



## **Key Stage 3 Curriculum: Science**

Our KS3 course is designed to stimulate students' interest in science through the careful selection of topics, a strong emphasis on practical work and links to modern developments in science. Our KS3 course uses the AQA Activate course which supports students in their learning at KS3 and into their future KS4 studies. All KS3 Science is supported by 'Kerboodle'. All students are provided with a log in.

### **Year 7:**

Science is divided into 12 topics, with each topic lasting about 9 lessons. Students are tested regularly to monitor progress and embed the skills of exam technique. Modern topics are combined with traditional science, and practical skills are developed throughout the course. Students are given the opportunity to carry out scientific techniques and scientific ways of thinking, and to think about how scientists communicate effectively with each other and the outside world.

The topics covered in Year 7 are:

#### **Biology**

Cells, Tissues, Organs and Systems, Sexual Reproduction in Animals, Muscles and Bones.

#### **Chemistry**

Mixtures and Separation, Acids and Alkalis, the Particle Model.

#### **Physics**

Energy, Electricity, Forces, Space.

### **Year 8:**

The science course introduces some new topics and extends understanding of how science works. We introduce several literacy and communication skills including weighting and bias in scientific writing, cause and effect, scientific arguments and assessing sources. The 10 topics covered in Year 8 are:

#### **Biology**

Food and Nutrition, Plants and their Reproduction, Breathing and Respiration.

#### **Chemistry**

Combustion, The Periodic Table, Metals and their Uses, Rocks.

#### **Physics**

Fluids, Light, Earth and Space.

### **Year 9:**

Students begin the Science KS4 course in Year 9. All students study the Core Units for the OCR GCSE Gateway Science courses. They also develop the skills required for practical work, Controlled Assessment tasks and exam practice.

#### **Biology Unit 1 Cell Biology**

Cell structure, cell Division, Transport in Cells

#### **Physics Unit 1 Energy**

Energy Changes in a system, Conservation and dissipation of energy, National and global energy resources.

#### **Chemistry Unit 1 Atomic structure and the periodic table**

The model of the atom, the periodic table, Properties of transition metals.

