Emscote Infant School Knowledge Organiser Year 2 Science Autumn Term

Living in Habitats

Science Knowledge Organiser: Living Things and their Habitats

I already know...

- ...that plants are **living** things that **grow**.
- ...to **look closely and record what I see** (pictures, simple lists, tallies).

Vocabulary

living – something that can carry out life processes (move, grow, reproduce, etc.).

dead – something that was once living but is not living now.

never been alive – something that has not ever been living (e.g. rock, plastic).

life processes – the things living things do to stay alive (move, grow, respond, respire, reproduce, get energy, get rid of waste).

habitat – a place where plants and animals live.

predator – an animal that hunts other animals for food.

food chain – shows how living things get energy from food, starting with a plant.

decomposer – an animal that eats dead plants/animals and helps break them down.

Key knowledge

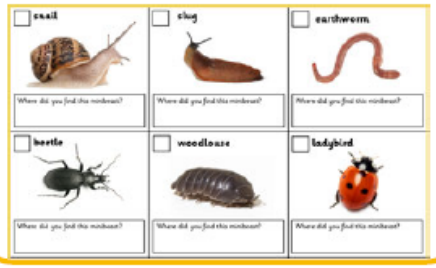
- All **living** things do certain **life processes** (take a look at the table below!).

Move	**Grow**	Gain **energy**	Get rid of **waste**
Respond	**Respire** (breathe)	**Reproduce**	

- A **habitat** is where plants and animals **live**, and it must be suitable because living things need **food, water, air and shelter**.
- In a habitat, living things **depend on each other**.
- **Food chains** always start with a **plant**, because plants get their energy from the **sunlight**. Then energy moves from what is eaten to the eater (e.g. grass → snail → bird)

Scientific enquiry

- I can **arrange** living things into **simple food chains** using arrows to show "is eaten by".
- I can **find, observe** and **group** minibeasts by what they look like.



Thinking questions

- How can you tell if something is living if it doesn't move very much (like a plant)?
- What would happen to animals in a habitat if there was no clean water?
- Why might a habitat be suitable for one animal but not for another?
- What might happen to a food chain if one organism was removed?

I should now be able to...

- ☐ Tell the difference between **living**, **dead**, and **never been alive** things.
- ☐ Explain what a **habitat** is.
- ☐ Name some plants/animals that live in a **seaside habitat**.
- ☐ Use the words **herbivore, carnivore, omnivore** correctly.
- ☐ Build and talk through a simple **food chain** using arrows.

Emscote Infant School Knowledge Organiser Year 2 Science Autumn Term

Growth and Survival

Science Knowledge Organiser: Animals, including Humans

I already know...

- ...that animals are living things and I can name some common animals.
- ...how to use simple charts/tallies to record what we find out.

Vocabulary

offspring – a baby animal.

adult – a fully grown animal.

reproduce – to have babies.

life cycle – the stages a living thing goes through as it grows.

egg – what some animals lay; the baby grows inside and then hatches out.

live young – a baby animal born from its mother (not from an egg).

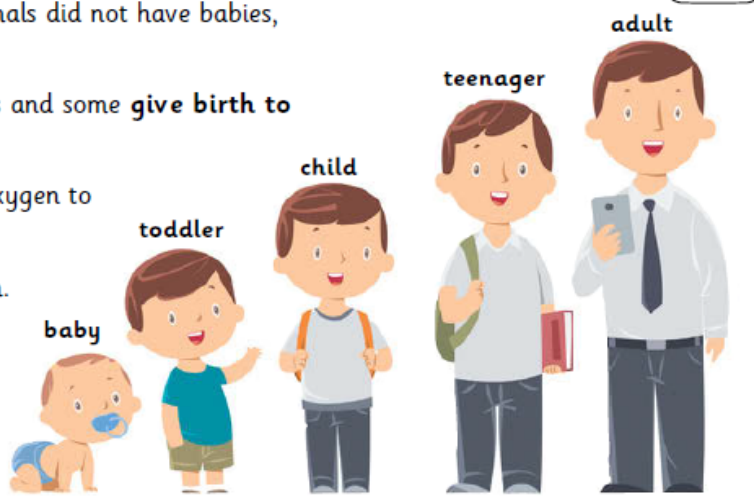
pregnant / gestation – when a baby is growing inside its mother; gestation is how long this lasts.

habitat / environment – the place an animal lives that provides what it needs (food, water, air, shelter).

oxygen – a gas in air (and in water) that animals need to stay alive.

Key knowledge

- All animals, including humans, **have offspring**. If animals did not have babies, that kind of animal could **die out (become extinct)**.
- Animals have babies in two main ways: some **lay eggs** and some **give birth to live young**.
- All animals (including humans) need food, water and oxygen to survive. Food gives energy to **move and grow**.
- Animals need to live in an environment that **suits** them. If an animal is in the wrong place, it may not be able to find the right **food, water, oxygen or shelter**.
- Humans stay healthier when they eat a **variety** of foods from different **food groups** (a balanced diet).



Scientific enquiry

We can **sort and record** animals into groups (e.g. animals that lay eggs / give birth) to help answer questions.

Thinking questions

- Do all baby animals look like their parents? Why might some look different?
- Why do some animals lay lots of eggs, but others only have one baby at a time?
- Do all animals need the same type of food? Why/why not?
- What do you think would happen if a cow and a fish swapped homes?

I should now be able to...

- ☐ match some baby animals to their parents (e.g. calf–cow, chick–chicken).
- ☐ sort animals into lay eggs or give birth to live young.
- ☐ say the three basic needs for survival.
- ☐ explain why different habitats suit different animals.
- ☐ measure and record a result neatly (e.g. height in cm) to answer a question.