

Science is all about exploring, posing questions and observing the world around us. We are very lucky to have a wonderful setting, developing garden and nearby wood where the children can learn outside. The emphasis is practical and fun and the children develop their knowledge through scientific investigation and observations.

YEAR 1 PROGRAMME OF STUDY

Plants

Pupils are taught to:

- * identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.
- * identify and describe the basic structure of a variety of common flowering plants, including trees.

Seasonal Changes

Pupils are taught to:

- * observe changes across the four seasons
- * observe and describe weather associated with the seasons and how day length varies.

Animals including humans

Pupils should be taught to:

- * identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- * identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- * describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
- * identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Every day materials

Pupils should be taught to:

- * distinguish between an object and the material from which it is made
- * identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.
- * describe the simple physical properties of a variety of everyday materials
- * compare and group together a variety of everyday materials on their simple physical properties

Working scientifically

Pupils in years 1 and 2 should:

Explore the world around them and raise their own questions. They should experience different types of scientific enquiries, including practical activities, and begin to recognise ways in which they might answer scientific questions. They should use simple features to compare objects, materials and living things and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they should begin to notice patterns and relationships. They should ask people questions and use simple secondary sources to find answers. They should use simple measurements and equipment (eg. hand lenses and egg timers) to gather data, carry out simple tests, record simple data and talk about what they have found out and how they found it out. With help, they should record and communicate their findings in a range of ways and begin to use simple scientific language.
NB: opportunities for working scientifically should be provided across years 1 and 2 so that the expectation is met by the end of year 2.
Pupils are NOT expected to cover each aspect for every area of study.

YEAR 2 PROGRAMME OF STUDY

Plants

(This unit may be part of on-going study where the children plant seeds, care for and harvest vegetables over the year)

Pupils are taught to:

- * observe and describe how seed and bulbs grow into mature plants
- * find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Materials and their properties

Pupils should be taught to:

- * identify and compare the uses of a variety of everyday materials including: metal, plastic, glass, brick, rock, paper and cardboard.
- * find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Animals including humans

Pupils are taught to:

- *notice that animals, including humans, have offspring that grows into adults
- * find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- * describe the importance for humans of exercise, eating the rights amounts of different types of food, and hygiene.

All living things and their habitats

Key Stage 1 Science Curriculum

Pupils are taught to:

- * explore and compare the differences between things which are living, dead and have never been alive.
- * identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of animals and plants, and how they depend on each other.
- * identify and name a variety of plants and animals in their habitats, including micro-habitats
- * describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Working scientifically

- * ask simple questions
- * observe closely using simple equipment such as hand lenses
- * identify and classify
- * suggest answers to their questions eg. suggest what an animal might eat from knowing where it lives
- * gather data to help in answering questions
- * perform simple tests