Amblecote Primary School—Knowledge Organisers

Phase: 3/4	Subject: Science	Focus: Habitats & Living Things	Term: Autumn 1

What I should already know?

I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
I can talk about the differences between things that are living, dead and things that have never been alive.
I know that animals, including humans, have offspring which grow into adults.

Vocabulary

Life processes	The things living things do to stay alive, They move, breathe, sense, grow, reproduce, excrete and get their energy from food.
Respiration	A process where plants and animals use oxygen gas from the air to help turn their food into energy.
Sensitivity	The way living things react to changes in their environment.
Reproduction	The process through which young are produced.
Excretion	The process by which living things get rid of waste.
Nutrition	The process of obtaining food to provide living things with energy to live and stay healthy.
Habitat	The specific area or place in which particular animals or plants may live.
Environment	An environment contains many habitats and these include areas where there are both living and non-living things.
Endangered species	A plant or animal where there are not many of their species left and scientists are concerned that the species may become extinct.
Extinct	When a species has no more members alive on the planet, it is extinct.
Classification	This is where plants or animals are placed into groups according to their similarities.
Vertebrates	Animals with a backbone.
Invertebrates	Animals without a backbone.
Specimen	A particular plant or animal that scientists study to find out about its species.
Characteristics	The distinguishing features or qualities that are specific to a species.
Food chain	A food chain shows how each animal gets its food. Food chains are once of the ways that living things depend on each other to stay alive.
Food sources	This is the place a living thing's food comes from.
Microhabitat	A microhabitat is a very small habitat in places

By the end of the unit I should know...

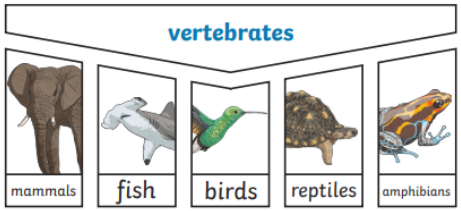
- That living things can be grouped in a variety of ways.
- That I can use a classification key to help group, identify and name a variety of living things.
- That environments can change and that this can sometimes pose dangers to living things.

Knowledge

Life Processes

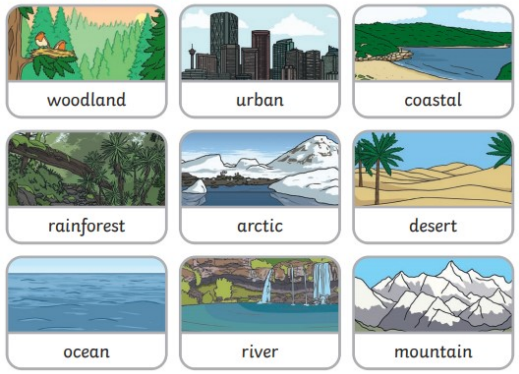
To stay alive and healthy, all living things need certain conditions that let them carry out the seven **life processes**:

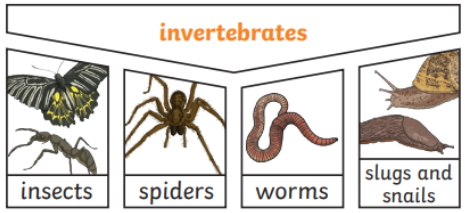
Movement
Respiration
Sensitivity
Growth
Reproduction
Excretion
Nutrition



Vertebrates can be separated into five broad groups.

Examples of **habitats**:





You could sort **invertebrates** you might see around school in different ways, such as in this example. The vast majority of living things on the planet are **invertebrates**.

Changes to an **environment** can be natural or caused by humans. Changes to an **environment** can have positive as well as negative effects. Here are some examples of things that can change an **environment**.

Natural
- earthquakes
- storms
- floods
- droughts
- wildfires
- the seasons

Human-Made
- deforestation
- pollution
- urbanisation
- the introduction of new animal or plant species to an **environment**
- creating new nature reserves

Plants and animals rely on the **environment** to give them everything they need. Therefore, when **habitats** change, it can be very dangerous to the plants and animals that live there.

Animals can be grouped in lots of different ways based upon their **characteristics**.

Question 1 - What is an invertebrate?	Start of Unit	End of Unit
An animal with a backbone.		
An animal without a backbone.		
An animal that swims in the sea.		
An animal that flies.		
Don't know		

Question 2 - What is a vertebrate>?	Start of Unit	End of Unit
An animal with a backbone.		
An animal without a backbone.		
An animal that swims in the sea.		
An animal that flies.		
Don't know		

Question 3 - Which of these are examples of vertebrates?	Start of Unit	End of Unit
Fish		
Mammals		
Birds		
insects		
Don't know		

Question 4—Which of these are examples of invertebrates?	Start of Unit	End of Unit
Fish		
Mammals		
arachnids		
insects		
Don't know		

Question 5 - What 7 life processes do all living things do?
Start of unit:
End of unit:

Question 6— Name as many different habitats as you can?
Start of unit:
End of unit:

Question 7— List some causes of environment changes?
Start of unit:
End of unit:

What I have enjoyed learning in this science topic?

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