

# 7 MATHS

## Curriculum & Assessment Outline

### 2019 – 2020



#### Year 7 Maths

Students entering in Year 7 are initially placed into sets based on Key Stage 2 data from Primary schools as well as a baseline assessment that they sit at the start of year 7. The sets are reviewed termly in order to ensure our students are at the correct level for them in order to maximise their progress.

Students begin to follow a five year scheme of learning that is aspirational and challenging. The curriculum offers carefully considered sequential learning that has been coupled with rigorous low stakes formative assessment and summative assessments in order to ensure knowledge is not just encountered but embedded in students' long-term memory. The lessons involve problem-solving, fluency and reasoning aspects, which are proven to be essential skills for students to develop. Within this students are given strategies to approach problem-solving questions, for example using bar modelling. There are also real-life contextualised questions, including questions on Science, Technology, Engineering and Maths (STEM) to help students explore how their mathematical progression will fulfil the Maths vision.

#### KS3 Maths Curriculum: Foundation

- Topic 1:** Calculators.
- Topic 2:** Factors and Multiples.
- Topic 3:** Expressions, functions, and formulae.
- Topic 4:** Decimals and measures.
- Topic 5:** Analysing and displaying data.
- Topic 6:** Angles and lines.
- Topic 7:** Graphs.
- Topic 8:** Measuring and shapes
- Topic 9:** Fractions, decimals, and percentages.
- Topic 10:** Transformations

#### KS3 Maths Curriculum: Higher

- Topic 1:** Number skills.
- Topic 2:** Equations, functions and formulae.
- Topic 3:** Equations.
- Topic 4:** Decimals.
- Topic 5:** Analysing and displaying data.
- Topic 6:** Angles and shapes.
- Topic 7:** Sequences and graphs
- Topic 8:** Perimeter, area and volume.
- Topic 9:** Fractions.
- Topic 10:** Multiplicative reasoning.

#### Year 7 Summative Assessment Calendar:

- Baseline assessment:** September
- End of term assessment 1:** December
- End of term assessment 2:** March
- End of year assessment:** June

#### How can I support my child?

Students have access to the MathsWatch website <https://vle.mathswatch.co.uk>, a very useful tool for them to enhance their skills and plug gaps in knowledge. It is recommended that students log in to this on a regular basis.

- Pupil login** – Students are given their username at the start of the year
- Pupil password** – pupil date of birth written in the following format: dd/mm/yyyy

Students follow the national curriculum throughout Key Stage 3. This is designed for students to be stretched and challenged and ensures problem-solving, fluency and reasoning questions are involved in all lessons. Students are given strategies to approach problem-solving questions, for example using bar modelling. There are also real-life contextualised questions to help students explore how mathematical problem-solving can be applied to practical activities. Students are offered additional support in after school sessions and are always encouraged to speak to their teachers if they have any questions and/or require further help. Homework is set on a weekly basis and this usually takes the form of either a Knowledge Organiser quiz or a task on the MathsWatch website, with problems based on work completed that week in class and on previous topics studied.