

# GCSE COMBINED SCIENCE

Science attempts to explain the world in which we live. Scientists try to explain phenomena and solve problems using evidence. The data to be used as evidence must be reliable and valid, as only then can appropriate conclusions be made. A scientifically literate citizen should, amongst other things, be equipped to question, and engage in debate on, the evidence used in decision-making. The reliability of evidence refers to how much we trust the data. The validity of the evidence depends on the reproducibility of the data, as well as whether the research answers the question. If the data is not reproducible then the research cannot be valid. The specification requires students to complete six units of study equally spread across Biology, Chemistry and Physics

**Biology Unit One:** Cell Biology, Organisation, Infection and response and Bioenergetics.

**Biology Unit Two:** Homeostasis and response, Inheritance, Variation and Evolution and Ecology.

**Chemistry Unit One:** Atomic Structure and the Periodic Table, Bonding, Structure and the Properties of Matter, Quantitative Chemistry and Chemical Changes and Energy Changes

**Chemistry Unit Two:** The Rate and Extent of Chemical Change, Organic Chemistry, Chemical Analysis and the Chemistry of the Atmosphere and using Resources

**Physics Unit One:** Energy, Electricity, Particle model of matter and Atomic Structure

**Physics Unit Two:** Forces, Waves and Magnetism and Electromagnetism

## How will I be assessed?

There are six exams that will assess this learning as well assessing the understanding of the 16 required experimental tasks. Each unit will be assessed in one exam that will be a mixture of multiple choice, structured, closed short answer and open response questions. These exams are taken in a linear system, these will be sat at the **end of year 11**.

| Paper              | Module                  | %           | Duration of Paper |
|--------------------|-------------------------|-------------|-------------------|
| Biology 1          | Biology Unit 1          | 16.7        | 75mins            |
| <b>Biology 2</b>   | <b>Biology Unit 2</b>   | <b>16.7</b> | <b>75mins</b>     |
| Chemistry 1        | Chemistry Unit 1        | 16.7        | 75mins            |
| <b>Chemistry 2</b> | <b>Chemistry Unit 2</b> | <b>16.7</b> | <b>75mins</b>     |
| Physics 1          | Physics Unit 1          | 16.7        | 75mins            |
| <b>Physics 2</b>   | <b>Physics Unit 2</b>   | <b>16.7</b> | <b>75mins</b>     |