

# Science

## Welcome to the Science Department Curriculum Information 2018 – 2019

### **The Team:**

Mrs P Francis	Head of Department
Mrs L Gregory	Second in Science
Mr M Miah	Teacher of Science
Mr T Behan	Teacher of Science

### **Key Stage 3:**

Pupils will study a range of topics and will develop skills to work scientifically. The first topic in year 7 is 'Passport to science'. This topic will teach pupils to work safely in a science laboratory and how to use equipment correctly.

Pupils will work in science laboratories and have access to a wide range of resources and equipment. The lessons will give a required level of understanding in chemistry, biology and physics that will form the foundations for the GCSE.

### **Topics Year 7**

<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
Passport to science Cells Forces Particles	Reproduction Atoms and elements Energy Nutrition & digestion	Electricity Pure & impure substances

### **Topics Year 8**

<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
Motion Food and nutrition Ecosystems Atoms & reactions	Waves Acids & alkalis Genetics	Earth and atmosphere Preparation for year 9

## **Key Stage 4:**

Pupils have a three year GCSE course starting in year 9. All pupils follow a double award combined GCSE in year 9. In year 10 we look at the assessments completed in year 9 and offer some pupils the opportunity to follow a triple science course in year 10 and 11.

### **GCSE Examination board AQA**

This qualification is linear. Linear means that students will sit all their exams at the end of the course in Year 11

#### ***Subject content Biology:***

Cell biology

Organisation

Infection and response

Bioenergetics

Homeostasis and response Inheritance, variation and evolution. Ecology

#### ***Subject content Chemistry:***

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

Using resources

#### ***Subject content Physics:***

Energy

Electricity

Particle model of matter

Atomic structure

Forces

Waves

Magnetism and electromagnetism

### **Assessment**

There are six papers: two biology, two chemistry and two physics. Each of the papers will assess knowledge and understanding from distinct topic areas.

Each paper will be a written exam: 1 hour 15 minutes

- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

The questions will be multiple choice, structured, closed short answer, and open response.

**Pupils following a triple science will complete the double award as above but will study further topics in physics, chemistry and biology**

**Assessment**

There are six papers: two biology, two chemistry and two physics. Each of the papers will assess knowledge and understanding from distinct topic areas.

Each paper will be a written exam: 1 hour 45 minutes and will be 50% of the GCSE

Students will be awarded a separate Biology, Chemistry and Physics GCSE.