



## 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 Exploring Science course from Pearson.

### Year 7:

Science is divided into 9 topics, with each topic lasting about 10 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 and 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 Units for the AQA Science course. They also develop the skills required for practical work 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