

Mathematics in the Third Form at Bruern Abbey Senior School

The Third Form sees the boys start their iGCSE curriculum. We feel the iGCSE, which allows the use of a calculator on both papers and has a slightly more accessible language base, is the best GCSE option for Bruern boys.

Some boys will move straight onto the Higher Tier curriculum whilst other will focus initially on the Foundation Tier. On the Higher Tier papers scores from Grade 3 to Grade 9 can be obtained, whilst on the Foundation Tier the range is from Grade 1 to Grade 5.

We follow the Pearson/Edexcel curriculum.

Boys will have seven lessons a week and in addition homework will be set once during the week. Homework will usually be of a revision nature as our boys need to have core skills being reinforced on a regular basis.

The plan overleaf gives the topic schedule for the year. You can see that some of the major GCSE topics will be covered in this period, so it is important that boys get into the groove pretty quickly.

Jed McCarthy and Steve Phillips.

Third Form Maths (Foundation) 2023/24

Michaelmas	Lent	Summer
<p><u>Unit 1 - Number</u></p> <ul style="list-style-type: none"> • Calculations • Decimal numbers • Place value • Factors and multiples. • Squares, cubes and roots • Index notation • Prime factors <p><u>Unit 2- Algebra</u></p> <ul style="list-style-type: none"> • Algebraic expressions • Simplifying expressions • Substituting into expressions • Formulae • Expanding brackets • Factorising • Using expressions and formulae 	<p><u>Unit 3 -Graphs, Tables and Charts</u></p> <ul style="list-style-type: none"> • Frequency tables • Two-way tables • Representing data • Time series • Stem and Leaf Diagrams • Scattergraphs and lines of best fit. <p><u>Unit 4 -Fractions and Percentages</u></p> <ul style="list-style-type: none"> • Working with fractions • Multiplying and dividing fractions • Fractions decimals and percentages – converting to a from. • Percentage calculations. <p><u>Unit 5 – Equations, Inequalities and Sequences</u></p> <ul style="list-style-type: none"> • Solving linear equations • Introduction to inequalities • Using formulae • Sequences – generating and finding the n^{th} term of linear sequences. 	<p><u>Unit 6 – Angles</u></p> <ul style="list-style-type: none"> • Properties of shapes • Angles in parallel lines and triangles • Exterior angles and interior angles in polygons • Geometrical problems <p><u>Unit 7 – Averages and Range</u></p> <ul style="list-style-type: none"> • Mean, median, mode and range. • Comparing types of average • Estimating the mean in grouped data • Sampling <p><u>Unit 8 – Perimeter, Area and Volume</u></p> <ul style="list-style-type: none"> • Rectangles, triangles and parallelograms • Trapezium • Compound shapes • Calculating the surface area of 3D solids • Volume of prisms