

Science @ eotas

Our Science provision aims to stimulate the natural curiosity of our young people. To enable them to acquire problem solving skills through practical based learning.

Big ideas



- To encourage curiosity and asking questions.
- To develop skills enabling students to conduct scientific investigations safely.
- To explore the world around us and deepen the students understanding of scientific concepts.
- To developing critical thinking skills which can be applied to real world situations.

Content and Sequencing



- All units of work build upon the skills and knowledge from previous learning and the order of learning has been carefully considered to ensure the best outcomes for students.
- Our KS3 scheme of work is developed using the national curriculum and provides students with the key skills and knowledge required to succeed at GCSE.
- Physics, Chemistry, Biology, How Science Works and Maths in Science are taught sequentially to add depth and complexity of understanding. We use a combination of core content and longer projects to develop and extend learning.
- At GCSE we study the AQA Trilogy science course which provides students with the essential skills and knowledge needed to continue their learning in a STEM related subject and/or career.



Links with English and Maths

- The Science curriculum is intrinsically linked to the maths curriculum and equips students with the ability to carry out a range of mathematical skills, from simple calculations to multi-step questions involving the use of formulae.
- Students are required to include a variety of extended writing pieces in their work throughout both KS3 and KS4. Correct use of SPAG is encouraged and GCSE assessments include this as part of the marking criteria.

Retrieval Practice



- Regular questioning is used throughout every lesson to gauge and deepen understanding.
- Ongoing end of unit tests are used to test recall of content.
- Exam practice throughout the course, develops the skills of applying the science to new situations.
- Practical work develops enquiry and evaluation skills.
- Low stakes testing

Progress



- Progress is recorded using in class feedback, end of topic tests and practical skills.
- Students progress through a continuous loop of teacher diagnosis, pupil therapy and testing.
- End of term and end of year exams ensure that students understand their own progress. They are given time to conduct an improvement (therapy).

Support



- Within every lesson teacher feedback, both verbal and written, is used to support learning.
- The needs of every individual pupil is taken into account when planning lessons using Pupil Passports.
- Peer and group working supports and stretches every pupil in the class.
- Specialised support staff work with very small groups or individuals.

