



# GCSE SCIENCE (BIOLOGY, CHEMISTRY & PHYSICS) (Board: AQA)



## WHY STUDY SCIENCE?

Science is about curiosity; learning about the world around us. Scientific understanding is changing our lives and is vital to the world's prosperity. All the science GCSE courses encourage students: to develop a critical approach to scientific evidence, to explore the implications of science for society, and to develop scientific literacy needed by every citizen. Studying science can lead into future careers in genetics, forensics, engineering, biotechnology, medical physics, telecommunications and traditional areas such as engineering, technology and medicine.

## CONTENT & ASSESSMENT

All GCSEs in Science are assessed by examinations. In addition, there are required practicals that are completed as part of the normal teaching time which are subsequently examined upon within the written exam papers.

## BIOLOGY

### Paper 1

- Topics 1-4
- Cell Biology
  - Organisation
  - Infection and Response
  - Bioenergetics

Paper 1: 1 hour 15 minutes

Paper 2: 1 hour 15 minutes

### Paper 2

- Topics 5-7
- Homeostasis and Response
  - Inheritance
  - Variation and Evolution
  - Ecology



## **CHEMISTRY**

### **Paper 1**

Topics 8-12

- Atomic structure and the Periodic Table
- Bonding, Structure & the Properties of Matter
- Quantitative Chemistry
- Chemical changes
- Energy changes

Paper 1: 1 hour 15 minutes

Paper 2: 1 hour 15 minutes

### **Paper 2**

Topic 13-17

- Rate and extent of chemical change
- Organic chemistry
- Chemical Analysis
- Chemistry of the Atmosphere
- Using resources

## **PHYSICS**

### **Paper 1**

Topics 18-21

- Energy
- Electricity
- Particle model of matter
- Atomic structure

Paper 1: 1 hour 15 minutes

Paper 2: 1 hour 15 minutes

### **Paper 2**

Topics 22-24

- Forces
- Waves
- Magnetism & Electromagnetism

Students at Maiden Erlegh Chiltern Edge will follow either a Single Science (Triple) or Combined Science Pathway. The course descriptions provided here are for the Combined Science qualifications (2 GCSE's). A significant proportion of the content is the same and therefore decisions regarding Science course entries will be made during Year 10 in conjunction with the Science Department. All students have commenced on the Single Science pathway at the start of Year 9.

