# Primary Stage6 Science for Year6

# **E** Scientific enquiry

## Ep Ideas and evidence

- **6Ep1** Consider how scientists have combined evidence from observation and measurement with creative thinking to suggest new ideas and explanations for phenomena.
- 6Ep2 Collect evidence and data to test ideas including predictions. Ep Plan investigative work
- 6Ep3 Discuss how to turn ideas into a form that can be tested.
- 6Ep4 Make predictions using scientific knowledge and understanding.
- **6Ep5** Choose what evidence to collect to investigate a question, ensuring that the evidence is sufficient.
- **6Ep6** Identify factors that are relevant to a particular situation.
- **6Ep7** Choose which equipment to use.

## Eo Obtain and present evidence

• **6Eo1** Make a variety of relevant observations and measurements using simple apparatus correctly.

- 6Eo2 Decide when observations and measurements need to be checked by repeating to give more reliable data.
- 6Eo3 Use tables, bar charts and line graphs to present results.

### Eo Consider evidence and approach

- 6Eo4 Make comparisons.
- 6Eo5 Evaluate repeated results.
- 6Eo6 Identify patterns in results and results that do not appear to fit the pattern.
  6Eo7 Use results to draw conclusions and to make further predictions.
- 6Eo8 Suggest and evaluate explanations for predictions using scientific knowledge and understanding and communicate these clearly to others.
- **6Eo9** Say if and how evidence supports any prediction made.

# **B** Biology

#### **Bh** Humans and animals

- 6Bh1 Use scientific names for some major organs of body systems.
- 6Bh2 Identify the position of major organs in the body.

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- 6Bh3 Describe the main functions of the major organs of the body.
- 6Bh4 Explain how the functions of the major organs are essential.
  Be Living things in their environment
- **6Be1** Explore how humans have positive and negative effects on the environment, e.g. loss of species, protection of habitats.
- 6Be2 Explore a number of ways of caring for the environment, e.g. recycling, reducing waste, reducing energy consumption, not littering, encouraging others to care for the environment.
  6Be3
  Know how food chains can be used to represent feeding relationships in a habitat and present these in text and diagrams.
  6Be4 Know that food chains begin with a plant (the producer), which uses energy from the sun.
- 6Be5 Understand the terms producer, consumer, predator and prey.
- 6Be6 Explore and construct food chains in a particular habitat.

# **C** Chemistry

## **Cc** Material changes

• 6Cc1 Distinguish between reversible and irreversible changes.

- 6Cc2 Explore how solids can be mixed and how it is often possible to separate them again.
- 6Cc3 Observe, describe, record and begin to explain changes that occur when some solids are added to water.
- 6Cc4 Explore how, when solids do not dissolve or react with water, they can be separated by filtering, which is similar to sieving.
  6Cc5 Explore how some solids dissolve in water to form solutions and, although the solid cannot be seen, the substance is still present.

# **P** Physics

• **6Pm5** Represent series circuits with drawings and conventional symbols.

#### Pf Forces and motion

- 6Pf1 Distinguish between mass measured in kilograms (kg) and weight measured in newtons, noting that kilograms are used in everyday life.
- **6Pf2** Recognise and use units of force, mass and weight and identify the direction in which forces act.
- 6Pf3 Understand the notion of energy in movement.
- 6Pf4 Recognise friction (including air resistance) as a force which can affect the speed at which objects move and which sometimes stops things moving.

## Pm Electricity and magnetism

- 6Pm1 Investigate how some materials are better conductors of electricity than others.
- **6Pm2** Investigate how some metals are good conductors of electricity while most other materials are not.
- **6Pm3** Know why metals are used for cables and wires and why plastics are used to cover wires and as covers for plugs and switches.
- 6Pm4 Predict and test the effects of making changes to circuits, including length or thickness of wire and the number and type of components.