



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'.

Through teaching science, we aim to provide our pupils with the foundations to understand the world around them. At Woodlands Academy, Science is about enabling our pupils to experience and observe phenomena in the natural and humanly constructed world. They should be encouraged to be inquisitive and ask questions about what they notice and observe and should be helped to develop their understanding of scientific ideas by using different types of enquiries to answer their own questions. Exploration is a vital part of pupil learning and the teaching and learning of science should be done using first-hand practical experiences whenever possible. The Science curriculum will develop students understanding of how major scientific ideas contribute to technological change.

Our history 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.

The Science planning and curriculum describes in detail what pupils must learn in each year. This ensures continuity and progression, creating high expectations for attainment in Science. This planning clearly links to the assessment used at Woodlands and details every step of a pupil's history learning journey.

Aims and objectives

- The objectives of history are to ensure that all pupils:
- Focusing on the key scientific principles that underpin understanding of the natural world.

- Learning key facts about science and applying them to familiar and unfamiliar situations.
- Understanding that scientists use evidence to make judgements and assess the reliability of theories.

Using experiments to:

- Develop an understanding of the scientific approach to enquiry.
- Develop knowledge and understanding of the natural world.
- Learn how to use laboratory equipment and carry out standard procedures.

Key Stage Three - Stage Based Approach:

Science is taught to every Key Stage Three pupil two times per week, meaning each child will have at least 80 minutes of Science learning. Woodlands uses a stage-based approach in Key Stage Three for the Science 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 Science** from Stages 1 – 6 and **Active Learn** from Stages 7 – 9.

Key Stage Four - Qualification Pathways:

Science is a core offer at Woodlands. This means that every Key Stage Four pupil will have, at least, 160 minutes of Science per week. Science is split into Biology, Chemistry and Physics and pupils undertake the Combine Science offer, meaning it is the equivalent of two GCSE's. 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, Science qualifications that are offered are -

Curriculum Offered		
Pathway	Year 10	Year 11
Yellow	Entry Level	Entry Level
Orange	Entry Level	Entry Level
Blue	Entry Level	Entry Level
Purple	GCSE	GCSE
Green	GCSE	GCSE

GCSE Offer:

Science is a core GCSE offer. Our examination provider is **Edexcel**. The curriculum has been designed using resources from **Active Learn**.

How Science is organised and covered:

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Science 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.
- 1:1 and interventions.

The objectives of planning in science are as follows:

- Learning objectives are clear, easily understood by pupils and build on prior learning.
- To ensure that the work is differentiated and matched to pupils' capabilities, experience, and interest.
- To ensure progression, continuity, and subject coverage throughout the school.
- To ensure there is a range of scientific investigations included.
- To ensure assessment informs planning.
- To provide criteria for the monitoring and evaluation of teaching and learning.
- Curriculum planning in science is carried out in long-term, medium-term. The long-term plans map the scientific topics studied in each term.
- Our medium-term plans give details of each unit of work for each term.

The topics in Science are planned so that they build upon prior learning and are adapted from White Rose Science and Active Learns scheme of work. We ensure that there are opportunities for children of all abilities to develop their skills and knowledge and interest in each unit. Re-visiting, reinforcement and extension of learning is also built in.

Resource Allocation:

Resources are selected to teach Science that are:

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

Accurate Scientific vocabulary is used in our teaching and children are expected to use this in their verbal and written examples.

Science contributes to many other subjects and is it important that pupils are given opportunities for cross curricular development.

We endeavour to set work that is challenging and personalised. Each class will use differentiated and specific worksheets and resources. Additional enrichment opportunities will be encouraged such as cooking, music, or building. Each pupil will have two specific 40 minutes per week of Science.

Teaching and Learning

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Our Science education provision is mapped and planned effectively. We make use of the research driven approach, which has meant we use **White Rose Science** and **Active Learn** as a provider which underpins our curriculum. Teachers use a range of teaching techniques and strategies in a Science lesson. These will be chosen at the discretion on 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 differentiated 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. Science 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. Science is completed on a half termly 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 catchup lessons are written in PURPLE pen (some pupils will respond in pencil, this will be at the teacher's discretion). Curriculum leaders have time to observe classes complete work in their subject and offer specialist assistance to the staff and pupils.

Assessment

Woodlands uses BSquared Assessment System which has been designed around the National Curriculum. This is used to inform planning and facilitate adaptations 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 Science. The school's Assessment and Marking Policies inform high quality feedback and pupils' response to it.

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

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pupil safety then the safeguarding team will be informed immediately and other organisations contacted where necessary.

Monitoring and review

Science is the responsibility of all staff at Woodlands however the Science Curriculum 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 Science.
- 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 Science through the school's assessment system.

Policy Review

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