



Edition 7  
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# MATHEMATICS

## Curriculum Newsletter

### YEAR 7

#### Contact



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# Curriculum Intent

It is our intention that every student leaves school confident and competent to deal with any mathematical problem they may face in their lives and future careers.

This is achieved through promoting students to; be resilient in their approach, take risks to deepen their knowledge, forge valuable working relationships and take responsibility for and enjoy their learning. We aim to push students to be the best mathematicians by building up their skills base and maximising their attainment and understanding in mathematics at whichever stage that may be.

We ensure a coherent mathematics scheme of work that challenges all students and promotes teaching and learning; this provides students with the knowledge and skills to achieve well academically, and be successful once their education with us ends.

## Year 7 Curriculum

In Year 7, students study 7 key themes. Click the topics below to explore.

### Algebraic Thinking

Within this unit students will learn about sequences, are introduced to algebraic notation and begin to process equations and equivalent expressions.

### Place Value and Proportion

Recapping and expanding on place value work from KS2, including fluently converting between fractions, decimals and percentages.

### Applications of Number

Where students use the four mathematical operations to solve problems in different contexts including frequencies, perimeters and algebra.

### Directed Number and Fractional Thinking

This involves extending knowledge into dealing with negative numbers, and further calculations with fractions and percentages.

### Lines and Angles

Students first experience scales and accurate drawings using mathematical equipment, as well as learning and applying basic angle facts.

### Reasoning with Number

In the final half term students further expand on their numerical thinking including learning about probability, sets, prime numbers and giving written solutions.



# Praise and Reward

Our rewards system can be broadly split into four categories: classroom level, subject level, school level and privilege rewards. We'll focus on classroom and subject rewards here - for more information about our rewards schemes, please see our website.

## CLASSROOM LEVEL REWARDS

Awarded for: working hard, taking risks and rising to a challenge, making mistakes and learning from them, helping others, and taking pride in the school community.

Rewarded by: praise postcards, positive phone calls to parents/carers, positive text messages home, and lesson based prizes.

## SUBJECT LEVEL REWARDS

Reward scheme: Star of the Week, Curriculum Awards (Subject/School Way, Participation, Working with Pride, Embracing the Whole Curriculum), High Flyer, Extra Mile, Most Improved.

Rewarded by: names displayed on reward boards, certificates, social media posts.

# Broadening Horizons

Our intent is that all students have a full understanding of how to develop themselves as well rounded citizens, maintain healthy relationships and understand how to keep themselves safe both online and in their day-to-day life.

We want all students to know what options are open to them in the future and understand the routes they have in order to progress on their life journey.

Our curriculum will include:

- Exposing learners to worded problem-solving questions based on real life situations
- Measuring distances and working with time in PE lessons
- Opportunities throughout the curriculum to learn about mathematics in different cultures and across the ages
- Encouraging participation in maths challenges (such as the Junior Maths Challenge)



## UK Maths Trust - Junior Maths Challenge

The UK Maths Trust is the leading charity that advances the education of young people in maths. For over 20 years they have been inspiring a love of problem solving through maths challenges and enrichment activities, delivered by hundreds of volunteers. Click on the logo to find out more about their challenges.

## TED Ed - Is Math discovered or invented?

Explore some of the most famous arguments in the ancient debate: is math a human construct or part of the fabric of the universe? Would mathematics exist if people didn't? Did we create mathematical concepts to help us understand the world around us, or is math the native language of the universe itself? Jeff Dekofsky traces some famous arguments in this ancient and hotly debated question. Click on the logo to watch.



# Careers

Mathematics is a subject that is essential to a wide range of careers, from Science to Finance, Engineering, and more. Many jobs require problem-solving skills, but some also require the ability to draw and measure angles accurately. For example, careers in Architecture, Engineering, and Surveying all require a strong understanding of geometry and trigonometry.

In Year 7 careers lessons there is a focus on developing maths skills that link to careers in Maths. Did you ever wonder why Maths is so important? And what's got Architecture to do with it? Click on the logo below to explore.



## The Maths Way

The Maths way is followed and referred to in all lessons. It supports students to become young mathematicians and develop them into thinking and working like mini-mathematicians.

Firstly, to teach students the vital skills they need to achieve their full potential and gain the very best grades they can. Secondly, to teach students how each subject relates to the wider world, incorporating the life skills they will learn.

**THE MATHS WAY**

**WE LOOK FOR MATHS IN THE REAL WORLD**

We learn from peers & **listen to their explanations**

**WE CAN THINK LOGICALLY**

We can search for **patterns in data**

*Analyse, reason, deduce*

**WE CAN IDENTIFY RELEVANT INFORMATION**

*We use this to solve problems*

**WE SEE MISTAKES AS AN OPPORTUNITY TO LEARN**

We persevere & try **different approaches**

**WE MAKE MENTAL ESTIMATIONS TO CHECK OUR ANSWERS ARE REASONABLE**

*We show all our working out*

**SUBJECT WAYS**

Have your say! ✨

At WPT we're always looking for feedback. If you have any thoughts/opinions on this Curriculum Newsletter, its content or the curriculum in general, please click on the title to fill out a short feedback form.