

**GCSE Science****Exam board: AQA****Course Description:**

Students will either study the three Sciences separately (traditionally called Triple Science) and be awarded 3 GCSEs or follow the GCSE Combined Science route, this is similar to the current Core and Additional Science GCSEs, and is equivalent to two GCSEs.

**Course Content:****BIOLOGY****Term 1 and 2 – Cell Biology**

In this topic we will explore how structural differences between types of cells enables them to perform specific functions within the organism.

**Term 3 and 4 – Organisation**

Students will learn about the human digestive system and the respiratory system.

**Term 5 and 6 – Infection and Response**

Students will learn about pathogens which are microorganisms such as viruses and bacteria that cause infectious diseases in animals and plants.

**CHEMISTRY****Term 1 and 2 – Atomic structure and the periodic table**

Students will learn about the periodic table and how it provides chemists with a structured organisation of the known chemical elements.

**Term 3 and 4 – Bonding, structure and the properties of matter**

Students will learn about how Chemists use theories of structure and bonding to explain the physical and chemical properties of materials.

**Term 5 and 6 – Quantitative matter**

Students will learn about how different chemicals react together, to establish patterns and to make predictions about the behaviour of other chemicals.

**PHYSICS****Term 1 and 2 – Forces**

Students will analyse forces and how they affect designs of machines and instruments.

**Term 3 and 4 – Energy**

Students will learn about the concept of energy

**Term 5 and 6 – Waves**

Students will learn about wave behaviour and how it is common in both natural and man-made systems. Waves carry energy from one place to another and can also carry information.

**Useful websites:**

<http://www.my-gcsescience.com/>

<http://www.bbc.co.uk/education/subjects/zrkw2hv>

**Provision for the Most Able:**

Our most able students will be selected to follow the 3 separate Science route and therefore be awarded 3 GCSEs.

In addition, More Able students in science will be working through the topics above, regularly referencing Science in the real world, and looking at how the science we learn may apply to the latest discoveries.

Furthermore, they will be asked to suggest, evaluate and predict how new technologies may impact on our lives now and in the future.

**Assessment:**

Students will be assessed on their Working Scientifically skills in a Pre Public Exam (PPE). This provides a baseline as to which we can then improve to prepare students for these questions in their final exams. These skills will be reassessed frequently so we can track progress.

Students are assessed summatively each term on each topic content, students will be given a multiple choice test. Towards the end of the term to allow them and the teacher to diagnose the quality of their knowledge of the topic.

From this, students will be given support to improve any misconceptions or specific content areas before their end of topic test.

Feedback from their end of topic test will be provided to students in the format of the pathway they have achieved and the skill in which they should continue to improve.

External assessment is carried out at the end of the course, in Year 11.

**For students following the Separate Sciences (3 GCSEs):**

External exams are likely to be 1 hour 45 minutes and there will be 2 for each subject.

Each exam carries a weighting of 50% for each subject.

**For students following the combined Science (2 GCSEs):**

External exams are likely to be 1 hour 15 mins and there will be 2 for each subject.

Each exam carries a weighting of 16.7% of their final grade.

