

Primary Stage5 Science for Year5

E Scientific enquiry

Ep Ideas and evidence

- **5Ep1** Know that scientists have combined evidence with creative thinking to suggest new ideas and explanations for phenomena.
- **5Ep2** Use observation and measurement to test predictions and make links.

Ep Plan investigative work

- **5Ep3** Make predictions of what will happen based on scientific knowledge and understanding, and suggest and communicate how to test these.
- **5Ep4** Use knowledge and understanding to plan how to carry out a fair test.
- **5Ep5** Collect sufficient evidence to test an idea.
- **5Ep6** Identify factors that need to be taken into account in different contexts.

Eo Obtain and present evidence

- **5Eo1** Make relevant observations.
- **5Eo2** Measure volume, temperature, time, length and force.

- **5Eo3** Discuss the need for repeated observations and measurements.
- **5Eo4** Present results in bar charts and line graphs.

Eo Consider evidence and approach

- **5Eo5** Decide whether results support predictions.
- **5Eo6** Begin to evaluate repeated results.
- **5Eo7** Recognise and make predictions from patterns in data and suggest explanations using scientific knowledge and understanding.
- **5Eo8** Interpret data and think about whether it is sufficient to draw conclusions.

B Biology

Bp Plants

- **5Bp1** Know that plants need energy from light for growth.
- **5Bp2** Know that plants reproduce.
- **5Bp3** Observe how seeds can be dispersed in a variety of ways.
- **5Bp4** Investigate how seeds need water and warmth for germination, but not light.

- **5Bp5** Know that insects pollinate some flowers.
- **5Bp6** Observe that plants produce flowers which have male and female organs; seeds are formed when pollen from the male organ fertilises the ovum (female).
- **5Bp7** Recognise that flowering plants have a life cycle including pollination, fertilisation, seed production, seed dispersal and germination.

C Chemistry

Cs States of matter

- **5Cs1** Know that evaporation occurs when a liquid turns into a gas.
- **5Cs2** Know that condensation occurs when a gas turns into a liquid and that it is the reverse of evaporation.
- **5Cs3** Know that air contains water vapour and when this meets a cold surface it may condense.
- **5Cs4** Know that the boiling point of water is 100°C and the melting point of ice is 0°C.
- **5Cs5** Know that when a liquid evaporates from a solution the solid is left behind.

P Physics

PI Light

- **5PI1** Observe that shadows are formed when light travelling from a source is blocked. • **5PI2** Investigate how the size of a shadow is affected by the position of the object.
- **5PI3** Observe that shadows change in length and position throughout the day.
- **5PI4** Know that light intensity can be measured. • **5PI5** Explore how opaque materials do not let light through and transparent materials let a lot of light through.
- **5PI6** Know that we see light sources because light from the source enters our eyes.
- **5PI7** Know that beams/rays of light can be reflected by surfaces including mirrors, and when reflected light enters our eyes we see the object.
- **5PI8** Explore why a beam of light changes direction when it is reflected from a surface.

P Physics (continued)

Pb The Earth and beyond

- **5Pb1** Explore, through modeling, that the sun does not move; its *apparent* movement is caused by the Earth spinning on its axis.
- **5Pb2** Know that the Earth spins on its axis once in every 24 hours.
- **5Pb3** Know that the Earth takes a year to orbit the sun, spinning as it goes.
- **5Pb4** Research the lives and discoveries of scientists who explored the solar system and stars.