

# Ashtree Primary School and Nursery Medium Term Plan for Science

## EYFS - Nursery - Growth

### **Development Matters 2020 – Three & Four Year Olds**

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

### **Key Vocabulary**

Plant, seed root, stem, water, tree, leaf, tree

### **Working Scientifically Skills**

- Observing over time
- How does the ... change over time?
- Researching using secondary sources
- Find out more about the life cycles of the animals observed.
- Match animals and their young.

### **Key Knowledge - Plants**

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

1. Go for a walk outside and look at the natural world. Can the children identify any plants? Take photos of any plants found and create an album to keep in the book corner.
2. Where do plants come from? Share a range of different seeds with the children. Can they describe the shape, patterns etc they notice? Do they know anything about seeds, what they can do with them or where else they might be found? Can the children sort plants/not plants into correct groups?
3. Look at the PowerPoint: <https://primarysite-prod-sorted.s3.amazonaws.com/winnall-primary-school/UploadedDocument/35262e35943b41baa4d301bcda939e24/t-l-53440-little-acorns-story-powerpoint.pdf> What does this PowerPoint show? Discuss the key features in the PowerPoint  
Acorn falls to the ground, acorn is buried in the soil, the sun shined on the soil, the acorn began to grow roots, and the acorn began to grow a stem.
4. Plant some sunflower seeds in soil. Teach the children that we need to care for our sunflower seeds by giving them water and sunlight.

### **Key Knowledge - Animals**

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

1. Share photos of butterflies. Do the children know what a butterfly is? How can they describe the features they notice? How does a butterfly differ from humans?
2. How did we look when we were young? How have we changed? Does anyone know what a butterfly looked like when it was young?
3. Read the story The Very Hungry Caterpillar – can the children spot the changes throughout the story?
4. Create a life cycle to demonstrate the changes. Egg – caterpillar – cocoon – butterfly

### **Curriculum enhancements**

- looking after the plants in the sensory garden
- planting seeds from fruits at snack time

### **Suggested Activities**

- Show and explain the concepts of growth, change and decay with natural materials.
- plant seeds and bulbs so children observe growth and decay over time
- observe an apple core going brown and mouldy over time
- help children to care for animals and take part in first-hand scientific explorations of animal life cycles, such as caterpillars or chick eggs.
- Plan and introduce new vocabulary related to the exploration. Encourage children to use it in their discussions, as they care for living things.
- Encourage children to refer to books, wall displays and online resources. This will support their investigations and extend their knowledge and ways of thinking.

### **Possible Misconceptions**

Some children may think:

- all animals lay eggs
- the young animal is fully formed inside an egg and just waiting to hatch
- the young animal is fully formed inside an egg and just grows until it is big enough to hatch
- animals are assembled from body parts within the egg
- all animal young are just small versions of the adult and get bigger
- animals such as cows and hens “make” milk and lay eggs for us [humans]
- humans are not animals.

### **This will lead to . . .**

Reception

#### **Development Matters 2020 – Reception**

- Recognise some environments that are different to the one in which they live.
- Understand the effect of changing seasons on the natural world around them.

#### **ELG**

- Explore the natural world around them, making observations and drawing pictures of animals and 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