

Maths- Y9

MAGHULL HIGH SCHOOL – CURRICULUM MAP



HALF TERM 1 SEPT - OCT	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TOPIC (S)	Basic Number	Factors and Multiples	Basic Algebra	Basic Algebra	Basic Algebra	Basic Fractions	Basic Decimals
Knowledge & Skills development	<p>Basic Number</p> <ul style="list-style-type: none"> order positive and negative integer use the symbols =, ≠, <, >, ≤, ≥ apply the four operations, including formal written methods, to integers - both positive and negative understand and use place value (eg when working with very large or very small numbers, and when calculating with decimals) recognise and use relationships between operations, including inverse operations (eg cancellation to simplify calculations and expressions) estimate answers check calculations using approximation and estimation, including answers obtained using technology <p>Factors and Multiples</p> <ul style="list-style-type: none"> use the concepts and vocabulary of: <ul style="list-style-type: none"> factors (divisors), multiples common factors, common multiples highest common factor, lowest common multiple prime numbers and prime factorisation, including using product notation and the unique factorisation theorem apply systematic listing strategies, including use of the product rule for counting <p>Basic Algebra</p> <ul style="list-style-type: none"> use and interpret algebraic notation, including: <ul style="list-style-type: none"> ab in place of $a \times b$ $3y$ in place of $y + y + y$ and $3 \times y$ a^2 in place of $a \times a$, a^3 in place of $a \times a \times a$, a^2b in place of $a \times a \times b$ a/b in place of $a \div b$ coefficients written as fractions rather than as decimals brackets use conventional notation for priority of operations, including brackets, powers, roots and reciprocals understand and use the concepts and vocabulary of expressions, equations, formulae, inequalities, terms and factors and to include identities simplify and manipulate algebraic expressions by: <ul style="list-style-type: none"> collecting like terms multiplying a single term over a bracket taking out common factors expanding products of two binomials factorising quadratic expressions of the form $x^2 + bx + c$ including the difference of two squares <p>Basic Fractions</p> <ul style="list-style-type: none"> order positive and negative fractions apply the four operations, including formal written methods, to simple fractions (proper and improper), and mixed numbers – all both positive and negative calculate exactly with fractions <p>Basic Decimals</p> <ul style="list-style-type: none"> order positive and negative decimals apply the four operations, including formal written methods, to decimals – both positive and negative understand and use place value (eg when calculating with decimals) work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and $7/2$ and 0.375 and $3/8$) including ordering change recurring decimals into their corresponding fractions and vice versa 						

Assessment / Feedback Opportunities	Topic assessments	Self-assessment	Homework Online	Formative teacher assessment - verbal	Retrieval practice	
Cultural Capital	<ul style="list-style-type: none"> • Rounding with money • Greek alphabet 					
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						
Key Vocabulary	Factor multiple Venn operation place value round estimate approximate significant figures expression equation term formulae equation expand factorise coordinate quadrant function graph gradient y-intercept					
Digital Literacy						
Careers	Business, Finance, Architect, Building, Engineer.					