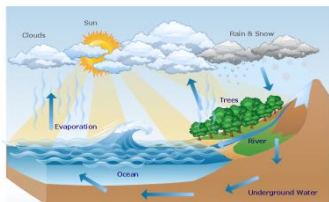
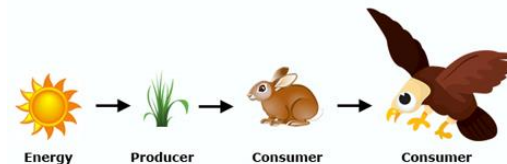


Science Progression of Skills



Year 4



Year 4 National Curriculum Objectives for Science: Children will be taught to:

Year 4 Working Scientifically

Pupils will be taught to use the following practical scientific methods, processes and skills:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up 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. Eg: more complex tables, bar charts, line graphs (with given axes), tally charts, venn diagrams.
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- reporting on findings from enquiries, including detailed displays or presentations of results and conclusions.
- using results to draw simple conclusions, make predictions for new values, suggest improvements and

Programmes of Study

Living things and their habitats

- recognise that living things can be grouped in a variety of ways (**Taught through 'The Stone Age' topic - discretely**).
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment (**'The Stone Age' topic**)
- recognise that environments can change and that this can sometimes pose dangers to living things (**'The Stone Age' topic**)

Animals including humans

- describe the simple functions of the basic parts of the digestive system in humans (**'Burps, Bottoms and Bile' topic**)
- identify the different types of teeth in humans and their simple functions (**'Burps, Bottoms and Bile' topic**)
- construct and interpret a variety of food chains, identifying producers, predators and prey. (**'The Stone Age' topic**)

States of matter ('Water, Water Everywhere' topic)

- 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

raise further questions.

- identifying differences, patterns, similarities or changes related to simple scientific ideas and processes.
- using straightforward scientific evidence to answer questions or to support their findings.

cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$)

- identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Sound (Water, Water Everywhere)

- 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
- recognise that sounds get fainter as the distance from the sound source increases.

Electricity (discrete topic)

- identify common appliances that run on 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.

Notes

Children Working Below

Children who are working above objectives listed above