**Science**

**Teachers:** TBC

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| **Methods of Assessment:** | AQA Separate Science is a set of three separate science courses: Biology, Chemistry, and Physics.  There are two examination papers for each separate science; each paper is 1 hour and 45 mins long and is 100 marks in total. Each paper will include content you will be taught in both your combined and separate science lessons.  This qualification is linear. Linear means that students will sit all their exams at the end of the course.  There are both foundation and higher tiers available although the expectation is that all pupils who opt for this subject will sit the higher tier. |
| **Course Outline:** | **GCSE Biology**  You will be taught 7 topics which are the same as those taught in Combined Science but contain additional content that will help to bridge the gap between GCSE and A-level.  These are: Cell biology; Organisation; Infection and response; Bioenergetics; Homeostasis and response; Inheritance, variation and evolution; and Ecology.  **GCSE Chemistry**  You will be taught 7 topics which are the same as those taught in Combined Science but contain additional content that will help to bridge the gap between GCSE and A-level.  These are: 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**  You will be taught 7 topics which are the same as those taught in Combined Science but contain additional content that will help to bridge the gap between GCSE and A-level, as well as one extra topic.  These are: Energy; Electricity; Particle model of matter; Atomic structure; Forces; Waves; Magnetism and electromagnetism; and Space physics (Separate Science only)  It is important to note that the Chemistry and Physics topics have quite a high Maths content compared with the rest of the science course. |
| **Progression routes:** | By taking sciences separately at GCSE level you will cover more science content, so you’ll be better prepared if you want to take science A-levels.  Pupils who take separate GCSE science are also more likely to get higher grades in A-level sciences.  However, separate sciences **are not essential** for progression in A-level.  If you do opt for separate sciences and want to do Biology, Chemistry or Physics at A-level, however, then a minimum of a grade 6 is required from each corresponding GCSE.  The other route available to study science further at KS5 is BTEC Applied Science. This is the equivalent of one A-Level but will be studied over two years and is assessed through a combination of examined and coursework components. |
| **How you will learn** | You will learn through a combination of theory and practical lessons. Theory lessons will be delivered using a range of methods to encourage a high level of engagement, promote independent learning and opportunities for discussion and debate current topics and developments within science in the world around us.    There are also several specific practicals that you are required to carry out, which you will then be examined on; this will be combined with other practical activities that will aid your knowledge and depth of understanding of scientific concepts.  There will be opportunities to develop examination technique throughout the course. |
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