

# 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.

