



Our Intent

At Woodlands our curriculum intent is as follows –

‘At Woodlands Academy we provide a personalised curriculum to prepare our students to be successful and confident young adults who can make outstanding progress to prepare them for opportunities after their secondary school journey’.

Mathematics provides pupils with a set of tools to help them understand the world around them. These tools include logical reasoning, problems solving skills, money skills and the ability to think in abstract ways. Mathematics is important in everyday life. It makes up a fundamental part of life and with this in mind, Woodlands endeavours to ensure pupils develop a positive and enthusiastic attitude towards mathematics.

Our mathematics curriculum promotes Woodlands ethos and is underpinned by our purpose ‘To put learners first and prepare them for their future’ it is also fundamental for our strategic vision which is that ‘At Woodlands Academy we provide a personalised curriculum to prepare our pupils to be successful and confident young adults who can make highly effective progress to prepare them for opportunities after their secondary school journey’.

The mathematics planning and curriculum describes in detail what pupils must learn in each year. Combined with the Woodlands Calculation Policy, this ensures continuity and progression, creating high expectations for attainment in mathematics. This planning clearly links to the assessment used at Woodlands and details every step of a pupil’s mathematics learning journey. Our mathematics curriculum promotes Woodland’s ethos and is underpinned by our purpose; The Woodlands Way – To make every minute **Worthwhile**, stay **Ambitious** and to build on **Yesterday**. We want to build a first-class education provision that provides highly tailored learning to ensure that our pupils are best prepared for life after Woodlands.

At Woodlands we believe that mathematics is vital to foster confidence and achievement in a skill that is essential in our society and in everyday life. We are committed to ensuring that all pupils achieve mastery in key concepts of mathematics, appropriate and specific to them. They will make genuine progress and avoid gaps that may provide barriers to learning as they move through education. Assessment for Learning, and emphasis on investigation, problem-solving, real-life examples, jobs and the development of mathematical thinking are essential components of the

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approach to mathematics at Woodlands. A rigorous and detailed evaluation of planning, teaching and assessment is important to provide continued improvement and development of mathematics at Woodlands.

Aims and objectives

The objectives of mathematics are to enable our pupils to:

- Show understanding of the size of numbers and where they fit in the number system.
- To understand place value and to use this within different mathematical processes.
- Know number facts such as number bonds, multiplication tables, methods for four processes.
- Use skills of the number system and the four processes to complete calculations mentally.
- Calculate and check accurately/efficiently, both mentally and in writing.
- Can draw on a range of calculation strategies.
- Recognise when it is appropriate to use a calculator or other mathematical equipment and to be able to do so effectively.
- Make sense of number problems, including non-routine and real-life problems, and identify the operations needed to solve them.
- Explain methods used and the reasoning behind it, using appropriate mathematical terms.
- Suggest suitable units for measuring and make estimates of measurements.
- Explain and make predictions from data
- Be able to construct and read charts, diagrams, graphs and tables.
- Develop spatial awareness and an understanding of the properties of 2D and 3D shapes.
- Be able to know volume, area and perimeter of different 2D and 3D shapes.
- Understand numbers smaller than one and use fractions/decimals.
- To develop and understanding of ratio and proportion, including percentages and scales.
- To understand angles, external and internal, and understand key geometrical terms within different shapes.
- Fill in missing numbers and sequences, checking these using appropriate methods.

How mathematics is organised and covered:

Mathematics is provided through:

- Discreet Curriculum time including paired work, group work and whole class teaching.
- Assemblies, class discussions and tutor time.
- As and when issues arise ensuring time is made within the curriculum to meet the needs of the pupils through identification via assessment processes.
- Positives – collecting and spending.
- 1:1 and interventions.

Pupils engage in:

- The development of mental strategies
- Written methods
- Practical work
- Investigational work

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- Problem solving
- Mathematical discussion
- Consolidation of basic skills and number facts
- Mathematics games

Key Stage Three - Stage Based Approach:

Maths is taught to every Key Stage Three pupil five times per week, meaning each child will have at least 200 minutes of mathematics learning. Woodlands uses a stage-based approach in Key Stage Three for the mathematics curriculum, offering the curriculum to pupils where they are developmentally working. This means pupils will access the curriculum which is at their individual starting point. This ensures that learning is adapted and personalised to each individual child. Our stage based curriculum has been designed using resources from **White Rose Maths**.

Key Stage Four - Qualification Pathways:

Mathematics is a core offer at Woodlands. This means that every Key Stage Four pupil will have, at least, 200 minutes of mathematics per week. Pupils will be taught a curriculum based on the qualification pathway they are in. Our Key Stage Four curriculum is based on the specification from **Edexcel**. As part of our pathway offer, Mathematic qualifications that are offered are –

Curriculum Offered		
Pathway	Year 10	Year 11
Yellow	Entry Level 1	Entry Level 2
Orange	Entry Level 2	Entry Level 3
Blue	Entry Level 3	Functional Skills Level 1
Purple	Functional Skills Level 1	Functional Skills Level 2
Green	Functional Skills Level 2	Functional Skills Level 2

GCSE Offer:

Mathematics is a core GCSE offer. Our examination provider is **Edexcel**. The curriculum has been designed using resources from **White Rose Maths**.

Resource Allocation:

Resources are selected to teach Mathematics that are:

- Age appropriate
- Non-discriminatory
- In accord with the values of Woodlands

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Accurate mathematical vocabulary is used in our teaching and children are expected to use this in their verbal and written examples. Number facts and mental recall is established before standard written methods are introduced.

Mathematics contributes to many other subjects and is it important that pupils are given opportunities for cross curricular development. It is important that mathematics is highlighted and planned into other curriculums such as Science and Computing. Other examples may include properties of shape in Art and Design Technology or the collection and presentation of data in History and Geography.

We endeavour to set work that is challenging and personalised. Each class will use adaptive and specific worksheets and resources. Additional enrichment opportunities will be encouraged such as cooking, music, or Art. Each pupil will have a specific 40 minutes per day of mathematics, and this is, where possible, within the first two periods of the day.

Teaching and Learning

Our mathematics education provision is mapped and planned effectively. We make use of the research driven approach, which has meant we use **White Rose Maths** as a provider which underpins our curriculum. Teachers use a range of teaching techniques and strategies in a mathematics lesson. These will be chosen at the discretion of the class teacher. Woodlands marking keys are used to specify the teaching input, technique, and strategy each child has received for each lesson.

Sometimes the focus of each lesson will be different depending on whether it be new learning, applying or mastering a topic. These may be different for individual pupils depending on their learning needs. Teachers planning will be highly adapted to meet the needs of all pupils. Teachers integrate the use of formative assessment by way of effective questioning, clear learning objectives and the use of success criteria. Effective feedback techniques are used. Mathematics uses the marking policy implemented throughout Woodlands. Our marking policy promotes Woodlands ethos and is underpinned by our purpose 'To put learners first and prepare them for their future' it is also fundamental for our strategic vision which is that 'At Woodlands there will be no limit to the possibilities for our pupils. We want to build a first-class education provision that provides highly tailored learning to ensure that our pupils are best prepared for life after school.

ACES (Assessment, Completion, Extension):

Children will have the opportunity to evaluate their work and respond to marking. Mathematics is completed on a bi-weekly cycle. They are expected to respond to marking as part of a "marking dialogue" with the teacher. ACE's lessons take place every Friday afternoon as part of every classes timetable, apart from in Year 11 which is a double lesson on a Thursday. These are set times to respond to marking from the teacher during that week. Teachers use the ACE's lessons to assess work, complete any missing work or offer an extension of learning to stretch progress.

Any work completed by the pupils in ACES lessons are written in PURPLE pen (some pupils will respond in pencil, this will be at the teacher's discretion). Subject leaders have time to observe classes complete work in their subject and offer specialist assistance to the staff and pupils.

Assessment

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Woodlands uses the BSquared assessment system which has been designed around the National Curriculum. This is used to inform planning and facilitate adaptive teaching in lessons. The assessment removes the use of levels by including grading descriptors. This provides a deeper understanding of attainment and progress. All assessments and teaching inform teachers understanding of a child's ability in mathematics. The school's Assessment and Marking Policies inform high quality feedback and pupils' response to it in Mathematics.

Safeguarding:

Should any topic be raised by a pupil that is not part of the lesson the member of teaching staff will discuss with the pupil outside of the lesson time. If there are any concerns for the pupil safety then the safeguarding team will be informed immediately and other organisations contacted were necessary.

Monitoring and review

Mathematics is the responsibility of all staff at Woodlands however the Mathematics subject leader will also:

- Support colleagues in their teaching, by keeping informed about current developments in the subject and providing resources where appropriate,
- Contribute to staff meetings and training sessions to facilitate the teaching of mathematics
- Contribute to quality assurance processes involving the subject such as moderation and lesson drop ins.

Lead staff are expected to monitor the progress of pupils in Mathematics through the school's assessment system.

Policy Review

Woodlands considers the Mathematics Policy document to be important and the policy will be reviewed by the Mathematics subject leader every year.