



MAGHULL HIGH SCHOOL – CURRICULUM MAP YEAR 7

HALF TERM 2 NOV-DEC	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
TOPIC (S)	5.1 Positive and Negative Numbers	5.1 Positive and Negative Numbers	5.1 Positive and Negative Numbers	6.1 Expressions, Equations and Inequalities	6.1 Expressions, Equations and Inequalities	6.1 Expressions, Equations and Inequalities	STEM Activities
Knowledge & Skills development	<p>5.1 (2nd November – 6th November)</p> <ul style="list-style-type: none"> • Interpret negative numbers in a variety of contexts. • Explore movement on an 'extended' number line. • To interpret the absolute value of a number as its distance from zero. • To understand how to order negative numbers using inequality notation. • To be able to model addition of a positive number as a translation on the number line. • To use this model to develop strategies for addition. • To be able to model addition of a negative number as a translation on the number line. • To understand that if two numbers are additive inverses they sum to 0. <p>5.1 (9th November – 13th November)</p> <ul style="list-style-type: none"> • Subtracting positive numbers is equivalent to the addition of the additive inverse. • Subtracting negative numbers is equivalent to the addition of the additive inverse. • Subtraction is then explored of as the inverse of addition. • Explore multiplication involving at least one positive number. • Visualise multiplication as a stretch by a scale factor. • Negative scale factors are described as a stretch in the opposite direction. • The commutativity of multiplication is explored. <p>5.1 (16th November – 20th November)</p> <ul style="list-style-type: none"> • Multiplication with a negative scale factor is extended to finding the product of two negative numbers. • Division by a positive integer is equivalent to multiplying by the reciprocal. • Further division facts are derived using 'fact families'. • The axioms introduced in Unit 2 also hold for negative numbers. • Manipulating and simplifying calculations using these axioms. <p>6.1 (23rd November – 27th November)</p> <ul style="list-style-type: none"> • Substitute variables to evaluate simple expressions. • Understand the algebraic notation of multiplication. • Collecting together like terms using tracking arithmetic and algebra. • Manipulating linear expressions involving multiple variables. • Using the distributive property to 'expand brackets' with linear expressions. • An introduction to factorising basic linear expressions. 						

<p>6.1 (30th November – 4th December)</p> <ul style="list-style-type: none"> • Introducing the concept of an equation. • Using Cuisenaire Rods or bar models to form equations. • Form equations related to a known equation. • Explore how equality is preserved. (i.e. balancing) • Using Cuisenaire Rods or bar models to form inequalities. • Form inequalities related to a known equation. <p>6.1 (7th December – 11th December)</p> <ul style="list-style-type: none"> • Forming expressions using algebraic lengths specified on a grid • Drawing shapes given expressions for the perimeter • Forming expressions using algebraic lengths specified on a grid. • Establishing inequalities from perimeter expressions. • Generalising counting strategies algebraically for repeating patterns. • Generalising counting strategies algebraically for different repeating patterns. <p>Last Week (14th December – 18th December) Maths puzzles and STEM activities</p>						
Assessment / Feedback Opportunities	Retrieval Homework	Termly assessment	Speedy feedback for DIRT	Formative teacher assessment - verbal	Retrieval practice Warm Up	
Cultural Capital	Real life application of negative numbers Worded problems using negative numbers in various real life context.					
SMSC / Promoting British Values (Democracy, Liberty, Rule of Law, Tolerance & Respect)	Working with unknown quantities.					
Reading opportunities	Mystery Math: First Book of Algebra by David A Adler Maths is Everywhere: Digits, Number lines, negative and positive numbers by R Colson					
Key Vocabulary	Negative, positive, integer, order, ascending, descending, calculate, equal, inequality, equation, expression, bracket, equals, balance, inverse					
Digital Literacy	Excel Formulae					
Careers	Quantity Surveyor, Weather Reporter, Business Analyst, Actuary					