Curriculum Map

Subject: Maths   **Year Group: 10F**

	Autumn 1/Autumn 2	Autumn 2	Autumn 2/Spring 1	Spring 2	Summer 1	Summer 2
Content	Unit 9: Graphs Unit 10: Transformations	Unit 11: Ratio and proportion	Unit 12: Right-angled triangles Unit 13: Probability	Unit 14: Multiplicative reasoning	Unit 15: Constructions, loci and bearings **End of Year exams**	Unit 16: Quadratic equations and graphs Unit 17: Perimeter, area and volume 2
Skills	Students will… **Unit 9: Graphs** Find coordinates, draw linear graphs, find the gradient, $y = mx + c$, work with Real-life graphs, and Distance-time graphs, **Unit 10: Transformations** Draw and describe translation, reflection, rotation, enlargement, and a combination of them	Students will… **Unit 11: Ratio and proportion** Write ratio, simplify and calculate with ratio including with measures, Solve problems with proportion – direct and inverse, interpret proportion graphs and calculate best buy	Students will… **Unit 12: Right-angled triangles** Be able to find missing lengths and angles by using trigonometry (SOHCAHTOA) and Pythagoras **Unit 13: Probability** Calculate probability involving two events and experimental probability. Be able to use Venn diagrams and Tree diagram to calculate probability	Students will… **Unit 14: Multiplicative reasoning** learn to work with percentages including growth and decay. They will work with compound measures, distance, speed and time. They will revisit direct and inverse proportion.	Students will… **Unit 15: Constructions, loci and bearings** Students will be able to sketch and name 3D solids, draw plans and elevations, make accurate drawings, use scale drawings and maps. They will be able to work with bearings and draw loci	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. **Unit 17: Perimeter, area and volume 2** Calculate the circumference of circle, the area of a circle, work with semicircles and sectors, find area and perimeter of

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						compound shaped, cylinders, Pyramids and cones, Spheres and composite solids.
Key questions	Activelearn Textbook Unit Test: Pg 240 and Pg 275	Activelearn Textbook Unit Test: Pg 341	Activelearn Textbook Unit Test: Pg 377 and Pg 408	Activelearn Textbook Unit Test: Pg 437	Activelearn Textbook Unit Test: Pg 476	Activelearn Textbook Unit Test: Pg 502 and Pg 536
Assessment	End of unit assessment	End of unit assessment	End of unit assessment	End of unit assessment	End of Year exam	End of unit assessment
Literacy/ Numeracy/ SMSC/ Character	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to advance questioning skills.	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to advance questioning skills.	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning – differentiating between theory and experimental. Building resilience, paying attention to detail, set pride in work and continue to advance questioning skills.	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to advance questioning skills.	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to advance questioning skills. A greater focus on effective study skills.	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to advance questioning skills.

Curriculum Map

Subject: Maths   **Year Group: 10H**

	Autumn 1/Autumn 2	Autumn 2	Autumn 2/Spring 1	Spring 2	Summer 1	Summer 2
Content	**Unit 9: Equations and inequalities** **Unit 10: Probability**	**Unit 11: Multiplicative reasoning**	**Unit 12: Similarity and congruence** **Unit 13: More trigonometry**	**Unit 14: Further statistics**	**Unit 15:Equations and graphs** **Unit 16: Circle theorems**	**End of Year exams** **Unit 17: More algebra**
Skills	Students will… **Unit 9: Equations and inequalities** Be able to solve quadratic equations, completing the square, solve simultaneous equations, linear and quadratic simultaneous equations and linear inequalities **Unit 10: Probability** Calculate the probability of combined events, for mutually exclusive events, experimental probability, independent and conditional events. Be able to use tree diagrams, Venn	Students will… **Unit 11: Multiplicative reasoning** Be able to calculate with percentages including growth and decay Be able to calculate with compound measures. Be able to solve problems involving ratio and proportion	Students will… **Unit 12: Similarity and congruence** Be able to identify congruence and similarity and calculate using scale factors including for 2D and 3D shapes. Be able to do geometric proof **Unit 13: More trigonometry** Be able to calculate upper and lower bounds. Be able to draw and interpret, graph of the sine function, cosine function and tangent function.	Students will… **Unit 14: Further statistics** Be able to use and solving problems involving sampling, cumulative frequency and box plots. Be able to draw and interpret histograms. Be able to compare and describe populations	Students will… **Unit 15:Equations and graphs** Be able to solve simultaneous equations graphically, represent inequalities graphically, draw graphs of quadratic and cubic functions and solve quadratic equations graphically. ITERATION PROCESSES **Unit 16: Circle theorems** Be able to apply the circle theorems to problems	Students will… **Unit 17: More 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

	Autumn 1/Autumn 2	Autumn 2	Autumn 2/Spring 1	Spring 2	Summer 1	Summer 2
	diagrams and set notation.		Be able to calculate areas, use the sine rule and cosine rule. Be able to solve 2D and 3D trigonometric problems. Be able to transform trigonometric graphs		involving length and angles. Be able to identify Radii, chords and tangents	
Key questions	Activelearn Textbook Unit Test: Pg 303 and Pg 336	Activelearn Textbook Unit Test: Pg 360	Activelearn Textbook Unit Test: Pg 395 and Pg 437	Activelearn Textbook Unit Test: Pg 468	Activelearn Textbook Unit Test: Pg 499 and Pg 527	Activelearn Textbook Unit Test: Pg 556
Assessment	End of unit assessment	End of unit assessment	End of unit assessment	End of unit assessment	End of Year exam	End of unit assessment
Literacy/ Numeracy/ SMSC/ Character	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning – differentiating between theory and experimental. Building resilience, paying attention to detail, set pride in work and continue to	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to	Interpreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to	Intepreting and working with problems in real-life context. Develop confidence with keywords and apply the knowledge to successfully solve the real-life problems as well as mathematical reasoning. Building resilience, paying attention to detail, set pride in work and continue to

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	advance questioning skills.	advance questioning skills.	advance questioning skills.	advance questioning skills.	advance questioning skills.	advance questioning skills.