

SCIENCE YEAR 3

WORKING SCIENTIFICALLY

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- ❖ asking relevant questions and using different types of scientific enquiries to answer them
- ❖ setting up simple practical enquiries, comparative and fair tests
- ❖ making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- ❖ gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- ❖ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- ❖ reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- ❖ using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- ❖ identifying differences, similarities or changes related to simple scientific ideas and processes
- ❖ using straightforward scientific evidence to answer questions or to support their findings.

PLANTS

Pupils should be taught to:

- ❖ identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- ❖ explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- ❖ investigate the way in which water is transported within plants
- ❖ explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

ANIMALS, INCLUDING HUMANS

Pupils should be taught to:

- ❖ identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- ❖ identify that humans and some other animals have skeletons and muscles for support, protection and movement.

ROCKS

Pupils should be taught to:

- ❖ compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- ❖ describe in simple terms how fossils are formed when things that have lived are trapped within rock
- ❖ recognise that soils are made from rocks and organic matter.

LIGHT

Pupils should be taught to:

- ❖ recognise that they need light in order to see things and that dark is the absence of light
- ❖ notice that light is reflected from surfaces
- ❖ recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- ❖ recognise that shadows are formed when the light from a light source is blocked by a solid object
- ❖ find patterns in the way that the size of shadows change.

FORCES AND MAGNETS

Pupils should be taught to:

- ❖ compare how things move on different surfaces
- ❖ notice that some forces need contact between two objects, but magnetic forces can act at a distance
- ❖ observe how magnets attract or repel each other and attract some materials and not others
- ❖ compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- ❖ describe magnets as having two poles
- ❖ predict whether two magnets will attract or repel each other, depending on which poles are facing.