**Science Overview – Year Two**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Year Two** | **Living things and habitats**  \*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 plant 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.  Pupils should be introduced to the ideas that all living things have certain characteristics that are essential to keeping them alive and healthy.  Pupils will learn about different habitats and understand how and why some animals are suited and have adapted to their habitats and climates. For example, a camel has a habitat in a dry, sandy and warm climate and a polar bear has a habitat in a cold and snowy climate.  Pupils will be able to create and describe a food chain and understand the difference between a ‘producer’, ‘consumer’, ‘prey’ and a ‘predator’. | **Plants**  \*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.  Pupils should learn about the local environment and observe how different plants grow. They will also learn about how different plants grow in different seasons and different countries through their rainforest project. They will also understand the different parts to a plant and the purpose of each part. For example – the stem, leaf and flowering part to the plant.  Pupils will also begin to learn about reproduction and growth in plants. They might also discuss how seed dispersal causes plants to grow in different locations. | **Everyday materials**  \*Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for a range of uses.  \* Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.  Pupils should be able to identify and discuss the uses of everyday materials so that they can understand the uses of them. For example: a brick is a suitable material to use in order to build house or that a glass is a suitable material for drinking out of. They will also learn that some materials have multiple uses.  They should think about and discuss how different solid shapes change and how materials can be used for different purposes. For example – a sponge can be hard when it is dry however, when it comes in to contact with water – or a liquid - it becomes soft and you are able to squash it. | **Everyday materials continued** | **Animals including humans**  \*Notice that animals, including humans, have offspring which grow into adults  \* Find out about and describe the basic needs of animals, including humans, for survival  \* Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.  Pupils should be introduced to the basic needs of animals for survival and the importance of exercise and nutrients. Pupils will also learn about how different animals/ humans are born and how they develop into being adults.  They should also learn about the basic needs of animals and humans and learn about what they need to survive. For example: a giant panda spends most of its life eating a large proportion of bamboo. They will also be introduced different animal habitats.  Pupils will also start to learn about the importance of exercise and what a balanced diet consists of. | **Practical Science investigations related to the Curious Scientist programme**  **Preparation and revision for the end of KS1 Science Trust assessment** |

**Throughout the course of the year – pupils will also cover the working scientifically objectives as listed below:**

|  |
| --- |
| Ask simple questions and recognising that they can be answered in different ways |
| observing closely, using simple equipment |
| performing simple tests |
| identifying and classifying |
| using their observations and ideas to suggest answers to questions |
| gathering and recording data to help in answering questions |