

OCR 21st Century Science A

Crocodile Clips lesson kits

The sections of the syllabus for which there are relevant Crocodile Physics and Crocodile Chemistry lesson kits are listed below. Under each heading, we've listed the lesson kit title [in bold], where you'll find it in the software and a brief description of the resource.

Because Crocodile Physics and Crocodile Chemistry are simulators, they will help you to cover other areas of the syllabus, too, and there are plenty of other experiments you can simulate. This is just a list of the lesson kits that are currently available.

C1: Air Quality

C1.2 What chemical reactions produce air pollutants? What happens to these pollutants in the atmosphere?

LESSON KIT:

Acid rain

Overview:

Make acid rain and then see its effect on limestone

Find it in:

Crocodile Chemistry - Acids, bases & salts

LESSON KIT:

Coal fires

Overview:

How the combustion of coal is used to produce energy

Find it in:

Crocodile Chemistry - Energy

LESSON KIT:

Products of burning

Overview:

Simulate combustion reactions and investigate the products

Find it in:

Crocodile Chemistry - Energy

LESSON KIT:

Fuels & food

Overview:

How much energy is in fuels and foods

Find it in:

Crocodile Chemistry - Energy

C2: Material Choices

C2.1 What different properties do different materials have?

LESSON KIT:

Elements & compounds

Overview:

Look at the particles that make up different substances

Find it in:

Crocodile Chemistry - Classifying materials

LESSON KIT:

Ionic, covalent & metallic

Overview:

Investigate some of the properties of solids with different bonding

Find it in:

Crocodile Chemistry - Classifying materials

C2: Material Choices

C2.3 Why does it help to know about the molecular structure of materials such as plastics and fibres?

LESSON KIT:

Boiling & melting

Overview:

Graph the temperature of water as it changes state

Find it in:

Crocodile Chemistry - Classifying materials

P2: Radiation and Life

P2.1 What types of electromagnetic radiation are there? What happens when radiation hits an object?

LESSON KIT:

Reflection & refraction

Overview:

Study sound, water and light entering different materials

Find it in:

Crocodile Physics - Waves

LESSON KIT:

EM spectrum

Overview:

Comparing wavelengths for different parts of the spectrum

Find it in:

Crocodile Physics - Waves

P2: Radiation and Life

P2.2 Which types of electromagnetic radiation harm living tissue and why?

LESSON KIT:

Absorption of Xrays

Overview:

Test different thicknesses of different materials

Find it in:

Crocodile Physics - Waves