Ashtree Primary School and Nursery Medium Term Plan for Science

EYFS - Reception - Growth

<u>Key Vocabulary</u> names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice,

Supplementary Vocabulary environment, polar regions, ocean, camouflage

Key Knowledge

Children can be taught key knowledge by following the steps below:

- 1. Recap what a plant and an animal is, where we might find them and the life cycle of a plant from seed. Recap the life cycle of a butterfly.
- Go for a walk outside during each season. Each time take photos and record the children's observations regarding weather, temperature and what they notice about the trees/plants/animals seen. Re-visit these observations before and after each walk to compare the changes over time. Include discussions about hibernation
- 3. During the Spring term Rainforest topic, **compare and contrast** the types of plants and animals found in the UK versus the rainforest.

Prior Learning

Development Matters 2020 – Three & Four Year Olds

- Understand the key features of the life cycle of a plant
- Plant seeds and care for growing plants.
- Begin to understand the need to respect and care for the natural environment

Reception

Development Matters 2020 – Reception

- Understand the effect of changing seasons on the natural world around them.
- Describe what they see, hear and feel while they are outside
- Recognise some environments that are different to the one in which they live.

ELG

- Explore the natural world around them, making observations and drawing pictures of plants.
- Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.
- Understand some important processes and changes in the natural world around them

Working Scientifically Skills

- Sort animals according to where they live.
- Researching using secondary sources
- Learn about animals in a different habitat.
- Learn how animals from a different habitat are cared for.

Curriculum enhancements

- Identify different habitats in the local area
- Make observations about the changes in the school environment during the different seasons.

Suggested Activities

- Teach children about a range of contrasting environments within both their local and national region.
- Model the vocabulary needed to name specific features of the world, both natural and made by people.
- Share non-fiction texts that offer an insight into contrasting environments.
- Listen to how children communicate their understanding of their own environment and contrasting environments through conversation and in play.
- Encourage focused observation of the natural world.
- Listen to children describing and commenting on things they have seen whilst outside, including plants and animals.
- Encourage positive interaction with the outside world, offering children a chance to take supported risks, appropriate to themselves and the environment within which they are in.
- Name and describe some plants and animals children are likely to see, encouraging children to recognise familiar plants and animals whilst outside.
- Provide children with have frequent opportunities for outdoor play and exploration.
- Encourage interactions with the outdoors to foster curiosity and give children freedom to touch, smell and hear the natural world around them during hands-on experiences.
- Create opportunities to discuss how we care for the natural world around us.
- Offer opportunities to sing songs and join in with rhymes and poems about the natural world.
- After close observation, draw pictures of the natural world, including animals and plants.
- Observe and interact with natural processes, such as ice melting, a sound causing a vibration, light travelling through transparent material, an object casting a shadow, a magnet attracting an object and a boat floating on water.
- <u>Seasons Explorify</u>

Possible Misconceptions

- animals are furry and have four legs
- a butterfly is not an animal because it is an insect
- animals adapt to their surroundings, e.g. a brown bear turns white and becomes a polar bear
- animals living in the soil breathe by coming to the surface
- dragons and other mythical creatures are real animals.

This will lead to . . .

In Year 1, the children will learn to,

- 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.
- 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)