

## Maths Department Curriculum Guide

### Year 10 Higher

#### Curriculum

Autumn	Spring	Summer
Calculations, checking & rounding. Indices, roots, reciprocals and hierarchy of operations. Factors, multiples and primes. Polygons, angles and parallel lines. Constructions, loci and bearings. Standard form and surds. Algebra: the basics. Representing and interpreting data. Collecting data.	Fractions. Percentages. Scatter graphs. Cumulative frequency, box plots & histograms. Setting up, rearranging & solving equations. Inequalities. Perimeter, area and circles.	Sequences. Ratio & proportion. 3D forms & volume, cylinders, cones and spheres. Accuracy and bounds. Graphs: the basics and real-life graphs. Linear graphs and coordinate geometry. Circle theorems. Transformations. Averages and range.

#### Assessment & Homework

*Homework will be set by both Maths teachers on a fortnightly basis so that on average students will be set 1 assignment per week. Details of assignments will be set on Arbor and some will be on Mymaths, which is an excellent online resource that we subscribe to. Login details are reset and shared with pupils at the start of each academic year. At times there will be two tasks to do on Mymaths but these can be very short and pupils should expect to spend roughly 30 minutes on the Maths homework they've been assigned.*

*Assessments are conducted half termly and details of topics and schedule are shared with pupils before the assessments. These generally last an hour, the duration of a lesson.*

#### Resources

- *Mymaths has a wonderful library of powerpoint lessons, which are accompanied by assessments.*
- *OneNote has tabs with the lessons teachers deliver, the scheme of work and knowledge organisers.*

#### Extra and Super Curricular Opportunities

*There are two lunchtime clubs that students can attend. These are the Rubik's and code breaking club as well as a Maths catch up club, where students can do some work or play maths games. Our top ability students are also offered an opportunity to do the UKMT Intermediate challenge as well as a team Maths feast against other schools.*