by: Perimeter, area & Volume assessment at end of Topic	**Names of triangles, polygons.** **Reflection & rotational symmetry.** **Perimeter and areas up to compound shapes.**

Department Curriculum and Assessment Outline

Maths Department: **Year 8 set 1:** **Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Number: Factors & Powers	Can you write a number in standard form ? Given the prime factors of 2 numbers, can you find their HCF and LCM?	Check Up, Strengthen & Review, followed by: Number assessment at end of Topic	Prime factor decomposition, HCF, LCM. Laws of indices. Powers of 10 & standard form. Rounding sig figs & estimation.
Term 1	Shape & Space	Can you find the area of an isosceles triangle, given the base and 2 equal sides? Can you find the volume & surface area of any cylinder?	Check Up, Strengthen & Review, followed by: Shape & Space assessment at end of Topic	Areas of 2D shapes & circles. Volumes & surface areas of prisms & cylinders. Pythagoras
Term 1	Algebra	Can you identify an equation and an identity? Can you solve: 5(2-x) = -8-3x	Check Up, Strengthen & Review, followed by: Algebra assessment at end of Topic	Expanding brackets & collecting up. Factorising. Working with powers. Identities & equations. Substituting negative numbers into brackets & powers Solving equations x both sides & brackets each side. Forming equations.
Term 2	Real Life Graphs	Can you draw a d/t graph for a given journey? Can you calculate the average speed from a d/t graph? Can you interpret real life graphs?	Check Up, Strengthen & Review, followed by: Real Life Graphs assessment at end of Topic	Real life graphs including d/t graphs. Calculate with s,d,t. Graphs of direct proportion. Misleading graphs
Term 2	Transformations Similar shapes	Can you perform and describe a combined transformation consisting of a reflection, rotation, and translation?	Check Up, Strengthen & Review, followed by: Transformations & Similar	Transformations of shapes: reflections, rotations, translations, enlargements. Similar shapes. Investigate similar areas/volumes

		Can you use the correct language to describe these transformations? Can you enlarge a shape with a negative & fractional scale factor? Can you find missing lengths in similar shapes? Can you calculate the volumes & areas of similar shapes?	Shapes assessment at end of Topic	
Term 2	Fractions, decimals & percentages	Can you write a recurring decimal as a fraction showing all the steps in your method? Can you find the original amount given a percentage increase/decrease? Can you find a profit/loss ? Can you calculate compound interest?	Check Up, Strengthen & Review, followed by: Fractions, Decimals & Percentages assessment at end of Topic	Writing decimals as fractions. Writing recurring decimals as fractions. Non calculator percentages. Calculating with percentages: Increases & decreases using multipliers; percentage change (profit/loss); reverse percentages, repeated change & compound interest
Term 3	Constructions & Loci	Can you construct a perpendicular a perpendicular from any given point to a line? Can you accurately construct a locus? Can you accurately construct the net of a 3 D triangular prism/pyramid?	Check Up, Strengthen & Review, followed by: Perimeter, area & Volume assessment at end of Topic	Constructing triangles, perpendicular bisectors, perpendiculars from points on & off a line, angle bisectors. Construct shapes such as rhombus/parallelograms. Construct accurate nets of triangular prisms & pyramids. Construct loci.
Term 3	Scale Drawing & Measures Similarity & Congruence.	Can you draw an accurate bearing? Can you find a bearing? Can you draw an accurate diagram to scale? Can you find a length in real life given the length on a map & its scale? Can you identify similar/congruent shapes? Do you know the conditions for congruent triangles?	Check Up, Strengthen & Review, followed by: Scale, Measures, Similarity & Congruence assessment at end of Topic	Use & interpret map scales. Measure & draw bearings. Draw diagrams to scale. Identify congruent & similar shapes. Know the conditions for congruent triangles. Solve problems with similar shapes.

		Can you find missing sides in similar shapes where one triangle is within a larger triangle?		
Term 3	Probability	Can you calculate an experimental probability and compare it with a theoretical probability?	Check Up, Strengthen & Review, followed by: Probability assessment at end of Topic	Start of Probability: simple probabilities, sample space diagrams: venn diagrams, trees. Experimental probability. Estimating probability, relative frequency

Department Curriculum and Assessment Outline

Maths Department: **Year 8 set 2:** **Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Number	Can you calculate with ratios? Can you square a negative number?	Check Up, Strengthen & Review, followed by: Number assessment at end of Topic	Column addition, subtraction, times, for large no's. Recap BIDMAS: using brackets. Calculate with ratios. Multiplicative reasoning Negative numbers: adding & subtracting, x & ÷
Term 1	Shape & Measures	Can you calculate the surface area of a cuboid? Can you convert between measures of capacity?	Check Up, Strengthen & Review, followed by: Shape & Measures assessment at end of Topic	3D shapes: edges, faces, vertices, isometric drawings, nets, surface areas of cubes/cuboids. Volumes. Capacity
Term 1	Algebra	Do you know the difference between writing an equation and an expression? Can you solve equations involving brackets?	Check Up, Strengthen & Review, followed by: Algebra assessment at end of Topic	Recap & extend: simplifying + & x. Function & inverse machines. Writing expressions. Using function machines to solve equations. BIDMAS with brackets and powers. Expanding brackets.

Term 1	Number Sequences	Can you explain how the Fibonacci sequence works? Can you find the nth term for the sequence : 6, 3, 0 , -3, -6…….?	Check Up, Strengthen & Review, followed by: Number sequences assessment at end of Topic	Number sequences: term to term rules, Aps, GPs, nth term, triangular numbers, Fibonacci
Term 2	Probability	Can you calculate an experimental probability and compare it to its theoretical probability? Can you list the outcomes of 2 events?	Check Up, Strengthen & Review, followed by: Probability assessment at end of Topic	Probability on a scale. Calculate equally likely probabilities. Prob. Of an event not happening. Finding possible outcomes of 2 events. Experimental Probability, comparing probabilities:
Term 2	Decimals	Can you divide 2 decimals? When multiplying 2 decimals, do you know where the decimal point should go?	Check Up, Strengthen & Review, followed by: Decimals assessment at end of Topic	Decimals: +,-,x ÷, ordering, rounding.
Term 2	Data	Can you draw a comparative bar chart and draw conclusions from it? Can you interpret a frequency table?	Check Up, Strengthen & Review, followed by: Data assessment at end of Topic	Designing data collection sheets: frequency tables, grouping data. Interpreting & drawing bar, compound & dual bar charts. Pie charts
Term 3	Angles	Can you solve angle problems, writing down a reason, at each step?	Check Up, Strengthen & Review, followed by: Angles assessment at end of Topic	Angles: vertically opp, in a triangle Drawing triangles accurately. Drawing nets accurately
Term 3	Fractions & Percentages	Can you find 70% of £32? Can you find 3% of £340? Can you find 15% of £46	Check Up, Strengthen & Review, followed by: Fractions & Percentages assessment at end of Topic	Equivalent, comparing fractions, adding & subtracting, fractions & decimals. Calculating percentages of amounts non calc & calc. Percentage Problems. Writing 1 amount as a percentage of another. Fractions of amounts

Term 3	Number	Can you write 260 as a product of primes?	Check Up, Strengthen & Review, followed by: Number assessment at end of Topic	Squares, cubes & roots, Extend BIDMAS to brackets & powers. Prime factor decomposition: LCM & HCF using venn diagrams.

Department Curriculum and Assessment Outline

Maths Department: **Year 9 set 1:** **Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Straight Line Graphs	Can you find the equation of a line, a parallel and perpendicular line? Can you calculate & interpret a gradient from a line, from a pair of co-ordinates? Can you find an inverse function? Given the graph of an equation, can you graph its inverse?	Check Up, Strengthen & Review, followed by: Straight line assessment at end of Topic	Straight line graphs: plotting from table of values recap y=mx + c. gradient & intercept Interpreting gradient & intercept from real life graphs. Calculating gradient from 2 co-ordinates Parallel & perpendicular lines. Inverse functions & their graphs.
Term 1	Number: Powers & Roots	Can you perform the 4 operations with numbers written in standard form without a calculator?	Check Up, Strengthen & Review, followed by: Powers & Roots assessment at end of Topic	Reciprocals, standard form, indices: including negative & fractional. Surds: giving in its simplest form.
Term 1	Number Sequences & Quadratics	Can you find the nth term rule for the following sequence: 2, 7, 14, 23……	Check Up, Strengthen & Review, followed by: Number Sesquence assessment at end of Topic	Recap nth term of an AP. Sequences: quadratic Factorising Recap: single bracket Factorising quadratics. Solving quadratics by factorising. Difference of 2 squares, perfect squares.

Term 1	Trig	Can you plot the graph of sinx and cos x and find the 2 values of x for which sinx=cosx between 0 & 360°.	Check Up, Strengthen & Review, followed by: Trig assessment at end of Topic	Trig Trig within problems & bearings. Trig graphs.
Term 2	Non Linear Graphs	Can you match the appropriate equation with its graph?	Check Up, Strengthen & Review, followed by: Graphing assessment at end of Topic	Graphing quadratics, cubics, reciprocals. Investigate properties of these graphs.
Term 2	Simultaneous Equations	When is it easier to use elimination or substitution?	Check Up, Strengthen & Review, followed by: Simultaneous assessment at end of Topic	Solving simultaneous equations: elimination, substitution and graphical using y=mx+c. Word problems
Term 2	Inequalities	Can you describe a region enclosed on a diagram using inequalities?	Check Up, Strengthen & Review, followed by: Inequalities assessment at end of Topic	Solving inequalities, including double inequalities & representing solutions on a number line. Graphical solution of inequalities
Term 3	Data Handling	Can you draw and interpret a histogram?	Check Up, Strengthen & Review, followed by: Data assessment at end of Topic	Primary and Secondary data, random sampling, bias, surveys. Stem & leaf, box plots & quartiles, Cf curves, histograms. Averages from grouped tables.
Term 3	Ratio & Proportion	Find the formula connecting x and y if they are directly proportional and x is 9 when y is 63.	Check Up, Strengthen & Review, followed by: Ratio assessment at end of Topic	Recap ratio & solving problems involving ratio. Multiplicative reasoning: using direct proportion.

Department Curriculum and Assessment Outline

Maths Department: **Year 9 set 2:** **Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Number	Do you know where to place the point, using Napiers Bones, when multiplying 2 decimals?	Check up, strengthen & review . End of topic assessment.	Review addition & subtraction of decimals. Write decimals of millions Multiplication & Division by a decimal. Problems.
Term 1	Algebra: Sequences & Equations	Can you use the formula A= $\frac{1}{2}$(a+b)h, to find A given that a= 10, b= 6 , h=4 Can you solve equations with brackets?	Check up, strengthen & review . End of topic assessment.	Finding & using nth term Solving equations using number machines Substitution into expressions & formulae, using formulae from geometry.
Term 1	Data Handling	Can you explain why it is not a good idea to use a line of best fit to predict a value on a scatter diagram when it lies outside your data range?	Check up, strengthen & review . End of topic assessment.	Statistics: Primary, secondary data, sampling, surveys. Mean from a frequency table. Using measures of average/spread to compare data. Grouping data, 2 way tables. Pie charts & scatter diagrams: outliers, correlation. Misleading graphs

Term 1	Fractions, Decimals & Percentages	Can you perform all 4 operations with fractions?	Check up, strengthen & review . End of topic assessment.	All 4 operations with fractions Recurring decimals Equivalent proportions Percentages recap. Percentage change.
Term 2	2D & 3D Geometry	Given that a polygon has an exterior angle of 36°, can you find the number of sides of the polygon?	Check up, strengthen & review . End of topic assessment.	Angles with parallel lines. Angles in Polygons: Exterior & interior angles. Using Map Scales. Constructions: bisect an angle & a line segment. 3D shapes: faces, edges, vertices, isometric drawings, volumes of cubes, cuboids & combined 3D shapes. Views
Term 2	Algebraic and Real Life Graphs	If y = 5 – 4x, find & interpret the gradient and y intercept.	Check up, strengthen & review . End of topic assessment.	Plotting straight line graphs Gradient & Intercept Reading graphs Distance time graphs Midpoints
Term 2	Polygons & Transformations	Can you enlarge a shape on a co-ordinate grid given the centre and scale factor?	Check up, strengthen & review . End of topic assessment.	Quadrilaterals & Triangles Transformations of shapes Congruent shapes
Term 2	Multiplicative Reasoning	Can you recognise direct and indirect proportion problems?	Check up, strengthen & review . End of topic assessment.	Using ratios and proportions Measures and Conversions
Term 3	Algebraic and Geometric Formulae	Can you find the area and circumference of any circle?	Check up, strengthen & review . End of topic assessment.	Substituting into formulae Using geometric formulae Compound shapes Circles
Term 3	Probability	Can you represent a probability problem by drawing a tree diagram and use it to calculate probabilities?	Check up, strengthen & review . End of topic assessment.	Probability experiments 2 way tables Sample space diagrams Tree diagrams

Term 3	Trigonometry	Can you find a missing angle in a right angled triangle given 2 sides?	Check up, strengthen & review . End of topic assessment.	Trig. Trig or Pythagoras? Trig in problems : bearings, isosceles triangles etc.

Department Curriculum and Assessment Outline

Maths Department: **Year 10 set 1: Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Basic Number	Can you find find the error interval of the number p, which is 0.00453 to 3 sf? 2 buses leave the station at 9.00 am. If a red bus leaves every 12 mins and a blue bus leaves every 8 mins, at what time will both buses be leaving at the same time again?	End of topic assessment.	Recap of: Multiplying & dividing with decimals; Rounding with sf. Approximating & Estimating Upper & Lower Bounds; Error intervals Patterns in calculations Multiples, prime factors, LCM, HCF. Negative Numbers
Term 1	Algebra: Expressions & formulae	Is the following an identity, expression, factor, formula or equation: $(x-3)(x+4) = x^2 - x - 12$ Expand $(2x-3)(x+4)^2$	End of topic assessment.	How to identify : expressions, formulae, equations, identities, factors. Recap: expanding & factorising: linear & quadratic. Perfect squares, difference of 2 squares. More than 2 binomials. Changing the subject of an equation. Changing the subject when the subject appears more than once.
Term 1	Similar Shapes, Areas & Volumes	Can you find the scale factor of enlargement and hence any missing sides? Can you square/cube & cube/square root to find the appropriate scale factor?	End of topic assessment.	Similar shapes Similar areas Similar Volumes
Term 1	Circle theorems	Can you recognise the shape represented by each circle theorem within a diagram?	End of topic assessment.	Recap angle facts. Circle theorems: investigate & use to solve problems.

		Draw a diagram to represent and explain the theorem: “alternate segment”.		Proofs of theorems.
Term 1/2	Exploring and Applying Probability Combined Probability	Can you represent probabilities in a 2 way table/ tree diagram or venn diagram to help solve a problem? Can you use set notation? If P(A) = 0.7, P(B)= 0.6 & P(AuB)=0.9, Calculate P(A∩B).	End of topic assessment.	Recap calculating simple theoretical probabilities. Experimental probabilities. Mutually exclusive and exhaustive events; addition rule. Expectation Probability & 2 way tables. Sample space diagrams including venn diagrams. Set notation. Independent events: multiplication rule, tree diagrams. Conditional probability.
Term 2	Quadratic Equations	Can you locate the roots and turning points of a quadratic curve? Can you form and solve a quadratic equation in order to solve a problem? Can you solve the pair of simultaneous equations: $x^2 + y^2 = 36$ and $x + 2y = 4$	End of topic assessment.	Solve quadratics by: Factorising Formula Discriminant and nature of roots Completing the square Identify the significant points of a quadratic & sketch it. Simultaneous equations: one linear, one quadratic/circle. Graphs of circles. Quadratic problems. Algebraic fractions. Solving equations involving algebraic fractions.
Term 2	Quadratic Inequalities	Can you solve the inequality: $-x^2 - 4x - 12 \leq 0$?	End of topic assessment.	Quadratic inequalities.
Term 3	Proportion	Can you set up a formula connecting x & y, which are directly or indirectly proportional to each other, involving a constant k, find k and then use the formula to solve problems?	End of topic assessment.	Recap ratio & proportion. Direct & inverse proportion. Graphical representation.

Term 3	Cosine & Sine Rule	Can you solve a problem in a non- right angled triangle using a combination of sine rules and cosine rules?	End of topic assessment.	Cosine rule for finding angles and sides Sine rule for finding angles and sides. Sine rule for area of a triangle?
Term 3	Arc lengths and sectors	Given an area of a sector, can you find the diameter of the circle?	End of topic assessment.	Use arc length and sector area formula & rearrange them.

Department Curriculum and Assessment Outline

Maths Department: **Year 10 set 2: Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Powers, reciprocals & standard form	Can you write a number in standard form? Can you simplify with indices?	End of topic assessment.	Rules for multiplying & dividing powers Negative indices and power zero Standard form
Term 1	Approximations	Can you find an error interval for a rounded value?	End of topic assessment.	Rounding Estimating Error intervals
Term 1	Congruence and similarity	Can you explain why 2 shapes are similar?	End of topic assessment.	Congruence Congruent triangles Similarity
Term 1	Algebra: linear equations	Can you solve an equation with negative x's on both sides of the equals sign? Can you solve an equation to solve a shape and space problem?	End of topic assessment.	Solving all types of equations
Term 1	Solving Inequalities	Can you solve a linear inequality?	End of topic assessment.	Solve linear inequalities and represent their solutions on a number line
Term 1	Simultaneous Equations	Can you solve a pair of simultaneous equations using graphical means?	End of topic assessment.	Solve a pair of simultaneous equations using elimination/substitution. Interpret within contexts.

				Understand their graphical representation.
Term 1	Perimeter & Area	Can you find an arc length and sector?	End of topic assessment.	Recap perimeters and areas of shapes including circles. Find simple arc lengths and sectors.
Term 2	Volumes & surface areas of prisms Curved shapes & pyramids	Can you draw a net of a pyramid and then find the surface area of a pyramid?	End of topic assessment.	Volumes & surface areas of cones, pyramids, spheres. Recap cylinders.
Term 2	Vectors	If a = -2 draw -2a -3	End of topic assessment.	Draw vectors & combined vectors Manipulate with column vectors Simple vector journeys
Term 2	Linear Graphs	Interpret the gradient and intercept of a real life graph	End of topic assessment.	Plotting graphs from table of values Plotting using y=mx + c Gradients Y intercepts (should be recap)
Term 2	Non Linear Graphs	Solve $x^2+ 5x + 6$. Now plot the curve. How do the solutions of the quadratic relate to the graph?	End of topic assessment.	Plot quadratic, cubic and reciprocal curves. Relate roots of a quadratic to solutions by factorising. Axis of symmetry.
Term 2	Ratio speed & proportion	Can you calculate with ratios?	End of topic assessment.	Ratio Best Buys S,d,t P, f , a proportion
Term 2	Constructions and loci	Can you construct an angle of 30 degrees?	End of topic assessment	Review constructions Use constructions in loci
Term 3	Quadratic equations,	Can you solve : X^2-x – 12 = 0	End of topic assessment	Expanding Factorising Solving Relate solutions to roots of graph

	Changing the subject of a formula			Change the subject of simple formulae
Term 3	Transformations of Shapes: review	Can you enlarge a shape by a fractional scale factor?	End of topic assessment	Reflections Rotations Translations & enlargements of shapes on a co-ordinate grid.
Term 3	Review and consolidation End of year Exam			

Department Curriculum and Assessment Outline

Maths Department: **Year 11 set 1: Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Surds	Can you rationalise : $\frac{5+\sqrt{3}}{2-\sqrt{3}}$	End of topic assessment.	Simplify and manipulate surds Rationalise
Term 1	Functions	Given 2 functions f(x) and g(x), can you find fg(x)?	End of topic assessment.	Definition of a function. Find the output of a function, the inverse, composite functions.
Term 1	Iteration	Can you find a solution to an equation using an iterative process?	End of topic assessment.	Find an approximate solution for an equation using iteration.
Term 1	Vectors	Given a line split in a ratio, find a vector journey. Can you prove that 3 points are collinear and that vectors are parallel.	End of topic assessment.	Properties of vectors. Vectors in geometry.
Term 2	Transformations of graphs	Can you describe the effect of the following transformations on f(x): f(2x) -f(x) + 3 Can you find the new equations after a transformation?	End of topic assessment.	Transformations of graphs using function notation.

Term 2	Graphs	Can you find the equation of a tangent to a curve/circle at a given point?	End of topic assessment.	Recognise properties of different graphs. d/t graphs, v/t graphs Estimating the area under a curve using trapezium rule. Rates of change: Use of gradient of a tangent to calculate the gradient at a point on a curve. Interpret.
Term 2	Length, area & Volume	Can you find the find the radius of a sphere, given its volume? Can you find a volume leaving π in your answer?	End of topic assessment.	Recap: Circumference & area of a circle; area of quadrilaterals Areas of sectors and arc lengths Recap: Volumes of prisms, cylinders. Volume of a pyramid, cones & spheres & curved surface areas. Volume of a frustrum.
Term 2	Algebraic fractions	Can you solve an equation involving integers & algebraic fractions?	End of topic assessment	Simplifying algebraic fractions. Performing the 4 operations Solving equations involving algebraic equations.
Remainder of term 2	Exam Paper practise & Revision			Review & consolidation. Exam Paper practise.
Term 3	Exam Paper practise & Revision			Review & consolidation. Exam Paper practise.

Department Curriculum and Assessment Outline

Maths Department **Year 11 GCSE Foundation Tier for 2018/19 only** **Teaching, learning and assessment during the course:**

Timing (Weeks, half terms)	**Unit title**	**Key question(s)**	**How will we know that pupils can answer the key GCSE question(s)?** Formally assessed work that will inform attainment grade	**Key themes of the unit**
Autumn 1: 3 weeks	Probability		End of Unit Test	Finding and using probability of outcomes for simple events and combined events, including use of systematic listing methods, sample space diagrams, two-way tables, Venn diagrams and set notation, frequency tree diagrams and probability trees.
Autumn 1: 3 weeks	Fractions, decimals, percentages and ratio		End of Unit Test	Arithmetic with fractions; equivalences between fractions, decimals and percentages; calculations with percentages; basic ratio; calculations/problems involving ratio, fractions, percentages and decimals
Autumn 2: 2 weeks	More statistics		End of Unit Test	Stem and leaf diagrams; scatter graphs and lines of best fit; pie charts; grouped data – the modal group, estimating the mean;
Autumn 2: 1 week	Algebra: factorisation		End of Unit Test	Factorising algebraic expressions into a single bracket (extension: quadratic factorisation into pairs of brackets)
Autumn 2: 1 week	Ratio and proportion		End of Unit Test	Best buys (including unitary method); using direct proportion including scaling recipes; speed/distance/time, density and pressure
Autumn 2: 2 weeks	Transformations		End of Unit Test	Identifying, describing and applying 4 types of transformation: translation, reflection, rotation & enlargement; rotation symmetry

Spring 1: 2 weeks	Sequences (n^{th} terms)		Mock Exam (week 1) and End of Unit Test	Recognising and continuing visual and number sequences; using n^{th} terms to generate sequences; finding n^{th} terms for linear sequences; special sequences
Spring 1: 2 weeks	Volume and surface area of prisms		End of Unit Test	Understanding differences between area, volume and surface area; calculating volume and surface area for cuboids, simple prisms and cylinders
Spring 1: 2 weeks	Algebraic graphs		End of Unit Test	Plotting algebraic graphs from equations; approximately solving equations using graphs; gradient and intercept of straight line graphs (using the form y = mx + c)
Spring 2: 2 weeks	Powers and standard form		End of Unit Test	Understanding powers of numbers; indices laws with pure numbers and algebraically; converting to and from standard form; ordering numbers in standard form; calculations involving standard form
Spring 2: 2 weeks	Pyramids, sectors and curved shapes		End of Unit Test	Volume and surface area of pyramids, cones and spheres; area of sectors and arc lengths/perimeter of sectors
Spring 2: 2 weeks	Constructions and loci, past paper practice		Past Paper Test	Compass constructions – equilateral triangle, perpendicular bisector, perpendicular to a line from/at a point, angle bisector; loci problems applying these
Summer 1: 4 weeks	Final preparation		Past Papers – mix of in class and as homework, including some timed	Past paper practice through lesson time and homework; additional taught topics as most appropriate based on ongoing assessment of critical needs for the class as a whole, sub-groups and individual students

Department Curriculum and Assessment Outline

Grade 5 Lunchtime Booster Sessions – Autumn term	
Autumn 1 (1 session)	Factorising quadratics
Autumn 2 (4 sessions)	Solving quadratic equations - by factorising - by the formula Quadratic curves – significant points Repeated and reverse % change

Spring 1 (5 sessions)	Simultaneous equations (algebraic & graphical) Direct and inverse proportion (algebraically) Revision: inequalities
Spring 2 (5 sessions)	Vectors Similarity and congruence Revision: Pythagoras and trigonometry Revision: distance-time and velocity-time graphs

Department Curriculum and Assessment Outline

Maths Department: **Year 11 set 2: Teaching, learning and assessment during the course:**

Timing	Unit Title	Key Question(s)	How will we know that pupils can answer the key question(s)?	Key Themes of the unit
Term 1	Percentages, compound measures, ratio & proportion	Can you calculate a reverse percentage?	End of topic assessment.	Calculating percentages. Compound interest Variation Link between ratios and percentages & proportion Direct and inverse proportion
Term 1	Data Handling Review	Can you find the median from grouped data? Can you explain why you would not make an estimate from a scatter diagram outside of plotted points?	End of topic assessment.	Sampling Pie charts Scatter diagrams, lines of best fit, extrapolation Grouped data & averages
Term 1	Number and Sequences Review	Can you generate the first 4 terms of the sequence given by the rule $4n^2 - 3$	End of topic assessment.	Number sequences. Finding nth term & using nth term formula for linear & quadratic sequences. Special sequences.
Term 1	Right angled triangles	Can you find a side or an angle using Pythagoras or trig? Do you know the value of cos 45° off by heart?	End of topic assessment.	Pythagoras Trig Non calc trig ratios
Term 2	Decimals & Fractions	Can you convert between fractions and decimals?	End of topic assessment.	All 4 operations with decimals & fractions including mixed numbers Fractions of quantities Rounding Recurring decimals & reciprocals

Department Curriculum and Assessment Outline

Term 2	Angles Review	Can you measure and draw a bearing?	End of topic assessment.	Calculating with angles, including polygons. Bearings
Term 2	Expressions and formulae & Substitution review	If $A = 2p^2$, and A is 50 find p.	End of topic assessment.	Recognise expressions, formulae, identities, factors etc Review substitution into expressions & formulae
Term 2/3	Past paper practise & revision			

Department Curriculum and Assessment Outline

Department Curriculum and Assessment Outline

Maths Department **Year 12 Maths A Level** **Teaching, learning and assessment during the course:**

Timing (Weeks, half terms)	**Unit titles**	**Key question(s)**	**How will we know that pupils can answer the key GCE question(s)?** Formally assessed work that will inform attainment grade	**Key themes of the unit**
Autumn 1	Algebra and functions Coordinate geometry	Pure Year 1 book chapters 1-6 Can you rationalise a surd? What does the discriminant tell us? Can you solve a quadratic using an appropriate method? Can you transform a graph? Can you solve a geometric problems involving parallel and perpendicular lines?	4 week test End of topic tests	Algebraic manipulation including indices & surds Quadratic functions including the discriminant Simultaneous equations, linear and quadratic inequalities and graphical interpretations/sol'ns Graphs of cubic, quartic and reciprocal functions and their transformations, using f(x) notation Straight line graphs, parallel and perpendicular lines, equations of circles, tangents and chords, geometric problems involving length and area
Autumn 2	Further algebra Trigonometry	Pure Year 1 book chapters 7-10 Can you factorise a cubic function? Can you solve trigonmetric equations using the identity for $\tan\theta$ and for $\sin^2 + \cos^2 = 1$ within a given range?	End of topic tests, 10 week test (all content to date)	Algebraic long division, the factor theorem, methods of proof and the binomial expansion Trigonometric ratios, solving triangles, trigonometric graphs, trigonometric identities (tan and Pythagorean) and solving equations

Department Curriculum and Assessment Outline

Spring 1	Vectors Calculus Exponentials and logarithms	Can you calculate the magnitude & direction of a vector? Can you find the equation of a tangent/normal at a specific point? Can you find stationary points? Can you differentiate from first principles? Can you find an area under a curve? Can you manipulate logarithms using log laws and solve an equation using logarithms?	End of topic tests, 16 week test (all content to date)	Vector definitions, magnitude and direction, position vectors, solving geometric problems and modelling with vectors Differentiation: first principles, differentiating polynomials, second derivatives, gradients of curves, tangents, normals and maxima/minima Integration as opposite of differentiation, indefinite and definite integrals of polynomials, areas under curves or between lines and curves Exponential functions and modelling, differentiating exponential functions, logarithms and natural logarithms, laws of logarithms, solving equations, linearising exponential graphs
Spring 2	*Statistics:* sampling, location and spread, representing data *Mechanics:* modelling, constant acceleration, forces and motion	Can you use techniques to take a sample, identifying advantages & dis-advantages. Can you interpret a range of statistical diagrams ? Can you describe the skewness of a data set?	End of topic tests, 22 week test (all content to date)	*Statistics:* populations and sampling, types of data, the Edexcel large data set for exams, measures of central tendency (location) and spread, variance and standard deviation, coding, outliers, box plots, cumulative frequency, histograms, interpreting and comparing data *Mechanics:* modelling assumptions, quantities and units, use of vectors, motion graphs and constant acceleration formulae, Netwon's laws, forces as vectors, forces, acceleration, motions in two dimensions, connected particles and pulleys
Summer 1	*Mechanics:* variable acceleration *Statistics:* correlation, probability and	Statistics and Mechanics Year 1 book chapters 11 and 4-7 Can you identify mutually exclusive and independent events	End of topic tests, 28 week test (all content to date)	*Mechanics:* functions of time, use of differentiation and integration for variable acceleration, maxima and minima problems, derivation of constant acceleration formulae *Statistics:* correlation and interpreting linear regression lines, probability including Venn and

	distributions, hypothesis testing	and use their properties to calculate probabilities? Can you identify a binomial distribution? What are the key features of a binomial distribution? Can you calculate a probability using the binomial? Can you identify the uniform distribution?		tree diagrams, mutually exclusive outcomes and statistically independent outcomes, statistical probability distributions, the binomial distribution and use of cumulative probabilities, hypothesis testing for binomial distributions: one- and two-tailed tests, critical values, actual significance level, conclusions in context
Summer 2	Revision and consolidation Algebraic methods Radians	--- Pure Year 2 book chapters 1 & 5 Can you solve a trigonometric equation involving radians	End of year exams (internal – synoptic)	Revision and consolidation Proof by contradiction, algebraic fractions, partial fractions and algebraic long division Radian measure, arc length, areas of sectors and segments, solving trigonometric equations with radians and small angle approximations

Department Curriculum and Assessment Outline

Department Curriculum and Assessment Outline

Maths Department **Year 13 Maths A Level 2019-20 onwards** **Teaching, learning and assessment during the course:**

Timing (Weeks, half terms)	**Unit titles**	**Key question(s)**	**How will we know that pupils can answer the key GCE question(s)?** Formally assessed work that will inform attainment grade	**Key themes of the unit**
Autumn 1	Trigonometry Parametric equations Differentiation	Pure Year 2 book chapters 6-9 Can you differentiate a function of a function? Use the product and quotient rule? Can you differentiate all trig functions?	36 week test, End of topic tests	Reciprocal trigonometric functions and their graphs, Pythagorean identities and their use, inverse trigonometric functions, addition formulae, double angle formulae, simplifying linear combinations of sin and cos, proving trigonometric identities and modelling Parametric equations – curve sketching, points of intersection, modelling Differentiating sin and cos from first principles, differentiating exponentials and logarithms, chain rule, differentiating products and quotients, parametric and implicit differentiation, using second derivatives, problems with rates of change
Autumn 2	Integration Functions and graphs Sequences and series Binomial expansion	Pure Year 2 chapters 11 and 2-4 Can you find a series expansion for a function expressed as partial fractions?	End of topic tests, 42 week test	Integrating standard functions, integrating f(ax + b), using trigonometric identities and partial fractions, reverse chain rule, integration by substitution, integration by parts, finding areas, trapezium rule, solving

		Can you sketch the modulus of a function?		first order differential equations by separation of variables Modulus function and modulus graphs, functions and mappings, composite functions, inverse functions, combining function transformations and solving modulus problems Arithmetic and geometric sequences and series, sum to infinity, sigma notation, recurrence relations and series modelling Binomial expansion of $(1 + x)^n$ and $(a + bx)^n$ and using partial fractions to find expansions
Spring 1	Numerical methods Vectors in 3D *Mechanics:* moments, forces and friction, projectile motion	Pure Year 2 chapters 10 and 12 Statistics and Mechanics Year 2 chapters 4-6	Mock Exams, 48 week test	Numerical methods for solving equations – iteration and the Newton-Raphson method Coordinates and vectors in 3D, solving geometric problems & basic mechanics in 3D *Mechanics* moments, resultant moments, equilibrium, centres of mass and tilting; resolving forces, inclined planes and friction; horizontal projection, horizontal and vertical components, projection at any angle and projectile motion formulae
Spring 2	*Statistics:* regression, and correlation, conditional probability & normal distribution *Mechanics:* forces – statics, dynamics and connected particles, further kinematics	Statistics and Mechanics Year 2 chapters 1-3 and 7-8	54 week test, and ongoing paper practice	*Statistics:* exponential models, measuring correlation, hypothesis testing for zero correlation; set notation, conditional probability and probability formulae; normal distribution, inverse normal function, standard normal distribution, approximating a normal distribution and hypothesis testing *Mechanics:* applications of forces to statics and dynamics including friction, inclined planes and connected particles; vectors in kinematics, vectors with projectiles, variable acceleration in one dimension, differentiating and integrating vectors

Department Curriculum and Assessment Outline

Summer 1 (4 weeks)	Revision/final consolidation and preparation	---	Past Papers – mix of in class and as homework, including some timed	Revision and consolidation External exams

Department Curriculum and Assessment Outline

Department Curriculum and Assessment Outline

Maths Department **Year 13 Maths A Level 2018-19 ONLY** **Teaching, learning and assessment during the course:**

Timing (Weeks, half terms)	**Unit titles**	**Key question(s)**	**How will we know that pupils can answer the key GCE question(s)?** Formally assessed work that will inform attainment grade	**Key themes of the unit**
Autumn 1	*Statistics (Year 1): correlation, probability distributions, hypothesis testing* Algebraic methods Functions and graphs Binomial expansion	Statistics and Mechanics Year 1 book chapters 4, 6 and 7 Pure Year 2 book chapters 1, 2 & 4	36 week test, End of topic tests	*Statistics:* correlation and interpreting linear regression lines, statistical probability distributions, the binomial distribution and use of cumulative probabilities, hypothesis testing for binomial distributions: one- and two-tailed tests, critical values, actual significance level, conclusions in context *Pure:* proof by contradiction, algebraic fractions, partial fractions, algebraic division Radian measure, arc length, areas of sectors and segments, solving trigonometric equations with radians and small angle approximations Modulus function and modulus graphs, functions and mappings, composite functions, inverse functions, combining function transformations and solving modulus problems

Department Curriculum and Assessment Outline

				Binomial expansion of $(1 + x)^n$ and $(a + bx)^n$ and using partial fractions to find expansions
Autumn 2	Radians Trigonometry Parametric equations Differentiation *Start integration (listed in Spring 1)*	Pure Year 2 book chapters 5-9	End of topic tests, 42 week test	Radian measure, arc length, areas of sectors and segments, solving trigonometric equations with radians and small angle approximations Reciprocal trigonometric functions and their graphs, Pythagorean identities and their use, inverse trigonometric functions, addition formulae, double angle formulae, simplifying linear combinations of sin and cos, proving trigonometric identities and modelling Parametric equations – curve sketching, points of intersection, modelling Differentiating sin and cos from first principles, differentiating exponentials and logarithms, chain rule, differentiating products and quotients, parametric and implicit differentiation, using second derivatives, problems with rates of change
Spring 1	Integration Sequences and series Numerical methods Vectors in 3D *Mechanics:* moments, forces and friction, projectile motion	Pure Year 2 chapters 11, 3, 10 & 12 Statistics and Mechanics Year 2 chapters 4-6	Mock Exams, 48 week test	Integrating standard functions, integrating f(ax + b), using trigonometric identities and partial fractions, reverse chain rule, integration by substitution, integration by parts, finding areas, trapezium rule, solving first order differential equations by separation of variables Arithmetic and geometric sequences and series, sum to infinity, sigma notation, recurrence relations and series modelling Numerical methods for solving equations – iteration and the Newton-Raphson method Coordinates and vectors in 3D, solving geometric problems & basic mechanics in 3D

				Mechanics moments, resultant moments, equilibrium, centres of mass and tilting; resolving forces, inclined planes and friction; horizontal projection, horizontal and vertical components, projection at any angle and projectile motion formulae
Spring 2	*Statistics:* regression, and correlation, conditional probability & normal distribution *Mechanics:* forces – statics, dynamics and connected particles, further kinematics	Statistics and Mechanics Year 2 chapters 1-3 and 7-8	54 week test, and ongoing paper practice	*Statistics:* exponential models, measuring correlation, hypothesis testing for zero correlation; set notation, conditional probability and probability formulae; normal distribution, inverse normal function, standard normal distribution, approximating a normal distribution and hypothesis testing *Mechanics:* applications of forces to statics and dynamics including friction, inclined planes and connected particles; vectors in kinematics, vectors with projectiles, variable acceleration in one dimension, differentiating and integrating vectors
Summer 1 (4 weeks)	Revision/final consolidation and preparation	---	Past Papers – mix of in class and as homework, including some timed	Revision and consolidation External exams

Department Curriculum and Assessment Outline

Department Curriculum and Assessment Outline

Maths Department **Year 12 Further Maths A Level with FP1 and FP2** **Teaching, learning and assessment during the course:**

Timing (Weeks, half terms)	**Unit titles**	**Key question(s)**	**How will we know that pupils can answer the key GCE question(s)?** Formally assessed work that will inform attainment grade	**Key themes of the unit**
Autumn 1	Complex numbers Series (1) Roots of polynomials	See Further Core Year 1 textbook chapters 1–4	4 week test (on Complex numbers)	Complex numbers and Argand diagrams Series: use of standard results for sums of natural numbers, squares and cubes Roots of quadratic, cubic and quartic equations and transformations of these
Autumn 2	Matrices Proof by induction Inequalities	See Further Core Year 1 textbook chapters 6–8 and FP1 chapter 4	10 week test (all content to date)	Matrices and linear transformations Proof by induction for summation results, divisibility results and matrix proofs Tough inequalities and modulus inequalities
Spring 1	Conic sections (1) Number theory Groups	See FP1 textbook chapter 2 and FP2 textbook chapters 1 and 2	16 week test (all content to date)	Parametric equations, parabolas and rectangular hyperbolas (including loci)
Spring 2	Volume of revolution Recurrence relations Further Matrices	See Further Core Year 1 textbook chapter 5 and FP2 book chapters 4 and 5	22 week test (all content to date)	Volumes of revolution about x- and y-axis **RECURRENCE RELATIONS** **FURTHER MATRICES**
Summer 1	Vectors Series (2)	See Further Core Year 1 chapter 9, FP1 chapter 1, followed by	28 week test (all content to date)	Lines, planes, angles and area in 2D and 3D using vector equations, scalar product, vector product and scalar triple product

		Further Core Year 2 chapter 2 and FP1 chapters 6.1 and 6.2		**SERIES**
Summer 2	Revision and consolidation	---	End of year exams (internal – synoptic)	Revision and consolidation

Department Curriculum and Assessment Outline

Department Curriculum and Assessment Outline

Maths Department **Year 13 Further Maths A Level with FP1 and FP2** **Teaching, learning and assessment during the course:**

Timing (Weeks, half terms)	**Unit titles**	**Key question(s)**	**How will we know that pupils can answer the key GCE question(s)?** Formally assessed work that will inform attainment grade	**Key themes of the unit**
Autumn 1	Complex numbers Polar coordinates	See Further Core Year 2 textbook chapter 1, FP2 chapter 3 and Further Core Year 2 chapter 5	36 week test	
Autumn 2	Further calculus (1) Hyperbolic functions Conic sections (2)	See Further Core Year 2 textbook chapters 3, 4 and 6 and FP1 textbook chapter 3	42 week test	Improper integrals, mean value of a function, calculus of inverse trigonometric functions, integration using partial fractions, further volumes of revolution Ellipses, hyperbolas (inc. eccentricity & loci)
Spring 1	Further trigonometry Further calculus (2) Differential equations	See FP1 textbook chapters 5 and 7 and Further Core Year 2 textbook chapters 7 and 8	Mock Exams, 48 week test	
Spring 2	Differential equations Further integration	See FP1 textbook chapters 6.3, 8 and 9 and FP2 textbook chapter 6	54 week test, and ongoing paper practice	
Summer 1 (4 weeks)	Revision/final consolidation and preparation	---	Past Papers – mix of in class and as homework, including some timed	Revision and consolidation External exams

Department Curriculum and Assessment Outline

	7	8	9set 1	9set 2	10 set 1	10 set 2	11, 1 112		12	13
Mid Term Autumn	Data Assessment	Number assessment	Straight Line Graphs Assessment	No. Algebra	Number Assessment	Powers& standard form approx	Surds Functions	Percentages Data	Pure Assessment from term 1	Pure & Applied Assessment From term 1
Report Autumn	Number & Algebra Assessments	Shape & Space & Algebra Assessment	Trig & Number Sequences Assessment	Data Fractions, & decimals	Algebra Assessment	Similarity Algebra Perim & Area	Iteration Vectors	No. & seqs	Pure Assessment from term 1	Mock Examination from term 1
Mid Term Spring	Angles & Fractions Assessments	Graphs & Transformations Assessment / Probability Decimals	Non Linear Graphs Assessment	Geometry Graphs	Probability Assessment	Vols & Areas Vectors Graphs Ratio Constructions	Transformations of graphs Mock	Triangles Decimals Mock	Pure and Applied Assessment from term 2	Pure & Applied Assessment From term 2
Report Spring	Equations Assessment / Graphs	Fractions, decimals & percentages / Data	Number & Simultaneous Equations Assessment	Transformations Multiplicative reasoning	Shape & Space Assessment	Quadratics Changing subject	Length area volume	Angles Algebra	Pure & Applied Assessment from term 2	Pure & Applied Assessment From term 2
Mid Term Summer	Multiplicative Reasoning , Decimals & Percentages Assessments / Transformations Decimals	Construction Assessment / Angles Fractions & percentages	Data & Ratio & Proportion Assessment	Algebra Probability	Quadratics & Proportion Assessment	Transformations	Past Papers & Algebraic fractions	Past papers	Pure & Applied Assessment from term 3	Pure & Applied Assessment From term 3

Department Curriculum and Assessment Outline

Report Summer	Perimeter, area & Volume Assessment Summer Exam	Perimeter, Area & Vol Summer Exam	Scales, Similarity & Probability Assessment Summer Exam	Number Summer Exam	Inequalities Summer exam	trig Summer Exam		Summer Exam		Mock Exams for Paper 1 & 2	