

MATHEMATICS

Autumn Term Topics

Starters

A range of introductory activities linked with topics during the year, including quizzes, mystery challenges and the use of interactive and student whiteboards.

ICT

ICT will be used regularly with all groups (a minimum of once every two weeks) to support the scheme of work and develop students' use of independent and e-Learning

Algebra

- Sequences
- Pattern spotting
- Functions and graphs
- Equations and formulae
- Solving problems
- Trial and improvement



Number

- Fractions – four rules
- Percentages
- Ratio
- Rounding and approximation

Shape, Space and Measures

- Angles of polygons
- The circle
- Tessellations
- Construction
- Volume and area

Handling Data

- Statistical investigations
- Correlation
- Comparing data



Spring Term Topics

Algebra

- Expansion
- Factorising
- Substitution
- Index notation

- Square roots and cube roots

Number

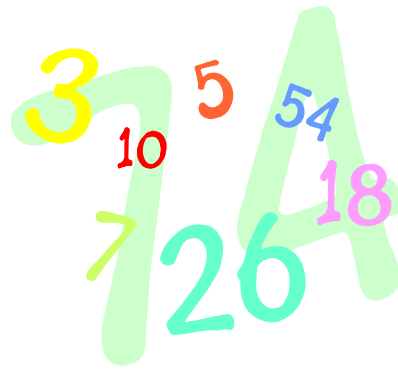
- Powers of 10
- Rounding
- Decimals
- Using a calculator

Shape Space Measures

- Enlargements
- Symmetry
- Map scales

Handling Data

- Probability
- Estimates of probability
- Statistical techniques



Summer Term

Two Investigations:

One statistical, one algebraic

Handling Data

- Commencement of GCSE Module 1 – Statistics
- Collecting / displaying data
- Averages
- Measures of spread
- Probability

Homework tasks:

A variety of practice exercises, investigational work, research, practical work and internet resources all based on classwork.

Additional resources:

Every student requires a calculator, angle measurer and compasses. A “dry wipe” whiteboard pen is also of benefit.