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| **Curriculum Plan for Parents – Year 9** |

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| **Subject** | Mathematics | **Contact Person** | Mrs Shaw / Miss Riley |

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| **Half term and topic** | **Your child will learn....** | **Key Homework** | **Assessment** |
| **Autumn 1**Calculation MethodsOrder & RoundingNumber PropertiesConstructionsLoci | Become fluent in the methods for adding, subtracting, multiplying and dividing decimals; rounding to significant figures; use a calculator efficiently for complex calculations; identify upper and lower bounds; begin to write numbers in standard form; solve written problems using LCM or HCF; prime factor decomposition; simplify algebraic expressions using Index Laws; simplify surds; use mathematical equipment accurately; perpendicular and angle bisectors; loci problems;  | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). |  |
| **Autumn 2**SequencesFunctions & GraphsMeasures | Write and use the nth term of arithmetic sequences; recognise and continue simple quadratic sequences; recognise that equations of the form y = mx + c correspond to straight-line graphs; gradients of parallel straight lines; solve simple simultaneous equations graphically; area and circumference of a circle; area of a trapezium; compound areas and perimeters; solve problems involving speed, distance and time; volume of prisms; introduction to Pythagoras; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). | November – formal assessment on all work covered so far (non-calculator and calculator tests) |
| **Spring 1**FDPAlgebra | Compare quantities using percentages; calculate with mixed numbers and improper fractions; multiply and divide decimals; simple interest; multipliers and compound interest; solve reverse percentage problems; change the subject of a formula; trial and improvement;  | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). | February – formal mid-year exams (non-calculator and calculator tests) |
| **Spring 2**AlgebraRatio & ProportionTransformations | Algebra (continued); expand two brackets; represent inequalities on a graph; solve simultaneous equations; ratio and proportion problems; divide a quantity into two or more parts using ratio; apply ratio to real contexts; use scale on maps; compare lengths, areas and volumes; rotation a shape using a centre of rotation; enlargements using a centre of enlargement and/or fractional scale factors; negative scale factors;  | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). |  |
| **Summer 1**TransformationsProbabilityGeometryHandling Data | Transformations (continued); describe a given transformation using correct terms; combine transformations; experimental probability; relative frequency; complete and use sample space diagrams to list all outcomes and calculate probabilities; recognise mutually exclusive events; independent events; venn diagrams; regular and irregular polygons; interior and exterior angles; angles on parallel lines; solve angle problems and give reasons; read bus or train timetables; interpret distance-time graphs; scatter graphs and correlation; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). |  |
| **Summer 2**Handling DataRevision of all topics | Handling data (continued); calculate the averages and range for grouped data in a frequency table; recognise discrete and continuous data; interpret information presented in a variety of different diagrams; sample methods and questionnaires; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). | June – formal end-of-year exams on all topics covered during the year (calculator and non-calculator assessments) |