

# SCIENCE – YEAR 4

AUTUMN

SPRING

SUMMER

## Working Scientifically

- 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
- 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

### Animals (including humans)

- describe the simple functions of the basic parts of the digestive system in humans
- identify the different types of teeth in humans and their simple functions
- construct and interpret a variety of food chains, identifying producers, predators and prey.

### All Living Things

- identify and name a variety of living things (plants and animals) in the local and wider environment, using classification keys to assign them to groups
- recognise that environments can change and that this can sometimes pose dangers to living things.
- Recognise that living things can be grouped in a variety of ways.

### States of Matter

- compare and group materials together, according to whether they are solids, liquids or gases
- observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)

### Electricity

- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- recognise some common conductors and insulators, and associate metals with being good conductors.

### Sound

- identify how sounds are made, associating some of them with something vibrating
- Recognise that vibrations from sounds travel through a medium to the ear.
- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it.

