

3rd Science is available as an option choice for the more able students, it enables students to convert the Combine Science units into separate GCSE's in Biology, Chemistry and Physics.

Those that choose to follow the Third Science Option will cover many of the same units covered in Combined Science, but to a greater depth and breadth than Combined Science. As a consequence it gives students wishing to study A levels in these subjects a wider breadth of knowledge which can be useful making the transition from GCSE to A level.

Biology; Chemistry and Physics all have a minimum of 8 required practical's, which students are required to take an active part in. Like other option subjects, it is taught over two years and assessed as separate qualifications at the end of Year 11.

### **What will I study?**

#### **GCSE Biology**

Biology is split into eight major topics including: Cell biology; Organisation; Infection and response; Bioenergetics; Homeostasis and response; Inheritance variation and evolution and Ecology.

#### **GCSE Chemistry**

Chemistry is split into ten topic areas including: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes; Energy changes; The rate and extent of chemical change; Organic chemistry; Chemical analysis; Chemistry of the atmosphere and Using resources.

#### **GCSE Physics**

Physics is split into eight topic areas including: Forces; Energy; Waves; Electricity; Magnetism and electromagnetism; Particle model of matter; Atomic structure; and Space physics (physics only).

### **Who should do the Third Science?**

If you enjoy Science, and expect to achieve a level 6 or better at the end of KS3, you should seriously consider choosing the Third Science Option. It will enable you to have a much broader and more in-depth appreciation of scientific knowledge and thinking.

As well as providing a sound grounding for those who choose to study A levels in Biology, Chemistry, Physics, it also provides a good background for those wishing to follow careers in the following STEM areas:

- Medicine
- Nursing

- Engineering (Mechanical/Electrical/Chemical)
- Veterinary Work
- Forensic Science
- Physiotherapy
- Pharmaceutical e.g. MSD/ P and G
- Sports Science
- Pathology
- Patent Law
- Research and Development.

**How will it be assessed?**

Assessment in Biology; Chemistry and Physics takes the form of two 1hr 45 minute written papers for each Science studied. Both papers make up 50% of the final grade and contain a mix of multiple choice, structured, closed short answer, and open response questions.

**For further information please contact Mr Hiscock or your Science teacher.**