**SCIENCE SKILLS PROGRESSION- AGE RELATED EXPECTATIONS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Early Learning Goal** |  | **By the end of year 1 pupils are able to:** | **By the end of year 2 pupils are able to:** |
| **Understanding the world:**  Children know about similarities and differences in relation to everyday processes. They talk about the features of their own immediate environment and how environments might vary from one another. | **Working scientifically** | * Ask simple questions and recognise that they can be answered in different ways. * Use simple equipment to observe closely. * Perform simple tests. * Identify and classify. * Use his/her observations and ideas to suggest answers to questions. * Gather and record data to help answering questions. | * Ask simple questions and recognise that they can be answered in different ways, including use of scientific language from the National Curriculum. * Use simple equipment to observe closely, including changes over time. * Perform simple comparative tests. * Identify, group and classify. * Use his/her observations and ideas to suggest answers to questions, noticing similarities, differences and patterns. * Gather & record data to help answering questions, including from secondary sources. |
| **Animals**  **including humans** | * Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. * Identify which animals are carnivores, herbivores and omnivores. * Describe and compare the structure of a variety of common animals, 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. | * Understand that animals, including humans, have offspring which grow into adults. * Describe the basic needs of animals, including humans, for survival (water, food and air). * Describe the importance for humans to exercise, eating the right amount of different food, and hygiene. |
|  | **End of Year 1** | **End of Year 2** |
| **Materials** | * 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 everyday materials on the basis of their physical properties. | * Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. * Describe how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. |
|  | **Plants** | * 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 flowering plants, including trees. | * Observe and describe how seeds and bulbs grow into mature plants. * Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. |
|  | **Forces** |  | * Identify that forces happen between two objects and that pushing and/or pulling can make objects start moving, go faster or slower, or stop them, and even make them change their shape. * Understand that some forces need contact between objects, but others can act at a distance (e.g. magnets). * Observe that when one object moves over another, there will be a force between them which slows down the motion and that this is called friction. |
| **Longitudinal Studies** | **Seasonal Changes (Y1)**  **Habitats and how the seasons affect them (Y2)** | * Observe changes across the 4 seasons. * Observe and describe weather associated with the seasons and how day length varies. | * Explore and compare the differences between things that are living or dead, and things which 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 different kinds of animals, and hoe 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. |