

# SCIENCE

During the year the pupils will complete the Key Stage 3 programmes of study which cover scientific enquiry (Sc1), life processes and living things (Sc2), materials and their properties (Sc3) and physical processes (Sc4). Pupils' performance in these sections will provide evidence for the end-of-key-stage teacher assessment. As in years 7 and 8 there will be a continuing development in the areas of literacy, numeracy, ICT, key skills and thinking skills. The schemes of work also provide many opportunities for pupils to carry out scientific investigations and to learn about the importance of experimental evidence in supporting scientific ideas.

In the Summer term students will be engaged in tasks that improve their skills of scientific enquiry to prepare them for their GCSE course in year 10. Details of the curriculum can be found at [www.standards.dfes.gov.uk](http://www.standards.dfes.gov.uk).

The following topics are taught in a cycle:

## **9A Inheritance and selection (Sc2)**



In this unit pupils learn:

- that characteristics are inherited and how this is used in selective breeding
- why selective breeding is important
- about variations arising from environmental differences

In scientific enquiry pupils:

- collect, organise and use large data sets relating to variation

## **9B Fit and healthy (Sc2)**



In this unit pupils learn:

- how the human respiratory, digestive and circulatory systems interact to maintain activity
- about the functions of the skeleton
- about ways in which diet, exercise, smoking and drugs affect health

In scientific enquiry pupils:

- find out how scientists linked diseases to a lack of specific nutrients
- consider how the work of different scientists has contributed to a medical advance
- evaluate conflicting evidence

