

Subject: Science Year Group: Yea			
Links to previous work/Remember when	In the year 1 children will have studied the animals and plants that are found in the locality of the school and looked at differences between omnivores, carnivores and herbivores.		
	<ul> <li>Working Scientifically</li> <li>Asking more relevant questions and used different scientific enquiries to answer them.</li> <li>Set up some comparative and fair tests.</li> <li>Made careful observations, and where appropriate taken measurements.</li> <li>Identify and classify (KS1)</li> <li>Using their observations to suggest answers to questions.</li> </ul>		
	Year 2 Key Skills to be taught		
Autumn 1 2024  What the children should know at the end of this series of lessons	<ul> <li>Explore and compare the differences between things that are living, dead, and things that have never been alive.</li> <li>Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</li> <li>Identify and name a variety of plants and animals in their habitats, including microhabitats.</li> <li>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</li> <li>Working Scientifically</li> <li>Set up simple practical enquiries, comparative and fair tests.</li> <li>Make systematic and careful observations and, where appropriate, take accurate measurements using standard</li> </ul>		
	<ul> <li>units, using a range of equipment, including thermometers and data loggers.</li> <li>Gather, record, classify and present data in a variety of ways to help answer questions.</li> <li>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>Report on findings from enquiries, including oral.</li> </ul>		

#### Vocabulary

Alive, dead, living, habitat, microhabitat, conditions, adapted, food chain, omnivore, herbivore, carnivore, sensitivity, growth, respiration, movement, excretion, reproduction, nutrition, mountain, polar, jungle, sea, desert, savannah, features, suited, eaten.



Sequence	Learning	Suggested lesson outline
of	Objectives/Outcomes	
learning		
Explorify could be used at the start of the unit as a	Learning Objective: I can explore and compare the differences between things that are living, dead, and things that have never been	Recap – What do the words omnivore, herbivore and carnivore mean? Can you remember any of the differences between them from our autumn term work?
stimulus.	alive.  Key Knowledge: Children can use MRS GREN to identify the seven things all living things can do. They can then use these seven life processes to identify with certainty what is alive, what is dead and what	MRS GREN Movement, respiration, sensitivity, growth, reproduce, excretion, nutrition  Explore carefully with the children what each of these terms mean.  Children complete a sorting activity correctly sorting pictures into living and never alive. Children go on to write their own definitions of living, dead and never alive. Encourage the use of MRS GREN
	was never alive.  Enquiry Type: Identify and classify.	where appropriate.
2	Learning Objective: I can identify and name a variety of plants and animals in their habitats, including microhabitats.	Recap – Can you remember MRS GREN? What did we use it for last week?  Observe closely the microhabitats
	Key Knowledge: A habitat is where a plant or an animal lives? A microhabitat is a small habitat. There are many different types of microhabitats around our school.	around our school In this lesson the children will go on a walk around the school to look at the different microhabitats they can find.  Children record a list of the different habitats they find; they plot the microhabitats on a map of the school; draw their favourite microhabitat and describe the microhabitat they have
	Enquiry Type: Identify and classify. Observe closely, using simple equipment.	drawn.
3 IPad lesson or information	Learning Objective: I can identify and name a variety of plants and	Recap – What microhabitats did we find last week? What was living there?
books	animals in their habitats.	Plants, animals and their habitats



#### **Key Knowledge:**

Bigger habitats can be quite different from each other - e.g. mountain and jungle. The plants and animals which live in a habitat are suited to the conditions they find there.

#### **Enquiry Type:**

Gather, record, classify and present data in a variety of ways to help answer questions. Report on findings from enquiries, including oral.

4
Requires
live
woodlice

#### **Learning Objective:**

I can observe closely and use my observations to answer questions.

#### Key Knowledge:

Woodlice prefer damp, dark places. Children should be able to deduce this based on the results of their investigation.

#### **Enquiry Type:**

Make systematic and careful observations - linked to video description of water cycle. Set up simple practical enquiries, comparative and fair tests.

5 Learning Objective:

I can identify that most living things live in a habitat to which they are suited.

#### **Key Knowledge:**

Animals and plants have different features which

In this lesson the children will research the types of plants and animals which live in a particular biome or habitat. You could stick to mountain,polar, jungle, sea, desert and savannah, or introduce others should you wish. The outcome here is that the children can **name** some plants and animals which live there. They do not need to say anything about how animals and plants are adapted to live there.

Children record their research identifying some adjectives to describe their habitat, and a list of plants and animals which live there. They can then draw a labelled picture of their habitat.

**Recap –** Which habitats can you remember from last week? What lived there? What microhabitats did we find in the school grounds?

#### What conditions do woodlice prefer?

We can use this simple investigation and observe closely where the woodlice go on the tray. Our observations can then help us to determine what conditions they prefer. Discuss the handling of live creatures and what we should do with them after our little test.

Children prepare for the test by splitting a plastic tray into four sections - dark and dry, dark and damp, bright and dry and bright and damp. They collect woodlice using paint brushes and petri dishes before placing the woodlice in the test tray. Children record their findings, stating how they know.

**Recap –** Which animals did we find on the savannah? Why do they live there?

# How plants and animals are suited to their environment

In this lesson the children will have time to discuss the features of certain plants and animals that make them suited to life in a particular habitat. They will also

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	make them suited to certain environments. Without these features, life would be very hard in certain habitats.  Enquiry Type: Record findings using simple scientific language.	consider the human race and how they may or may not be adopted  Most children state how a given animal is suited to life in a particular habitat. Some children select their own animal and say what features it has which make it suited to life in a particular habitat.
6	Learning Objective: I can describe how animals obtain their food from plants and other animals, understanding that this can be recorded as a simple food chain.  Key Knowledge: Nutrition is when we eat food to give us energy. Different animals have different diets. Scientists use food chains to show what different animals eat in a habitat.  Enquiry Type:	Recap – How do we know if something is alive?  Simple food chains In this lesson the children will be introduced to a simple food chain for the first time. They should have plenty of time to discuss the idea of a simple food chain, where there is only one organism at each stage. They do not need to know the terms for each organism (e.g. consumer) in the chain. They will need to use the knowledge they have gained about what plants and animals are found in particular habitats to do this.  Children use the given picture cards to create a couple of examples of a simple
	Make systematic and careful observations; gather, record and present findings;	food chain. They could then go on and construct a simple food chain for a different habitat.
7	Learning Objective: To demonstrate what has been learnt about living things and their habitats.	ASSESSMENT LESSON  Children complete short formative assessment.

#### **Learning Outcome/product**

During this unit of work, children will learn about living things and their habitats. They will start the unit of work looking at whether things are living, dead or have never been alive. They will then look at microhabitats and larger habitats identifying some animals that may live there. Children will then conduct an investigation to see which type of conditions woodlice prefer in their habitat. After that they will look at how living things are adapted to their environment. Finally they will look at food chains within habitats.

Assessment records	List only those children who have not achieved the expected outcomes.