Curriculum Map

Subject: Maths

Year Group: 10F (Set 4)

	Autumn 1/Autumn 2	Autumn 2	Autumn 2/Spring 1	Spring 2	Summer 1	Summer 2
Content	**Unit 8: Area, Perimeter, Volume**	**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**
Skills	Students will… **Unit 8: Area & Perimeter** Convert between units of measurement. Find the area & perimeter of 2D shapes Find the surface area and volume of cuboids, Cones, spheres, pyramids etc. Find area and circumference of circles.	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.

Key questions	Activelearn Textbook Unit Test	Activelearn Textbook Unit Test	Activelearn Textbook Unit Test	Activelearn Textbook Unit Test	Activelearn Textbook Unit Test	Activelearn Textbook Unit Test
Assessment	End of unit assessment	End of unit assessment	End of unit assessment	End of unit assessment	**End of year exam** – 2 Papers (SET BY TEACHERS & DEPENDENT ON UNIT COMPLETION BY GROUPS)	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 (Sets 1 – 3)

	Autumn1/Autumn2	Autumn 2	Spring 1/Spring 2	Spring 1/Spring 2	Spring 2	Summer 1	Summer 2
Content	**Unit 7: Area and volume.** **Unit 8: Transformations and constructions.**	**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**	**End of year exams** **Unit 15:Equations and graphs**
Skills	Students will… **Unit 7:** Find the perimeter and area of compound shapes. Convert between metric units area. Calculate upper and lower bound of measurements. Calculate surface area and volume of prisms. Calculate the area and perimeter of sectors. Calculate the volume and surface area of cylinders and spheres. Calculate the volume and surface area of pyramids and cones.	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	Students will… **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 diagrams and set notation.	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	Students will… **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. 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	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 8: Draw plans and elevations of 3D solids, Carry out and describe reflection and rotation Carry out and describe enlargement and translation Carry out and describe a combination of transformations Solve problems involving bearings and scale drawings, Construct a triangle using a ruler and compasses. Construct perpendicular and angle bisectors. Use loci to solve problems.		**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		trigonometric graphs		
Key questions	**HIGHER ACTIVELEARN BOOK UNIT 7 & UNIT 8 PRACTICE TESTS**	**HIGHER ACTIVELEARN BOOK UNIT 9 PRACTICE TEST**	**HIGHER ACTIVELEARN BOOK UNIT 10 & UNIT 11 PRACTICE TESTS**	**HIGHER ACTIVELEARN BOOK UNIT 12 PRACTICE TEST**	**HIGHER ACTIVELEARN BOOK UNIT 13 PRACTICE TEST**	**HIGHER ACTIVELEARN BOOK UNIT 14 PRACTICE TEST**	**HIGHER ACTIVELEARN BOOK UNIT 15 PRACTICE TEST**
Assessment	End of unit assessment	End of unit assessment	End of unit assessment	End of unit assessment	End of unit assessment	**End of year exam** – 2 Papers (SET BY TEACHERS & DEPENDENT ON UNIT COMPLETION BY GROUPS)	End of unit assessment
Literacy/ Numeracy/ SMSC/	Understanding and Interpreting worded questions	Interpreting and working with	Interpreting and working with	Interpreting and working with	Interpreting and working with problems	Interpreting and working with problems	Interpreting and working with problems

Character	Recognising and appreciating its practical application in real life Viewing objects and things in different positions and perspectives. Using equipment correctly Resilience, practicing diligence and paying attention to details	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.	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.	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.	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.	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.	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.