

AUTUMN 1

Number, Powers and Standard Form <ul style="list-style-type: none"> - Prime factors - Multiplying and dividing decimals - Negative numbers - Prime numbers - Square and square rooting - Indices - Standard form - Estimation 	Fractions and Percentages <ul style="list-style-type: none"> - Converting between improper fractions and mixed numbers - Multiply and divide fractions - Write a quantity as a fraction/percentage of another - Increase/ decrease by a percentage - Simple and compound Interest - Reverse percentages 	Ratio and Proportion <ul style="list-style-type: none"> - Simplifying ratio and writing in the form 1: n - Solve ratio problems - Combining ratios - Recipe-style proportion problems - Best Buys 	RAR Teachers will use assessment data to revisit topics to improve these skills.	Prior Learning <ul style="list-style-type: none"> - Negative Numbers (Year7 Aut1) - Decimal Calculations (Year7 Aut1) - Indices (Year8 Aut2) - Standard Form (Year8 Aut1) - Fractions and Percentages (Year7 Aut1/ Year8 Spr1)
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AUTUMN 2

Angles <ul style="list-style-type: none"> - Solve problems using angle facts - Angles in a polygon - Special quadrilaterals - Scale drawings - Bearings 	Algebraic Manipulation <ul style="list-style-type: none"> - Substitution - Expanding/ Factorising - Expand double and triple brackets - Factorise Quadratics - Re-arranging Formulae (Link to Science) 	Sequences <ul style="list-style-type: none"> - Generate sequences from its nth term. - Find the nth term of a linear sequence - Solve problems involving sequences - Generate quadratic sequences from its nth term - Find the nth term of a quadratic sequence 	RAR Teachers will use assessment data to revisit topics to improve these skills.	Prior Learning <ul style="list-style-type: none"> - Angles (Year7Spr2) - Algebraic Manipulation (Year7Spr1/ Year8 Aut2) - Sequences (Year8 Sum1)
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SPRING 1

Right-Angles Triangles <ul style="list-style-type: none"> - Pythagoras Theorem - Trigonometry of right angles triangles - Solve problems involving pythagoras and trigonometry 	Simple Probability <ul style="list-style-type: none"> - Calculate probabilities from two way tables and frequency trees - Experimental probability - Mutually exclusive events - Venn diagrams 	Linear Graphs <ul style="list-style-type: none"> - Plot linear graphs - Equation of a line - Solving problems involving the equation of a line - Parallel and perpendicular lines - Solve simultaneous equations graphically 	Prior Learning <ul style="list-style-type: none"> - Probability (Year7Aut2) - Linear Graphs (Year8Spr1)
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SPRING 2

Averages <ul style="list-style-type: none"> - Calculate Averages - Solve averages problems - Find averages from a frequency table 	Length, Area and Volume <ul style="list-style-type: none"> - Area of 2D shapes and compound shapes - Volume of a prism - Volume of a pyramid - Arc Length and area of a sector - Volume and surface area of a cylinder, cone and sphere 	RAR Teachers will use assessment data to revisit topics to improve these skills.	Assessment and QLA Students will receive personalised feedback and revisit personalised topics.	Prior Learning <ul style="list-style-type: none"> - Averages (Year7 Spr1) - Area and Volume (Year7 Spr2/ Year7 Sum1)
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SUMMER 1

Statistical Diagrams <ul style="list-style-type: none"> - Line graphs - Stem and leaf diagrams - Pie charts and scatter diagrams 	Inequalities <ul style="list-style-type: none"> - Representing on a number line - Solving Inequalities - Graphical inequalities 	Constructions and Loci <ul style="list-style-type: none"> - Plans and elevations - Constructing triangles - Angle bisector and perpendicular bisectors 	RAR Teachers will use assessment data to revisit topics to improve these skills.	Prior Learning <ul style="list-style-type: none"> - Statistical Diagrams (Year7 Spr1) - Plans and Elevations (Year7 Sum1)
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SUMMER 2

Similarity <ul style="list-style-type: none"> - Solve similar shape problems - Solve problems involving the area and volume of similar shapes 	Transformations <ul style="list-style-type: none"> - Prove triangles are congruent - Reflection and rotational symmetry - Translation and rotation - Enlargement including negative and fractional scale factors - Solve problems involving multiple transformations 	RAR Teachers will use assessment data to revisit topics to improve these skills.	Assessment and QLA Students will receive personalised feedback and revisit personalised topics.	Prior Learning <ul style="list-style-type: none"> - Similar shapes (Year8 Spr2) - Limited transformations (KS2)
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CAREERS LINKS

Accountancy, chef, banking insurance, bookmaking, risk analyst, news reporting, analyst, businessperson, performance analyst. Actuaries, economist, meteorologist, carpenter, welder, construction, architecture, joinery, games designer, software design & IT, engineering, catering, hairdressing.

CHARACTER LINKS

Perseverance and determination skills are fostered (performance virtues) particularly when students do not arrive at the correct answer first time and when trial and error skills are needed. Project work encourages critical thinking, judgement, and reasoning skills (intellectual virtues) to arrive at the outcome

KEY ASSESSMENT DATES

Year 9 will have an assessment at the end of every unit (approximately 2-3 weeks). They will have one large assessment in March and then at the end of the year which will test all the topics that the students have covered.