



# Year 7 MATHS

## Topic Titles

- Toolkit lessons
- Properties of number
- Comparing numbers
- Multiplying and dividing decimals
- Constructions and labelling
- 2D shapes
- Proportional reasoning
- 3D shapes
- Expressions
- Units
- Area and volume
- Calculations with fractions
- Transformations
- Measuring and presenting data

## Intent

The intention of the maths curriculum is to foster pupils' interest, enjoyment, and curiosity of maths. By following the National Curriculum, our curriculum will be rigorous, coherent and connected throughout Key Stage 3. We aim to develop competent mathematicians who are able to apply their knowledge across subjects, year on year.

By designing the curriculum around a mastery approach all students will gain depth to their learning leading to secure and sustained progress over time. All students will develop their fluency, reasoning and problem-solving skills.

The department has the strong belief that all students can be successful in maths and teaching for understanding is at the heart of every lesson

## Links with other subjects

- Averages and data – Science
- Geometric reasoning – Art
- Fractions – Music
- Logical reasoning – computing
- Measures - Tech
- Percentages and negative numbers – History
- Graph interpretation and measures - Geography

## How will knowledge and skills be taught?

Knowledge and skills will be taught through a combination of teacher-student explanation and student self-discovery. Teaching will follow the NCETM's Teaching for Mastery approach with lessons consisting of visual representations, modelling and purposeful practice to help students build and link their knowledge together.

There is a focus in year 7 of building a secure foundation. Students will revisit ideas they have met in primary school before building on these in further depth.

## How can parents help?

- Present a positive opinion of maths – please change: 'I was never very good at maths' to 'I had to work really hard at maths'
- Encourage your child to attend Sum Up The Week to consolidate their learning
- Highlight the use of maths in your everyday life – calculating change, timings etc
- Speak to your child about the maths they are learning in school and ask them to explain their understanding to you.
- Maintain your child's fluency with times tables, mental maths and written multiplication and division.

## Recommended Reading and Preparation for Learning

- Murderous Maths – Kjartan Poskitt  
The Number Devil – Hans Magnus Enzensberger  
The Man Who Counted – Malba Tahan  
Alex's Adventures in Numberland – Alex Bellos  
How Long is a Piece of String – Rob Eastaway  
How Many Socks Make a Pair – Rob Eastaway  
Humble Pi – Matt Parker