

## EDEXCEL INTERNATIONAL PRIMARY AND LOWER SECONDARY PROGRAMME

### SCIENCE

#### Curriculum aims

The Edexcel International Primary and Lower Secondary Curriculum for Science is designed to:

- develop scientific knowledge and conceptual understanding of key concepts in the physical world
- enable students to develop a deeper understanding of key scientific concepts as they progress through the course
- enable students to recognise and ask scientific questions and to consider different ways of finding the answers
- provide opportunities to develop skills of observation and analysis through exploration and hands-on science
- develop students' understanding of the nature, processes and methods of science and how these affect, and are affected by, the world around them
- provide a foundation of scientific knowledge and understanding that will enable students to study for an International GCSE in science
- support teachers in their delivery, with the additional offers of schemes of work, teaching and learning materials, professional development and assessment materials

#### Content

#### **Learning Objectives**

Learning Objectives are arranged by school year (1 – 9), under topic headings, organised into the specific disciplines of:

- Biology
- Chemistry
- Physics



Pearson

Although some aspects of scientific enquiry may be detailed separately, the course materials and the assessments will adopt an integrated approach to enquiry and embed this within the substantive science content of biology, chemistry and physics.

Learning Objectives provide detail of what is to be taught during a school year, but not necessarily the order of teaching.

Learning Objectives across the different disciplines in a single year are, in many places, designed to support each other. It is not necessary to teach the content as separate disciplines throughout, particularly where topics, such as Energy, lend themselves to a more integrated approach.

Learning Objectives across school years allow students to meet concepts at increasing levels of complexity, so that they can develop a greater breadth of knowledge and depth of understanding as they progress through the course.

### **Notes and Guidance**

Notes and guidance offer further explanation of Learning Objectives. Sometimes they include suggested approaches, apparatus, and/or models that may be used to support teaching and learning. Sometimes they include examples of the depth to which a topic is expected to be taught. Some opportunities for open ended extension/research work are provided for students wishing to further extend their knowledge of a particular topic.

The use of scientific terminology is emphasised to assist students learning science in a second language. Where key vocabulary appears in a Learning Objective, it is *italicised*, exemplifying which key terms are essential for use in assessments.

Unless indicated otherwise, all suggestions and examples are illustrative only; others may be equally or more appropriate, depending on the students, the class and the situation.