Curriculum Map

Subject: Maths

Year Group: 11F (Set 4)

	Autumn 1/Autumn 2	Autumn 2	Autumn 2/Spring 1	Spring 2	Summer 1	Summer 2
Content	**Unit 16: Quadratic equations and graphs** **Unit 17: Perimeter, area and volume2** **Students continue to learn new content. Where appropriate or necessary a review of year 10 work may also be completed.**	**Unit 18: Fractions, indices and standard form** **Unit 19: Similarity and enlargement** **Students continue to learn new content. Where appropriate or necessary a review of year 10 work may also be completed.**	**Unit 20: More algebra** **Students continue to learn new content. Where appropriate or necessary a review of year 10 work may also be completed.**	**REVISION** **Students complete formal revision programme with incorporated exam practice**	**REVISION** **Public Exams**	
Skills	Students will… **Unit 16: Quadratic equations and graphs** Be able to expand double brackets, plot quadratic graphs, use quadratic graphs, factorise quadratic expressions and solving quadratic equations algebraically.	Students will… **Unit 18:** Be able to multiply and divide fractions, apply the laws of indices, write large and small numbers in standard form, calculate with standard form.	Students will… **Unit 20:** Be able to draw and interpret graphs of cubic and reciprocal functions and some non-linear graphs. Be able to solve simultaneous equations graphically and algebraically. Be able to rearrange formulae and do some simple proof.	Students will… Learn to select appropriate rules and knowledge to apply to a range of exam type problems in different contexts. Review topics to consolidate mathematical understanding and apply this knowledge appropriately in the context of an exam.	Students will… The revision programme is bespoke to each teaching group and will be focussed on key topics for certain grades and areas for improvement identified by ongoing assessment. These are supported by use of: ● Formal revision sessions	

	Unit 17: Perimeter, area and volume 2 Calculate the circumference of a circle, the area of a circle, work with semicircles and sectors, find area and perimeter of compound shaped, cylinders, Pyramids and cones, Spheres and composite solids.	**Unit 19:** Be able to identify congruence and similarity. Calculate using the scale factors. Be able to solve questions using vectors.			● Regular completion of past papers ● Topic and skill specific booklets created and shared across the department	
Key questions	**FOUNDATION ACTIVELEARN BOOK UNIT 16 & UNIT 17 PRACTICE TESTS**	**FOUNDATION ACTIVELEARN BOOK UNIT 18 &UNIT 19 PRACTICE TESTS**	**FOUNDATION ACTIVELEARN BOOK UNIT 20 PRACTICE TEST**	Past exam questions	Past exam questions	
Assessment	End of unit assessment	**PPE1** – 2 Papers (SET BY TEACHERS & DEPENDENT ON UNIT COMPLETION BY GROUPS)	End of unit assessment	**PPE2** – Pupils sit 3 papers	**GCSE exams – 3 papers Edexcel board on set public dates**	
Literacy/ Numeracy/ SMSC/ Character	Learn to select appropriate rules and knowledge to apply to a range of problems in different contexts. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	

Curriculum Map

Subject: Maths   **Year Group: 11H (Sets 1 – 3)**

	Autumn 1/Autumn 2	Autumn 2	Autumn 2/Spring 1	Spring 2	Summer 1	Summer 2
Content	Unit 15 completion if needed Unit 16:Circle Theorems	Unit 17: Further Algebra	Unit 18: Vectors and geometric proof Unit 19:Direct proportion	COMPLETION OF UNITS IF NEEDED & EXAM REVISION Students complete formal revision programme with incorporated exam practice	REVISION PUBLIC EXAMS	Transition to Year 12
Skills	Students will… **Unit 16: Circle theorems** Be able to identify Radii, chords and tangents. Be able to apply the circle theorems to problems involving length and angles. Be able to prove the circle theorems.	Students will… **Unit 17: Further Algebra** Be able to rearrange formulae, work with and simplify algebraic fractions. Solve algebraic fraction equations. Revisit and calculate with surds. Be able to use function notation, find inverse and composite functions. Prove a result using algebra.	Students will… **Unit 18:** Be able to name vectors and use vector notation. Work with vector arithmetic including parallel vectors and collinear points. Be able to apply the rules of vectors to solve geometric problems. **Unit 19:** Be able to write and use equations to solve problems involving direct and inverse proportion.	Students will… **Learn to select appropriate rules and knowledge to apply to a range of exam type problems in different contexts.** **Review topics to consolidate mathematical understanding and how to apply this knowledge appropriately in the context of an exam**	Students will… The revision programme is bespoke to each teaching group and will be focussed on key topics for certain grades and areas for improvement identified by ongoing assessment. These are supported by use of: ● Formal revision sessions ● Regular completion of past papers ● Topic and skill specific booklets created and shared	

			Be able to sketch and interpret exponential functions and some non-linear graphs. Be able to translate graphs of functions including reflecting and stretching.		across the department	
Key questions	**FOUNDATION ACTIVELEARN BOOK UNIT 15 &UNIT 16 PRACTICE TESTS**	**FOUNDATION ACTIVELEARN BOOK UNIT 17 PRACTICE TESTS**	**HIGHER ACTIVELEARN BOOK UNIT 18 PRACTICE TEST PAGE 584 UNIT 19 PRACTICE TEST PAGE 621**	Past Exam questions	Past exam questions	
Assessment	End of unit assessment	PPE1 – 2 Papers (SET BY TEACHERS & DEPENDENT ON UNIT COMPLETION BY ALL SETS)	End of unit assessment	PPE2 – All pupils sit 3 papers	GCSE exams – 3 papers Edexcel board on set public dates	
Literacy/ Numeracy/ SMSC/ Character	Learn to select appropriate rules and knowledge to apply to a range of problems in different contexts. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	Understanding and interpreting worded questions in real-life contexts and be able to apply appropriate algebraic skills. Aspiration, Resilience, Initiative, Confidence	