MATHS CURRICULUM GUIDE

Year 7 Autumn

Understanding place value and carrying out calculations using the 4 operations with & without a calculator

Recognising & extending simple sequences and substituting values into expressions; using simple functions

Changing between fractions, decimals and percentages

Making & solving simple equations

Finding perimeters, areas & volumes of simple shapes

Using geometrical reasoning using facts about angles on a straight line, in a triangle and quadrilateral

Representing and Interpreting data presented in simple charts and tables

Year 7 Spring

Understanding the number system & place value

Calculations involving fractions & percentages

Reading scales and converting between measures, including metric to metric conversions, imperial to imperial & metric to imperial

Knowing the terms integers, powers and roots and using them in calculations

Representing simple functions graphically

Using ratio and proportion

Knowing the difference between an expressions and an equation, making and solving simple equations

Using geometrical reasoning to solve problems using parallel & perpendicular lines

Simple constructions including triangles given ASA, SAS & SSS

Collecting & organising data, including using tallies & frequency tables

Representing data using line graphs & pie charts

Processing data to find range and averages

Year 7 Summer

Recognise and use multiples, factors (divisors), common factors, highest common factor, lowest common multiple and primes

Generate sequences from practical contexts and describe the general term in simple cases.

Be able to plot tables of values for simple functions and plot and interpret the graphs of linear function from real-life and other subjects.

Use vocabulary and ideas of probability, drawing on experience.

Understand and use the probability scale from 0 to 1; find and justify probabilities based on equally likely outcomes in simple contexts; identify all the possible mutually exclusive outcomes of a single event.

Collect data from a simple experiment and record in a frequency table; estimate probabilities based on this data.

Recognise and visualise the transformation and symmetry of a 2-D shape, including reflection, rotation, translation and enlargement.

Use straight edge and compass to construct simple shapes and loci, including the perpendicular from a point to a line

Half termly assessments will be given, in the form of past paper questions. Revision sheets are posted on the VLE.

Homework will be set once a week, one piece from each teacher per fortnight. Each piece should last about 30 minutes and may be an exercise from 'mymaths' or a worksheet. All students have a personal login to mymaths.

Homework details should be written on the homework record sheet in the front of the student's exercise book. Each student should keep their homework record updated, with the mark awarded - A means fully understood, B means largely understood and C means that there were problems with this technique/skill. Students should make use of this 'traffic light' system when they come to revise for the half termly test. Grades for the test should be recorded on the student's record sheet, in the front of their exercise book.