

# 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

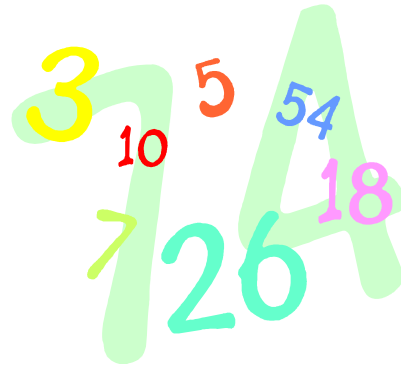
- Powers of 10
- Rounding
- Decimals
- Using a calculator

## 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.