



## Maths

### Department Intent

- Students become confident, competent and independent mathematicians
- Instill the ethos that everybody “can do” maths
- Build a conceptual understanding of maths and its interrelated content so that children can apply their learning in different situations
- Develop a student’s ability to articulate, discuss and explain their thinking using appropriate mathematical vocabulary
- Foster a classroom where students don’t fear mistakes and see mistakes as learning tools – there is an emphasis placed upon developing the power to ‘think’ rather than just the ‘do’. Is this the only way we can do it? Is there another way that works?
- Children develop into resilient and inquisitive learners – skills needed to become life-long mathematicians
- Deliver an engaging maths curriculum, which sparks curiosity and nurtures confidence in maths

### Implementation

#### KS3

- Putting number first – A significant amount of time is spent reinforcing number in order to build competency and ensure children can confidently access the rest of the curriculum. This is visited at the start of every half term to reinforce the prior knowledge and introduce new concepts and a starter at the beginning of every lesson will visit basic number skills.
- Depth before breadth – Students acquire depth of knowledge in each topic within mathematics and opportunities to revisit previously learned skills for students who remain with us for an extended period of time
- Students have daily mathematics lessons providing them with a stage not age mathematics curriculum. The reason for the stage not age approach is that students are all at very different levels in their journey and some have very significant gaps in their knowledge. However, this will be delivered with a personalised approach and at the pupils’ own ability level and appropriate challenge provided.
- Termly (12 week) standardised assessment to track progress and small topic assessment in lessons to monitor understanding

#### KS4

- Developing number sense - A significant amount of time is spent reinforcing number in order to build competency and ensure children can confidently access the rest of the curriculum. This is visited at the start of every half term to reinforce the prior knowledge and introduce new concepts and a starter at the beginning of every lesson will visit basic number skills.
- Breadth and scope of curriculum – Students need exposure to as many different topics of the maths curriculum as possible particularly in Year 11. Students may have missed large amounts of their mathematical education and will have significant gaps in knowledge which need to be addressed. Students should feel confident that they have seen the material that an examination could present to give them the confidence to “have a go”

- Students will be delivered an age-appropriate curriculum to allow them the best opportunity to access the GCSE examinations at the end of Year 11. However, this will be delivered with a personalised approach and at the pupils' own ability level and appropriate challenge provided.

**Impact – What is the impact of our curriculum?**

- Students are beginning to try and engage in Math's with a more positive and "can do" attitude
- Students are developing more fluency in basic number skills are able to perform basic mathematical skills without assistance and with confidence.
- Students to become more familiar with the idea of assessment and that it is not a negative experience but an opportunity to show success and identify where the student needs more practice
- Students to leave with a qualification in Math's (ELC and ideally graded in GCSE at the end of KS4)