

Year 8 Curriculum Overview [2019-2020] – Planning for Progression
Subject – Maths

| Schedule | Term | Knowledge & Understanding | Literacy Skills Building vocabulary Developing oral skills Developing reading skills Developing writing skills | Key Skills Subject Skills Numeracy Skills 21 st Century Skills Employability Skills | Assessment Formative Interim Summative |
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| Autumn Term | Half Term 1 | <ul style="list-style-type: none"> Integers, powers & routes Sequences, functions & graphs Geometrical reasoning: lines, angles & shapes Construction & loci | Vocab Indices, cubed, root, reciprocal, arithmetic, geometric, quadratic sequence, Fibonacci, acute, reflex, obtuse, isosceles, base, angles, parallel, perpendicular, alternate, corresponding, co-interior, loci, equidistant Oral skills Pupils respond to questioning when using whiteboards. Pupils come to front to demonstrate solutions Reading Classwork and online HWKs where problem solving incorporated e.g. loci descriptions | Subject Number, algebra, geometry Reasoning, problem solving, communication Employability Logic in angle work and algebra. 21 st century Communication and critical thinking (angle problems) Cultural Capital. Power related to distances in universe Fibonacci related to golden ratio and occurrence as a natural phenomenon and in ancient constructions e.g. pyramids and acropolis. | Topic test every 2 weeks (SAMS). Formal in class assessment - Half term 2: week commencing 11 th November |
| | Half Term 2 | <ul style="list-style-type: none"> Probability Ratio & proportion Equations, formulae, identities & expressions Measures & mensuration; area | Vocab Outcome, bias, independent, identity, expression, Polygon names, volume, capacity, unit Oral skills Pupils respond to questioning when using whiteboards. Pupils come to front to demonstrate solutions | Subject Number, statistics, algebra and geometry. Reasoning, calculating, communication Employability Logical, analytical, organised thinking, particularly in angle problem solving | |

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| | | | Reading Classwork and online HWKs where problem solving incorporated e.g. mensuration questions in context in class and in online HWKs. | 21st century Collaboration paired working solving problems. Communication in angle work and algebra essential skills Creativity approach to angle problems will vary Cultural Capital Wonder of pi and infinite diagonal in a parallelogram. Monty Hall problem | |
| Spring Term | Half Term 3 | <ul style="list-style-type: none"> • Functions & graphs • Mental calculations • Written calculations & checking | Vocab Function, variable, axis, parallel, parabolic, quadrant, product, sum, square, cube Oral skills Pupils respond to questioning when using whiteboards. Pupils come to front to demonstrate solutions Reading Classwork and online HWKs where problem solving incorporated e.g. fraction question in context | Subject Algebra, number, problem solving, calculating, communicating Employability Logical, analytical, decision making, financial literacy 21st Century Communication | Topic tests every 2 weeks |
| | Half Term 4 | <ul style="list-style-type: none"> • Transformations & co-ordinates • Processing & representing data; interpreting & discussing results • Equations, formulae, identities & expressions | Vocab Rotate, reflect, translate, enlarge, scale factor, proportion, trend, term Oral skills Pupils respond to questioning when using whiteboards. Pupils come to front to demonstrate solutions | Subject Geometry, number, statistics, algebra Reasoning, problem-solving, communication | |

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| | | | Reading Classwork and online HWKs where problem solving incorporated e.g. data question in context line HWKs Written Interpret data making written conclusions | Employability Logical, analytical 21st century Communication, Cultural Capital Tessellations references | |
| Summer Term | Half Term 5 | <ul style="list-style-type: none"> Fractions, decimals & percentages Measures & mensuration Equations, formulae, identities & expressions Sequences, functions & graphs: using ICT Calculations and checking | Vocab Numerator, denominator, multiple, factor, sum, product, names of polygons, trapezium. kite, quadrilateral, geometric, quadratic Oral skills Pupils respond to questioning when using whiteboards. Pupils come to front to demonstrate solutions Reading Classwork and online HWKs where problem solving incorporated e.g. volume question in context | Subject number, algebra, geometry, Reasoning, problem solving, communication, retention Employability Logical Financial literacy analytical | <i>Topic tests every 2 weeks</i> <i>Formal exam week commencing 27 April</i> |
| | Half Term 6 | <ul style="list-style-type: none"> Geometrical reasoning: co-ordinates & construction Measures & mensuration; volume Statistical Enquiry | Vocab Numerator, denominator, multiple, factor, sum, product, Mode, median, quartile, range, interquartile Oral skills Pupils respond to questioning when using whiteboards. Pupils come to front to demonstrate solutions Reading Classwork and online HWKs where problem solving | Subject geometry, statistics Communication, problem solving Employability Logical, analytical. Organisation, initiative, financial literacy 21st Century Communication | |

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| | | | <div>incorporated e.g. angle bearing question in context.</div> <div>Written</div> <div>Interpret data referring to context</div> | | |
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