

Stage 2

Thinking and Working Scientifically

Models and representations

- **2TWSm.01** Know that a model represents an object or idea in a clear way.
- **2TWSm.02** Make and use a physical model of a familiar system or idea.
- **2TWSm.03** Describe the difference between a diagram and a picture.

Scientific enquiry: purpose and planning

- **2TWSp.01** Ask questions about the world around us and talk about how to find answers.
- **2TWSp.02** Make predictions about what they think will happen.

Carrying out scientific enquiry

- **2TWSc.01** Sort and group objects, materials and living things based on observations of the similarities and differences between them.
- **2TWSc.02** Use given equipment appropriately.
- **2TWSc.03** Take measurements in non-standard units.
- **2TWSc.04** Follow instructions safely when doing practical work.
- **2TWSc.05** Use a given secondary information source to find an answer to a question.
- **2TWSc.06** Collect and record observations and/or measurements by annotating images and completing simple tables.

Scientific enquiry: analysis, evaluation and conclusions

- **2TWSa.01** Describe what happened during an enquiry and if it matched their predictions.
- **2TWSa.02** Identify simple patterns in results, e.g. increasing and decreasing patterns.
- **2TWSa.03** Present and interpret results using tables and block graphs.

Biology

Structure and function

- **2Bs.01** Compare how animals, including humans, are similar and different in their external body parts and skin covering.
- **2Bs.02** Identify the different types of human teeth, explain how they are suited to their functions and describe how to care for teeth.

Life processes

- **2Bp.01** Know that humans need to manage diet, maintain hygiene and move regularly to be healthy.
- **2Bp.02** Describe what illness is and describe the common signs of illness in humans.
- **2Bp.03** Describe how the offspring of animals, including humans, change as they become older.
- **2Bp.04** Know that animals, including humans, produce offspring that have a combination of features from their parents.

Ecosystems

- **2Be.01** Know that an environment in which a plant or animal naturally lives is its habitat.
- **2Be.02** Know that different habitats contain different plants and animals.
- **2Be.03** Identify similarities and differences between local environments in terms of hot, cold, dry, wet, many plants, few plants, many animals and few animals.

Chemistry

Materials and their structure

- **2Cm.01** Understand that some materials occur naturally and others are manufactured.

Properties of materials

- **2Cp.01** Describe a property as a characteristic of a material and understand that materials can have more than one property.
- **2Cp.02** Explain why materials are chosen for specific purposes on the basis of their properties.
- **2Cp.03** Know that materials can be tested to determine their properties.

Changes to materials

- **2Cc.01** Know that some changes can turn a material into a different material.

Physics

Forces and energy

- **2Pf.01** Know that forces can change the movement of an object.
- **2Pf.02** Know that forces can change the shape of an object.
- **2Pf.03** Recognise that things will only speed up, slow down or change direction when something else causes them to do so.

Light and sound

- **2Ps.01** Know that there are many light sources, including the Sun.
- **2Ps.02** Know that darkness is the absence of light.

Electricity and magnetism

- **2Pe.01** Identify how we use electricity and describe how to be safe with it.
- **2Pe.02** Recognise the components of simple circuits (limited to cells, wires and lamps).
- **2Pe.03** Explore the construction of simple series circuits (limited to cells, wires and lamps).

Earth and Space

Planet Earth

- **2ESp.01** Describe and compare different types of rock.
- **2ESp.02** Know rocks are extracted from the Earth in different ways, including from quarries, mines and riverbeds.
- **2ESp.03** Know that human activity can affect the environment.

Earth in space

- **2ESs.01** Describe the apparent movement of the Sun during the day.

Science in Context

- **2SIC.01** Talk about how some of the scientific knowledge and thinking now was different in the past.
- **2SIC.02** Talk about how science explains how objects they use, or know about, work.
- **2SIC.03** Know that everyone uses science and identify people who use science professionally.
- **2SIC.04** Talk about how science helps us understand our effect on the world around us.