Year 2 Biological Science: Living Things and Habitats — Unit 3

Scientific Investigations:

- Identifying and Classifying Things
- Researching Using Secondary Sources

Scientists

- Rachel Carson - the scientist who first discovered the dangers of chemical pollution in the ocean.

Scientific Skills Applied:

ASK
- To explore the world around them
- To ask their own questions

BREAKDOWN
- To use simple equipment

CAPTURE
- To observe closely
- To compare using simple features
- To record what they notice in different ways
- To sort things using simple features

DESCRIBE
- To explain what they found out
- To talk about what they have seen
- To use simple scientific language

Prior Learning:

- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants)
- Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants)
- Identify and name a variety of common animals including fish, amphibians, reptiles, birds, and mammals. (Y1 - Animals including humans)
- Identify and name a variety of common animals that are carnivores, herbivores, and omnivores. (Y1 - Animals including humans)
- Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds, and mammals, including pets). (Y1 – Animals, including humans)
- Observe changes across the four seasons. (Y1 - Seasonal changes)

Curriculum	Learning Intention	Knowledge and Key Vocabulary
Making links to learning and discuss the model (if needed)	What do you already know about living things and their habitats pre assessment task?	
Knowledge and skills through investigations Pupils should be taught to: - 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	How do we know if something is living, dead & non-living? Explore the characteristics of living things – MRS GREN Explore the outside environment regularly to find objects that are living, dead and have never lived. Discuss how an object was once alive – e.g., a wooden chair. Classify objects found in the local environment. What is a habitat?	**Knowledge:** - Describe what a habitat is. - Name and describe some habitats linking it to their size. - Explain that different habitats have different features for each animal to survive in a specific habitat. - Name and describe some habitats in our local area include the river and

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 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. Notes and guidance (non-statutory) - Pupils should be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. They should raise and answer questions that help them to become familiar with the life processes that are common to all living things. - Pupils should be introduced to the term's 'habitat' (a natural environment or home of a variety of plants and animals) and 'micro-habitat' (a very small habitat, for example for woodlice under stones, logs, or leaf litter). They should raise and answer questions about the local environment that help them to identify and study a variety of plants and animals within their habitat and observe how living things depend on each other, for example, plants serving as a source of food and shelter for animals. - Pupils should compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest. Pupils might work scientifically by: - sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. - They should 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. - They could construct a simple food chain that includes humans (e.g., grass, cow, human). - They could describe the conditions in different habitats and micro-habitats (under log, on stony path, under bushes) and find out how the	Identify the different habitats and which animals live in them. What types of habitats are there? Examine **global habitats**, e.g., Arctic, rainforest, desert – which animals are most suited to these habitats and why? Examine **local habitats**, e.g., house, garden, field, city, pond. Investigate which animals are most suited to these habitats and why? Examine **micro habitats** e.g., under rocks, barks of a tree, rockpools and explain which animals are most suited to these habitats and why? Compare different micro habitats and explain how the minibeasts help keep the microhabitat healthy. How does a habitat provide the basic needs for the life of the creature living in it? Explore how living things are suited to their own habitats. Complete fieldwork in the school grounds. Research the pond area, forest schools, the trees, the fields, and the bug hotel to identify animals in these places. Discuss how their habitat suits their needs. Compare the habitats of different creatures and animals. Examine the similarities and differences. Compare two different habitats and explain what animals and plants can be found there. Observe animals and plants carefully, To make observational drawings and label diagrams. Match animals and plants to their habitats Explain suitability to habitats. What is a food chain? Create simple food chains for a familiar local habitat from first-hand observation and research. Create simple food chains from information given e.g., in picture books. Create simple food chains that begin with a plant. Discuss what would happen if one of those living things in a food chain did not exist.	woodlands. Other habitats include the coast and the forest. - Name and describe some microhabitats. *Examples of microhabitats include under stones, in grass, under fallen leaves and in the soil.* - Name some minibeasts that can be found in microhabitats including worms, snails, ants, centipedes, millipedes, and butterflies. - To describe how animals and plants depend on each other to survive. **Vocabulary:** - Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed. - Names of local habitats e.g., pond, woodland etc. - Names of micro-habitats e.g., under logs, in bushes, under leaves, in the soil etc. - Names of global habitats e.g., desert, rainforest, Arctic, etc.

conditions affect the number and type(s) of plants and animals that live there.		
Application and Assessment Activity	https://www.educationquizzes.com/ks1/science/living-things-animal-habitats/	

Thinking Deeper:

Why Do We Need Bees?

- Bees are great pollinators, carrying pollen from one flower to another. Once pollinated, a flower develops into fruit, which we can eat. Bees are vital for pollinating many commercial crops, such as tomatoes, peas, apples, and strawberries. It would be very time consuming and costly to pollinate these plants in other ways. Bees make it much easier for farmers and keep the prices of these foods down.

Plastic - Villain vs Hero?

- Explore the positives and negatives of plastic's impact upon living things and their habitats.

Links to other subjects:

- Subject Specific links –
  - English: new vocabulary, explaining their work, describing images and processes.
  - Maths: sorting activities, tally charts, pictograms.
  - ICT: learning from activities and videos on IWB.
  - Geography: features of habitats and mapping where they are in the school grounds and beyond.
- Personal Development – to be aware of harmful germs and how to keep themselves safe.
- SMSC – learning how to look after the environment and learn how to respect nature.
  - Cultural Capital – investigating habitats from different places around the world
- Careers – microbiologist, environmentalist, RSPCA RSPB, vet, zoologist
- British Values -children respect the environment around them and the habitats within the school grounds
- Equality – Every animal deserves the same representation as another. Do animals have the same rights as humans?