Linton Infants Science Progression Document

Animals including humans

Pupils learn:

Y1 About a variety of common animals (including fish, amphibians, reptiles, birds and mammals).

The main body parts of common animals. The five main senses. To know that the skin is used for touch, the tongue is used for taste, the nose is used for smell, the eyes are used for sight and the ears are used for hearing.

That a carnivore is an animal that eats other animals and a herbivore is an animal that eats only plants. An omnivore is an animal that eats both animals and plants.

Y2 How living things change, and that animals have offspring that grow into adults. To know which offspring comes from which parent animal. To know the stages in some animal life cycles.

To know that all animals, including humans, need water, food and air to survive. To understand the importance of exercise, a balanced diet and hygiene for humans.

Materials

Pupils learn:

Y1 That objects are items or things. A material is what an object is made from. To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.

A property refers to how a material can be described. To describe the physical properties of a variety of everyday materials and know that materials can be grouped based on their physical properties. Y2 Why objects are made from particular materials. To know that different materials can be used for the same purpose.

That a push or pull must be applied to change the shape of a solid object. To know that solid objects can be squashed, bent, twisted or stretched. To know that different solid objects may take a different amount of force to change shape.

Plants

Pupils learn:

Y1: About a variety of common plants, and how they differ. Deciduous trees lose their leaves seasonally, but evergreen trees do not. The basic structure of a variety of common plants, including flowering plants and trees.

Basics about how plants grow

Y2: That seeds and bulbs grow into seedlings by producing roots and shoots. Seedlings grow into mature plants by developing parts.

Seeds need water to germinate. To know that plants need water, light and a suitable temperature for growth and health.

Working Scientifically Y1 and Y2 Pupils learn:

Posing Questions

To explore the world around them and raising their own simple questions. Recognising there are different types of enquiry). Responding to suggestions of how to answer their questions Planning

To recognise whether a test is fair. With support, deciding if suggested observations are suitable. Ordering a simple method.

Predicting

Suggesting what might happen, often justifying with personal experience.

Observing

Using their senses to describe, in simple terms, what they notice or what has changed.

Measuring

Using non-standard units to measure and compare. Beginning to use standard units to measure and compare. Beginning to use simple measuring equipment to make approximate measurements. Reading simple numbered scales.

Working Scientifically Y1 and Y2

Pupils learn:

Researching Gathering specific information from one simplified, specified source.

Recording Drawing and labelling simple diagrams
Recording (tables) Using a prepared table to record results including:

Numbers. • Simple observations. • Tally frequency.

Grouping and classifying

Grouping based on visible characteristics. Organising questions to create a simple classification key.

Graphing Representing data using pictograms and block charts.

Analysing and drawing conclusions Using their results to answer
simple questions. Beginning to recognise when results or observations
do not match their predictions.

Evaluating Beginning to recognise whether a test is fair or not.

Living things and their habitats

Pupils learn:

Y2 To understand some of the life processes, including movement, reproduction, sensitivity, growth, excretion and nutrition. To know the difference between things that are living, dead, and things that have never been alive, using some of the life

About a variety of habitats (and meaning), including woodland, ocean, rainforest and seashore. To know that a micro-habitat is a very small habitat. To know that living things depend upon each other (e.g. for food, shelter.) To understand that a food chain can be used to show how animals obtain food from eating either plants and/or other animals.

Forces, Earth and Space

Pupils learn:

Y1 The name and order of the four seasons; spring, summer, autumn and winter. To know that it is unsafe to look directly at the Sun.

The weather associated with the four seasons and how it changes. To understand that day length varies across the four seasons.

Science in Action Y1 and Y2

Pupils learn:

To know about famous scientists throughout history. To know about a range of jobs and careers that use scientific knowledge and methods. To know about the work of modern-day scientists. To know about science in the news and recent discoveries. To know there are spiritual, moral, social and cultural links with Science.