

**Things to include each half term:**

- 1 x active learning
- 1 x outdoor science lesson
- 3 x experiments/investigations
- 1 x child-led investigation
- 3 x examples of working scientifically

**Science display:**

- Pictures of different habitats
- Diagrams of various life cycles
- Pictures of different living things e.g. plants, insects, animals
- Photographs of children carrying out investigations
- Good examples of children's work

Scientific vocab

**Science Adventure**  
**Medium Term Planning**

**Lesson 1**

**Plant reproduction**

Children to complete KWL grid. Complete the first 2 columns (what do they already know, what do they want to find out).

Recap what the children learnt in Year 3 about the parts of a flower and their function. **Children move around the classroom to find the Parts of a Flower Information Cards.** Children use the information they find to complete a detailed diagram of the parts of a flower.

Recap meaning of the word pollination and discuss pollination by wind and animals. Children to sort explanations and pictures of pollination.

**Take photographs of plants in local area/outside area and sort based on features for pollination.**

Introduce children to sexual and asexual reproduction. Children complete card sorting activity.

**Lesson 2**

**Plant reproduction**

Show pictures of examples of things that have been cloned e.g. daffodils, star wars storm troopers, potatoes, bacteria splitting in two. Children to discuss what they have in common. (Identical copies) Recap sexual and asexual reproduction.

Explore a range of asexual and sexual plants and sort into two piles.

**Science Adventure**  
**Medium Term Planning**

Carry out plant cutting/artificial asexual reproduction investigation. Children to complete a scientific write up of their investigation e.g. Aims, Prediction, Method, Diagrams

Children to write a definition of the difference between asexual and sexual reproduction of plants.

**Lesson 3**

**Life cycle of insects**

Explore the local area for insects/go on a bug scavenger hunt. Use pooters to collect insects and take photographs. Then release insects back where they were found.

Recap meaning of metamorphosis. Introduce children to the terms complete metamorphosis and incomplete metamorphosis. Discuss what they think these mean. Watch video that explains the difference. Then create life cycle diagram to show complete metamorphosis (butterfly) and incomplete metamorphosis (grasshopper).

Children to carry out investigation by growing their own butterfly using a 'grow your own butterfly lab'. Children to complete scientific write up about their investigation and keep a diary of what happens to the eggs in their butterfly lab.

**Science Adventure**  
**Medium Term Planning**

**Lesson 4**

**Life cycle of amphibians**

Children to read information about Amphibians and then write a short definition of what an amphibian is as well as make notes about breeding.

Introduce children to the word metamorphosis and discuss what this word means. Show children images of a tadpole turning into a frog/watch video.

Children to sort life cycle pictures in chronological order.

Using life cycle pictures for support, children work in groups to make a 3d diagram/model of the life cycle of a frog. Children to also write an explanation about each stage of the frog life cycle using scientific vocabulary.

Each group to present their 3d model and explain the life cycle of a frog to their neighboring class.

**Lesson 5**

**Life cycle of birds**

Watch videos and look at diagrams of the life cycle of various birds.

Provide children with information about the life cycle of birds and get them to produce a detailed diagram explaining the life cycle of a bird.

**Science Adventure**  
**Medium Term Planning**

Recap life cycles that have been taught so far this half term. Discuss what the children notice is similar and different between the different life cycles.

Go through Powerpoint with the children to ensure they are aware of the similarities and differences. Children to then use information and sort into 2 columns (similar and different).

**Lesson 6**

**Life cycle of mammals**

Children move around the classroom and locate pictures of mammals and their offspring. At their tables children to match mammals with their offspring. Discuss how each mammal produces its offspring. Introduce the word monotreme- mammals that do not give birth to live offspring but lay eggs e.g. the duck-billed platypus.

Introduce the 3 types of mammals: placentals, marsupials and monotremes. Children to sort animal pictures and information into the 3 different groups of mammals.

Children to research the life cycle of a mammal of their choice. Then present their chosen life cycle using a method of their choice e.g. a drawing of a diagram, a 3d diagram, a song.

Year 5 – Summer 2

Living things and their habitats