**Key Stage One Science Topics 2021-2022**

|  |  |
| --- | --- |
| Term | Theme |
| Autumn Term  **Animals including humans** | **Year 1**  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 the importance of healthy foods.  **Year 2**  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 right amounts of different types of food, and hygiene  **Working Scientifically**  Children will use their observations to compare and contrast animals at first hand, through videos and photographs, using their senses to compare different textures, sounds and smells. Pupils will explore how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions. |
| Spring Term 1  **Animals including humans**  **Living things and their habitats** | **Year 1**  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).  **Year 2**  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**  Children will use their observations to compare and contrast animals at first hand and through videos and photographs, describing how they identify and group them; grouping animals according to what they eat.  Pupils will construct a simple food chain that includes humans (e.g. grass, cow, human). |
| Spring Term 2  **Plants** | **Year 1**  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.  **Year 2**  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.  To Identify the requirements of plants for germination, growth and survival, as well as to the processes of reproduction and growth in plants  **Work Scientifically**  Children will observe closely, using magnifying glasses, and compare and contrast familiar plants; describing how they were able to identify and group them. The children will draw diagrams showing the parts of different plants including trees. Pupils will keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.  Pupils will observe and record the growth of a variety of plants as they change over time from a seed or bulb, and observe similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy. |
| Summer 1  **Seasonal Changes** | **Year 1**  To observe changes across the four seasons.  To observe and describe weather associated with the seasons and how day length varies.  **Year 2**  Understand how to measure the weather.  To understand that some weather can be dangerous.  **Working Scientifically**  Pupils will make tables and charts about the weather; and make displays of what happens in the world around them, including day length, as the seasons change. The children will record and make charts of the weather they have observed and measured. |
| Summer Term 2  **Every day materials (and their uses)** | **Year 1**  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  **Year 2**  Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.  Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.  **Working Scientifically**  Children will perform simple tests to explore which materials are best for their purpose based on their properties. They will record their findings. |

**Key Stage One Science Topics 2022-2023**

|  |  |
| --- | --- |
| Term | Theme |
| Autumn Term  **Living things and their habitats** | **Year 1**  Identify things that are living, dead, and things that have never been alive.  Explore that animals live in different habitats.  **Year 2**  Explore and compare the differences between things that are living, dead, and things that 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 plants, and how they depend on each other.  Identify and name a variety of plants and animals in their habitats, including microhabitats.  **Working Scientifically**  Pupils will sort and classify things according to whether they are living, dead or were never alive, and record their findings using charts. The children will describe how they decided where to place things, exploring questions for example: ‘Is a flame alive? Is a deciduous tree dead in winter?’ and talk about ways of answering their questions. |
| Spring Term 1  **Everyday Materials** | **Year 1**  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 the basis of their simple physical properties.  **Year 2**  Explore the different properties of materials i.e. absorbent, magnetic.  Find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.  **Working Scientifically**  Children will compare the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs); observe closely, identify and classify the uses of different materials, and record their observations. |
| Spring Term 2  **Plants** | **Year 1**  To explore where food comes from.  Identify and name food provided by plants.  **Year 2**  Identify the different parts of a plant that provide food**.**  Explore the importance of plants and trees for providing food.  **Work Scientifically**  Children will observe closely, using magnifying glasses, and compare and contrast parts plant; describing how they were able to identify and group them. The children will draw diagrams showing the parts of different plants including trees. The children will use pictures and first-hand experiences to see the parts of the plant they can eat. |
| Summer Term 1  **Animals including humans** | **Year 1**  Identify animals in the local environment.  To understand how to care for animals, including pets.  **Year 2**  Learn that animals, including humans, have offspring which grow into adults- life cycles.  **Working Scientifically**.  Pupils will record and observe animals in their local environment. They will explore how different animals grow; asking questions about what things animals need for survival and suggesting ways to find answers to their questions. Children observe how animals including human grow and change over time through first hand experiences, pictures and videos. The children ask questions and make recordings of their findings. |
| Summer Term 2  **The Environment** | **Year 1**  Explore ways to care for the environment.  **Year 2**  Identify environmental issues and the impact humans have on the environment.  Explore different ways to protect the environmentand sustainability**.**  **Working Scientifically**  Pupils will ask questions and explore environmental issues and suggest changes to live a more sustainable life. Children will perform simple tests and record their findings. |