



**Living Things and Their Habitats (Biology)**

*Use half/full lesson to recap objectives from previous cycle.*

**Prior learning in Year ½ Cycle B (year 1 objectives children not yet covered in cycle will benefit from the recap lesson as a pre-teach):**

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.

**Key Vocabulary**

habitat  
micro-habitat  
living  
dead  
never alive  
producer  
prey  
predator  
food chain  
alive

SC1: National Curriculum Statements to cover this unit

Explore and compare the differences between things that are living, dead, and things that have never been alive  
Identify that most living things live in habitats to which they are suited and describe how different habitats

SC3: Understanding the world ideas to cover this unit

Explore the school grounds micro-habitats  
Compare living things and how they are suited to different habitats (food chains) as the year progresses and therefore introduces more breadth

**Lesson Sequence (based on 6 lessons per half term but as it is over a full term you can spend two lessons on each stage, perhaps one can be practical and the other can be in books)**

**Lesson 1 and 2** Living, Dead and Never Alive- allow children to sort without any input then after have pictures of different things in all categories and sort practically. Move to lesson where children explain why something is living, dead or never alive.

**Lesson 3 and 4** Local Habitats- Look around the playground and the field. Children draw pictures on the playground with chalk of what animals they found in the local habitat. Move to drawing and labelling in class.

**Lesson 5 and 6** Microhabitats- Explore science garden on hunt for microhabitats. Zoom in on the tiny world of these habitats and take pictures with the IPADs. Consider and draw conclusions about what lives in these microhabitats and why. Children label the pictures with their conclusions from discussions had outside. design a bug hotel! Incorporate many different microhabitats to encourage a variety of guests.

**Lesson 7 and 8** World Habitats- Explore different world habitats – have pictures of different world habitats and act out how it would feel to live in those different places. Next lesson match animals to different world habitats.

**Lesson 9 and 10** Identify How Animals are Suited to their Habitat- Animals have escaped the zoo and the zoo keeper needs your help! Children match animals to their names, description and habitat on a worksheet.

**Lesson 11 and 12** Food Chains- Construct a simple food chain that includes humans (e.g. grass, cow, human). Drama activity (children roleplay food chains to act out being the prey, predator and consumer) move to a written example in books. Practical lesson first.

SC2: Working Scientifically areas to cover this unit

Identifying and classifying  
Observing closely, using simple equipment  
Using their observations and ideas to suggest answers to questions  
Gathering and recording data to help in answering questions



**Plants (Biology)**

**Prior learning in EYFS:**

Plant seeds and care for growing plants.

Understand the key features of the life cycle of a plant and an animal.

Begin to understand the need to respect and care for the natural environment and all living things.

**Prior learning in Year ½ Cycle B (year 1 objectives children not yet covered in cycle will benefit from the recap lesson as a pre-teach):**

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.

**Key Vocabulary**

Germination - When the conditions are right, the seed soaks up water and swells, and the tiny new plant bursts out of its shell. This is called germination.

Shoot – Part of a plant that grows upwards from the seed or plant to find sunlight.

Seed Dispersal - When the seeds move away from the parent plant. They can drop to the ground in the plant’s fruit or be moved by the wind or animals.

Temperature - How warm or cold something or somewhere is. Some plants like cooler temperatures and some like warmer temperatures.

Sunlight - All plants need light from the sun to grow well. Some plants need lots of sunlight. Some plants only need a little sunlight.

Water – Is a liquid which plants need in order to grow.

**SC1: National Curriculum Statements to cover this unit**

Observe and describe how seeds and bulbs grow into mature plants.

Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

**SC2: Working Scientifically areas to cover this unit**

Observe and record with some accuracy the growth of a variety of plants.

Set up a simple comparative test to show that plants need light and water to stay healthy.

**Lesson Sequence (based on 6 lessons add in more if required during the half term).**

L1: What is a seed? What is a bulb? What do plants need to grow?

L2: How plants stay healthy (set up a simple investigation see PIXL for ideas).

L3: Observe how seeds and bulbs grow into mature plants (lifecycle of a plant).

L4: Look at how plants disperse their seeds (link back to this part of the lifecycle).

L5: Compare how plants grow in different environments – compare with plants found in the science garden (hot, cold, humid, dry and wet).

L6: Design a plant for a specific habitat – how will the plant survive in that habitat (link to Living Things from Autumn 1 and 2).



**Use of Everyday Materials (Physics)**

**Prior learning in Year 1/2 Cycle B (year 1 objectives children not yet covered in cycle will benefit from the recap lesson as a pre-teach):**

- Distinguish between an object and the material from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.

**SC1: National Curriculum Statements to cover this unit**

- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

**SC2: Working Scientifically areas to cover this unit**

- Compare the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs).
- Observe closely, identify and classify the uses of different materials, and record their observations.

**Key Vocabulary**

Materials- what objects are made from

Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard (Children to match these to real-life pictures).

Properties- this is what a material is like and how it behaves

Hard/soft

Dull/shiny

Smooth-rough

Stretch- something that can go wider or longer without breaking

Waterproof- it is resistant to water

**SC3: Understanding the world ideas to cover this unit**

- Find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.

**Lesson Sequence (based on 6 lessons add in more if required during the half term)**

L1: Identify and discuss (photograph evidence in Shared Area) the use of everyday different materials (hands on lesson using objects they can feel and discuss).

L2: Identify and discuss the use of everyday different materials (record properties of materials on a chart).

L3: To identify and compare the suitability of a variety of everyday materials (kitchen towel investigation/any suitable investigation).

L4- Test the properties of materials for particular uses (investigation lessons with different activities around the room e.g. which material is the most stretchy for Elastigirl? Which is the most waterproof for a rain coat? ( Video evidence for Shared Area).

L5- Study scientific inventors John Dunlop, Charles Macintosh or John McAdam

L6- Use knowledge of inventors to design own material for a specific purpose (HA writing opportunity).



**Animals including humans (Biology)**

*Use half/full lesson to recap objectives from previous cycle.*

**Prior learning in Year ½ Cycle B (year 1 objectives children not yet covered in cycle will benefit from the recap lesson as a pre-teach):**

- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

**Key Vocabulary**

Offspring – the child of an animal

Growth- when something increases in size

Survive – staying alive

Exercise- a physical activity to stay healthy

Healthy

Unhealthy

SC1: National Curriculum Statements to cover this unit

- Notice that animals, including humans, have offspring which grow into adults.
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

SC2: Working Scientifically areas to cover this unit

- Observe, through video or first-hand observation and measurement, how different animals, including humans, grow.
- Ask questions about what things animals need for survival and what humans need to stay healthy.
- Suggest ways to find answers to their questions.

SC3: Understanding the world ideas to cover this unit

- Can they do a weekly exercise diary at home?
- Discuss the effect of Joe Wicks in lockdown.

Lesson 1 – match, sort and group young animals to their adults including their names (PIXL lesson available)

Lesson 2-using knowledge from previous lesson, children to draw their own cycle of a human and animal showing how they grow into adults.

Lesson 3- Show what they know about survival of a baby/animal by creating a parenting/pet owners' guide

Lesson 4- Investigation – set up caterpillar cocoon (one for year 1 and one for year 2- check with resources) fill in investigation and monitor over half term.

Lesson 5- - sort healthy and unhealthy food (don't go through Eat well guide as covered in PSE and 3/4 science).

Lesson 6- activity lesson- children to go outside and have circuit made with exercise stations using things from the classroom.



**Working Scientifically**

**Prior learning:**

Children this year have covered the following units: living things and their habitats, plants, use of everyday materials and animals including humans (please see previous medium term plans).

Children will apply knowledge learnt this year to work scientifically in this unit. This is a good opportunity to recap previous vocabulary and assess sticky knowledge.

**SC2: Working Scientifically areas to cover this unit**

- Ask simple questions.
- Recognise there is more than one correct answer.
- Observe closely using simple equipment.
- Performing simple tests.
- Identify and classify.
- Apply observations to suggest answers.
- Begin to use a simple branching key.
- Gather and record data to help answer questions.

**SC3: Understanding the world ideas to cover this unit**

-

**Key Vocabulary**

Observe –

Record –

Data –

**Lesson Sequence (based on 6 lessons add in more if required during the half term).**