

**Curriculum Statement – Mathematics**

**Core Values**

Our curriculum is underpinned by our core values of:

Exceptional Resilient

Innovative Aspirational

Yourself Successful

**Curriculum Intent - Mathematics**

The Mathematics curriculum aims to enable all students to acquire mathematical skills and knowledge and to provide opportunities for them to use these skills to undertake problem solving with confidence, enjoyment and success. Students are encouraged to think for themselves within a clear, rigorous mathematical framework, to be critical of their own thinking and prepared to test, justify and improve their conclusions or solutions.

The Key Stage Three curriculum adopts a mastery approach to promote deep learning of core mathematical topics that develops the ability of the learner to synthesise skills and information and to apply it to mathematical problems both in and out of school. At Key Stage four these skills are enhanced as more sophisticated concepts are introduced, as the learners become more rounded mathematicians whilst also building in opportunities to prepare for their formal examinations.

**Secure developments and achievements…**

The curriculum provides opportunities for all learners to succeed in their learning of Mathematics and these successes are celebrated. The curriculum encourages the personalising of learning to ensure that all pupils are working at an appropriate level and within this students are able to make the progress expected whilst also being satisfied at their level of understanding. Formal assessments provide opportunities for students to demonstrate their learning and take pride in their progress. This success can be celebrated on an individual or classroom level depending on the individual.

**Prepare students for “life beyond Pewsey Vale”**

The Mathematics curriculum aims to develop the mathematical fluency of our learners providing them with fundamental numerical skills to function in society and an ability to apply knowledge to a variety of situations in order to solve complex problems. These include but are not limited to topics involving money and finance, the ability to read and interpret graphs and also to make sense of statistics and data. The curriculum provides opportunities for students to apply these skills to real life and authentic issues thereby developing an understanding of challenges they may encounter upon leaving school.

The curriculum provides significant opportunities to challenge students in their learning and celebrate their success, thus inspiring a love for Mathematics and the satisfaction that it brings. It is the aim that students will be inspired to pursue Mathematics as part of their further education or career.

**Promote active community involvement**

The Mathematics curriculum seeks to equip students with essential numerical and mathematical knowledge to function in society. Students are exposed to examples of Mathematics being used in a variety of professions, which in turn develops the interest of the pupils in these fields.

**Curriculum Implementation**

**Through Transition**

The aim of the curriculum in year seven is to ensure that the learners’ experience of transfer to secondary school is positive and challenging. Students are initially taught in their mixed ability tutor groups to provide stability during the transition. After the first term of year seven when the students are more confident in the new setting, the year group is put into sets based on prior ability. The mastery curriculum initially covers and develops understanding of the core topics taught at primary school to reassure, to build confidence and to challenge, whilst providing significant opportunity to stretch and challenge the most able whilst supporting those who struggle. Mathematical activities are planned which enable teachers to get to know students individually and which encourage students to work cooperatively. Emphasis, encouragement and support is given to the establishment of the standards of organisation (equipment, books, deadlines) and of presentation of written work that are expected in a secondary school.

**Through Nurture Provision (Individual Needs)**

The curriculum encourages a personalised approach through providing significant opportunities to stretch and challenge more able learners who are secure in their learning thereby allowing them to access a deeper level of understanding, whilst also encouraging those pupils who struggle with Mathematics to develop confidence and understanding of the subject. All pupils will have work that is targeted at an appropriate level to both ensure challenge whilst also allowing opportunities to succeed. This personalising can come in the form of the assigned task, the resources made available to them and teacher interaction and questioning to name a few.

**Through Enrichment**

Weekly after school Mathematics sessions are run for year eleven learners to support their understanding and wellbeing in preparing for their Mathematics examinations.

More able mathematicians in all year groups are invited to represent Pewsey Vale School by participating in the UK Mathematics challenge.

A weekly tutor time maths challenge is provided to tutor groups encouraging students’ engagement and enjoyment of the subject whilst also challenging them to apply their mathematical knowledge to a variety of problems.

**Through Teaching, Learning & Assessment**

The above sections detail a variety of strategies that link to teaching, learning and assessment.

 The teaching of Key Stage Three is using a mastery approach to develop a deep level of learning of key topics that provide a foundation for the more advanced concepts of years 10 and 11. At Key Stage Four the more complex topics are then introduced as students become more fluent mathematicians and prepare for their formal examinations.

Teachers are encouraged to personalise the learning for all students to ensure that all learners are appropriately challenged and supported. This can be achieved by teachers providing specific intervention for pupils, delivering new information using a variety of resources and setting different home learning for pupils to name a few.

Termly assessments are set to track student progress and identify areas for development. These areas for improvement are then communicated to the students to help inform their future learning.

**Through promoting Literacy**

Each subject has a copy of the school’s literacy strategy both in the front of the student’s books and also as a learning mat on desks. This is given to support the accurate use of subject specific spelling and correct use of grammar and punctuation. The subject specific words listed on each document are Tier 2 and Tier 3 language. The aim of this document is to provide learners with a format that is familiar, but developed for the lesson they are in at the time. Classrooms display Tier 2 and Tier 3 language for the specific topics being taught. Spellings of key words are corrected when work is deep marked. A literacy target is given. Both are addressed during DIRT sessions where learners are asked to improve their work in a dedicated section of any given lesson. Students are encouraged to read aloud in lessons and to grapple with difficult texts.

The mathematics department encourages literacy through the introduction of key terminology and a requirement that all note taking is done using full English. The spelling of these word and required sentences/paragraphs are then assessed and students encouraged to correct it.

**Through homework**

Homework is set using an online platform that provides immediate feedback to students whilst also providing details to the teacher of areas of strength and weakness. The requirement is that students will achieve a minimum score on all tasks before the homework is deemed complete. If students do not achieve the score they are required to speak to their teacher for support or use any revision resources available to improve their understanding before attempting the task again. This ensures that all students will be at the required standard. Tasks are personalised depending on the learner and their results inform future teaching.

**Curriculum Impact**

The impact of the school’s curriculum is measured through several means:

* Outcomes for students at GCSE in Y11
* Progress and attainment data for current year groups
* Number of students taking Maths and Further Maths at A Level
* Engagement in enrichment activities
* Student voice