



## GCSE Double Science (2 GCSE's)

Head of Faculty: Mrs J Johnson

Head of Years 10 & 11: Mrs A Miles-Williams

Email: A.Miles-Williams@barnwell.herts.sch.uk

### Why study GCSE Double Science?

GCSE Double Science gives students an overview of a range of scientific topics which are relevant to everyday life. Students will learn the fundamentals of Human Biology and how their body works, as well as an understanding of physics topics, such as how a circuit works. GCSE Science allows students to develop analytical and evaluative skills, as well as supporting the development of numeracy and literacy skills. Lessons are taught with stimulating practical, theory and activity-based activities.

### What does the course involve?

The new combined sciences GCSE provides students with a broad and balanced coverage of science (Biology, Chemistry and Physics), in terms of subject knowledge and understanding of scientific principles. It provides students with the skills required in an increasingly scientific world and an understanding of the ethical role of science in society.

The units taught in combined science are the same as those taught through the separate science option but are **reduced** in content.

### How will I be assessed?

This GCSE is studied in Years 10 and 11 and examined at the end of Year 11. Assessment will consist of six equally weighted papers (each one 16.7% of overall grade), with two papers assessing each discipline (Biology, Chemistry and Physics). The papers will be a mix of multiple choice, structured closed questions as well as open ended responses. Each paper will last 1 hour 15 minutes.

#### Biology

##### Paper 1

Cell biology  
Organisation  
Infection and response  
Bioenergetics

##### Paper 2

Homeostasis and response  
Inheritance, variation and evolution  
Ecology

#### Chemistry

##### Paper 1

Atomic structure and the periodic table  
Bonding, structure, and the properties of matter  
Quantitative chemistry  
Chemical changes

##### Paper 2

Energy changes  
Paper 2  
The rate and extent of chemical change  
Organic chemistry  
Chemical analysis

#### Physics

##### Paper 1

Energy  
Electricity  
Particle model of matter  
Atomic structure

##### Paper 2

Forces  
Waves  
Magnetism and  
electromagnetism

Students will be required to study a series of practicals that they will be assessed upon as part of their final examinations in addition to the subject content above.

### What are my progression routes?

In the sixth form, students who achieve a GCSE grade 6 or above will be able to study A-level Sciences; students who achieve a GCSE grade 5 or above will be able to study CTEC Applied Science.

### Additional Information

Double Science is suitable for all candidates; the course is broken down into manageable sections so that all students can access the learning.