Maths- Y11F

MAGHULL HIGH SCHOOL – CURRICULUM MAP

HALF TERM 1 SEPT - OCT	Week 1 w/b 2nd Sept	Week 2 w/b 9th Sept	Week 3 w/b 16th Sept	Week 4 w/b 23rd Sept	Week 5 w/b 30th Sept	Week 6 w/b 7th Oct	Week 7 w/b 14th Oct	Week 8 w/b 21st Oct
TOPIC (S)	**Introduction to Number**	**Fractions, Decimals & Percentages**	**Ratio: Estimation with rounding**	**Conversions & exchange rates/negative numbers**	**nth term & prime factorisation**	**Angle rules/triangles/interior & exterior angles**	**Polygons/2D & 3D shapes/symmetry & circles**	**Consolidation 1**
Knowledge & Skills development	**Introduction to Number** • Methods of calculation (addition, subtraction, long division and long multiplication) including with decimals **Fractions, Decimals & Percentages** • To become familiar with the connections between fractions, decimals and percentages. • To be able to manipulate each form of number fluently using equivalencies and recognising they are all the same quantity of an amount. • To work with fractions, decimals and percentages as individual skill areas. **Ratio: Estimation with rounding** • To become familiar with equivalent ratios; dividing ratios into given amounts; work with ratios in the context of comparisons, concentrations, scaling and recipes. • To work with rounding to given decimal places and significant figures. • To use approximation as a way of estimating outcomes and estimation as a means of checking results. **Conversions & exchange rates/negative numbers** • To become familiar with equivalent ratios; dividing ratios into given amounts; work with ratios in the context of comparisons, concentrations, scaling and recipes. • To work with rounding to given decimal places and significant figures. • To use approximation as a way of estimating outcomes and estimation as a means of checking results. **nth term & prime factorisation** • To become familiar with prime numbers and prime number decomposition. • To work with sequences and find the nth term of a series.							

	Angle rules/triangles/interior & exterior angles • To undertake a diagnostic assessment of geometry skills and identify first targets. • To clarify angles and triangle rules. • To determine procedures for calculating interior and exterior angle calculations. **Polygons/2D & 3D shapes/symmetry & circles** • To become familiar with a range of polygons and recognise the difference between 2D and 3D shape. • To revise elements of symmetry – rotation, reflection, translation and enlargement. • To name the common parts of a circle and work with area and circumference calculations, including arc length and understanding `pi`.						
Assessment / Feedback Opportunities	Topic assessments	Self-assessment sheets	Homework	Formative teacher assessment - verbal	Retrieval practice		
Cultural Capital	Use of number to solve real life problems involving widely used formulae Application of proportionality in real life problems including science						
SMSC / Promoting British Values **(Democracy, Liberty, Rule of Law, Tolerance & Respect)**		Willingness to participate in, and respond to mathematical opportunities. Use of social skills in different contexts, including working and socialising with pupils from different religious, ethnic and socio-economic backgrounds.					
Reading opportunities		Mathematics in the Simpsons					
Key Vocabulary		Equation Expression Identity Inequality Formula Binomial Polynomial Simplify Expand Factorise Coefficient Subject Inequality Less than More than Solution Solution-Set Proportionality Direct Inverse Vectors Direction Magnitude Scalar Parallel Collinear					
Digital Literacy		Microsoft Excel, DESMOS, Geogebra					
Careers		Architecture, Team Leader, Construction, Chef, Medicine					