

Lodge Farm Primary School- Knowledge Organiser



Science Topic: Living Things and their Habitats

Year: 5 Term: Spring 2

Key Knowledge/Content:

- Plants can reproduce sexually or asexually.
- Flowering plants have male and female sex organs and reproduce through seed dispersal.
- Life cycles show the various stages in the life of a living things' life.
- Amphibians go through metamorphosis where they change their physical form.

Scientist Focus:

David Attenborough (Nature TV Broadcaster)

Known for his numerous documentaries which educate viewers animals in their habitats including their life cycles and survival skills.

Links to:

Prior learning:

To know about different groups of animals and how their populations are being affected by human impact.

Future learning:

To learn about classifying living things using classification keys and how living things are adapted to their environments.

Key vocabulary with definition: Prior vocabulary:

- Environment- The surroundings or place where a living thing inhabits.
- Flowering plants- Plants which use flowers for reproduction
- Predator- An animal who uses other animals as their main food source.
- Germination- When a seed finds the right conditions and it bursts from a seed or bulb.
- Reproduction- When a living thing produces a similar version of itself.
- Embryo- An unborn baby after fertilisation.
- Fertilisation- When two cells fuse together.

New vocabulary:

- Sexual reproduction (plant)- .When opposite sex parts of the plant produce a new seed.
- Asexual reproduction (plants)- When an identical copy of the plant is made.
- Seed dispersal- When a plant ensures its seeds are spread as far as possible.
- Metamorphosis- A physical change some animals go through where they completely change form, happening mostly in amphibians and insects.
- Life cycle- A series of changes a living thing goes through during his life.

By the end of this unit

All children can: explain how flowering and non-flowering plants reproduce in different ways and identify the different stages in the life cycles of various living things.

Most children can: compare the ways that flowers can reproduce, either sexually and asexually, and **explain** the different life cycles of various living things.

Some children can: evaluate different methods of seed dispersal and **explain** how metamorphosis affects some life cycles of living things, including insects and amphibians.

Background understanding for teachers and parents:

This unit will look at how different plants reproduce, focusing on sexual and asexual reproduction. They will also identify and compare the different life cycles of living things, including looking at how metamorphosis affects some animals.

Curriculum Driver (one):

Knowledge of the World

Evidence outcome:

Explain how conditions around the world can affect different life cycles, such as weather and human impact.