**Year 2 Science Curriculum – Autumn Term 1**

|  |
| --- |
| **Theme: Local Habitats** |
| **Curriculum objectives** | **Vocabulary** | **Links across the curriculum** |
| 1. To explore and compare the differences between things that are living, dead, and things that have never been alive.
2. To identify the most living things in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals, plants, and how they depend on each other.
3. To identify and name a variety of plants and animals in their habitats including microhabitats.
4. To 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.
 | **Keyword** | **Definition**  | **Alive** | Living, not dead | **Art**: sketching animals and plants in their habitats.**Computering**: Use camera/ iPad to take photos of different plants and animals in varying habitats.**English**: Homes Sweet Homes – James Carter, Dominique Mertens – Poems about animal habitats.**English**: The Pond – Claire Llewellyn, Martin Sanders – An introduction to creature in a typical pond. |
| **Compare** | To notice how things are the same or different | **Breathe** | To draw air into the body and let it out |
| **Feed** | To eat food | **Consumer** | A living thing which has to eat other animals or plants to gain its food |
| **Move** | To change place or direction | **Decay** | To rot |
| **Record** | To draw or write what you observed or measured | **Decomposer** | A living thing that breaks down dead plants, animals or waste |
| **Order**  | To place objects in a sequence or pattern | **Depend** | To strongly need and receive help from an outside source in order to live |
| **Food chain** | A series of living things where each one is food for the next | **Habitat** | A place where an animal or plant finds the things it needs to live and grow |
| **Never been alive** | Has never been a living thing, or part of one | **Once alive** | Was once a living thing, or part of one, but is now dead |
| **Survive** | To stay alive | **Omnivore** | An animal that eats both plants and animals |
| **Producer** | A living things, such as a plant, which makes its own food | **Shelter** | Something that provides cover or protection |
| **Prior knowledge:***What specifically have pupils learned that is relevant to this unit that they are building upon?* | **Future knowledge:** *What specifically will pupils learn in the future that is relevant to this unit?* |
| Local habitats is a Biology topic building on children’s learning and experiences in the Early Years Foundation Stage and Year 1.Children have previously learnt:* About a variety of common wild and garden plants, their names and structure (Year 1 Biology – Plants)
* About a variety of fish, amphibians, reptiles, birds and mammals, their names and structure (Year 1 Biology – Animals, including humans)
* To observe changes across the four seasons (Year 1 Biology – Seasonal changes).
 | This prepares children for later learning:* How to identify, group and classify living things (Year 4 Biology – Living things and their habitats)
* How to construct food chains and identify predators and prey (Year 4 Biology – Animals, including humans).
 |
| **Lesson Sequence** | **Key Knowledge** | **Key Skills** |
| 1. *Are the things I find alive, have never been alive or once were alive?*
 | All things are either alive, have never been alive or once were alive. Living things include plants (including seeds) and animals. Things that were once alive include dead animals and plants, and parts of plants and animals that are no longer attached, for example, leaves and twigs, shells, fur, hair, and feathers. Things made of rock, metal and plastic have never been alive. | **Working scientifically****Skills children will learn, use and develop:*** Observe closely, using simple equipment
* Identifying and classifying.
* Using their observations and ideas to suggest answers to questions.

**Knowledge about science children will learn:**Children will learn about the methods scientists use to build scientific knowledge of the natural world.They will learn that scientists find explanations by looking carefully, and recording their observations of what they see and the changes that they notice.They will develop an understanding of the following type of enquiry: identifying and classifying.  |
| 1. *What lives in my tree?*
 | A habitat provides the basic needs of the animals and plants in it – shelter, food and water. There are different types of habitat. Animals and plants live in a habitat to which they are suited, which means that animals have features that help them move and find food in that habitat, and plants have features that help them to grow well there. |
| 1. *What animals live in this woody habitat?*
 | Different living things are suited to live in different parts of a woody habitat, for example, in the leaf litter, on the bark of trees, on the leaves. |
| 1. *What animals live in this grassy habitat?*
 | Different living things are suited to live in different parts of a grassy habitat, for example, deep down in the grass, in short or long grass, on top of the grass or on flowers. |
| 1. *What do animals that live in the woods eat?*
 | Animals obtain their food from plants and other animals. Plants and animals in a woodland habitat depend on each other for food. This can be shown in a food chain. All food chains begin with a plant. |
| 1. *What do animals that live in the pond eat?*
 | Animals obtain their food from plants and other animals. Plants and animals in a pond habitat depend on each other for food. This can be shown in a food chain. This lesson is optional. |
| **Themes and links** |
| **Themes (types of enquiry)** | **Where these are covered:** | **Links across the Science curriculum** |
| **Observing closely (using simple equipment)** | Lessons 2, 3, 4, 5 and 6Can describe observations using sensory and context-specific vocabulary (colour, size, texture, number of legs, and so on).Can make observations using all their senses (as appropriate to the task).Can use a magnifier correctly. |

|  |  |
| --- | --- |
| **EYFS** | To explore the natural world around them, making observations and drawing pictures of animals (EYFS framework; ELG The Natural World) |
| **1** | Identify and name a variety of common animals including fish, amphibians, reptiles, birds, and mammalsIdentify and name a variety of common animals that are carnivores, herbivores, and omnivoresDescribe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds, and mammals, including pets) |
| **2** |  |
| **3** | Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant |
| **4** | Construct and interpret a variety of food chains, identifying producers, predators, and prey.  |
| **5** |  |
| **6** |  |

 |
| **Gathering and recording data to help in answering questions** | Lessons 2, 3, 4 and 5Can use the Tier 3 vocabulary to describe their observations and use them to answer questions. |
| **Identifying and classifying**  | Lessons 1 and 2Can use their observations to identify living, non-living and once-lived things in a habitat.Can sort and group these things, identifying their own criteria for sorting.Can use simple secondary sources (such as identification sheets) to name living things. They describe the characteristics they used to identify a living thing. |  |