

Year 4 Knowledge Organiser

Science- Living Things and Their Habitats



Name: _____

Class: _____

Pre Knowledge quiz

Life Processes

1. Fill in the missing life processes:

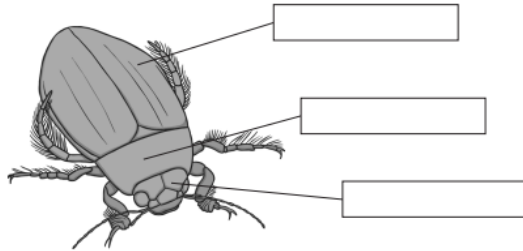
| |
|--------------|
| M |
| R |
| Sensitivity |
| G |
| Reproduction |
| E |
| Nutrition |

Invertebrates

5. What is an invertebrate?

.....

6. Label the three main parts of an insect's body:



Classifying

2. What is a vertebrate?

.....

3. Draw lines to match the vertebrate to its type:

| Vertebrate |
|------------|
| shark |
| elephant |
| snake |
| frog |
| robin |

| Type |
|-----------|
| mammal |
| amphibian |
| bird |
| reptile |
| fish |

4. Name a characteristic of:

a) An amphibian

.....

b) A mammal

.....

Local Habitat and Environmental Changes

When developers build a new housing estate where some fields used to be, what are the problems or dangers caused to wildlife?

.....

Litter and pollution in the sea is a danger to wildlife, what can be done to help?

.....

Why do you think we are now seeing more urban foxes roaming in places where there is housing?

.....

...What are most of the changes to habitats caused by?

.....

Think about endangered species:

a) What does endangered mean?

.....

b) What does extinct mean?

.....

c) Give an example of an endangered species and why it is endangered.

.....

d) Give an example of what can be done to save an animal from extinction.

.....

Key Vocabulary

| | |
|---------------------------|--|
| organisms | This is another word that can be used to mean 'living things'. |
| life processes | The things living things do to stay alive. |
| 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 products. |
| nutrition | Food which provides 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 . |

Life Processes

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

| | |
|--------------------|---------------------|
| | Growth |
| Movement | Reproduction |
| Respiration | Excretion |
| Sensitivity | Nutrition |



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

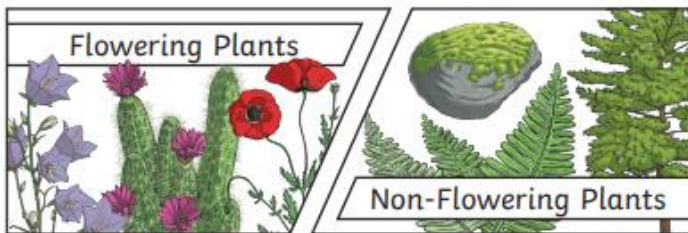
- deforestation
- pollution
- urbanisation
- the introduction of new animal or plant species to an **environment**
- creating new nature reserves

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.

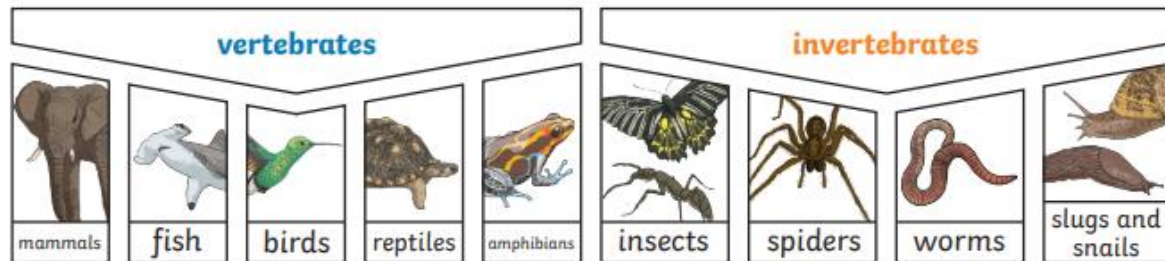
Key Vocabulary

| | |
|------------------------|---|
| 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. |

Plants can be sorted into many different groups. For example:



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

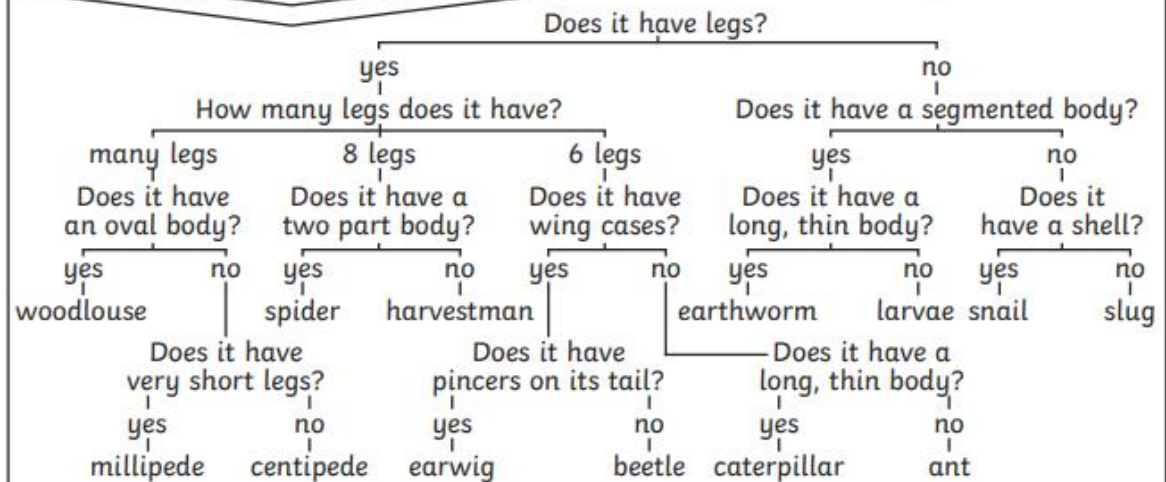


Vertebrates can be separated into five broad groups.

You can use **classification** keys to help group, identify and name a variety of living things. Here is an example of a **classification** key:

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**.

Invertebrate Classification Key



My Previous Knowledge...

New knowledge ...

Lesson
1

-
-
-

Lesson
2

-
-
-

Lesson
3

-
-
-

| | |
|-------------|---|
| Lesson 4 | <ul style="list-style-type: none">••• |
| Lesson 5 | <ul style="list-style-type: none">••• |
| Lesson 6 | <ul style="list-style-type: none">••• |
| Lesson 7 | <ul style="list-style-type: none">••• |

Post Knowledge quiz

Life Processes

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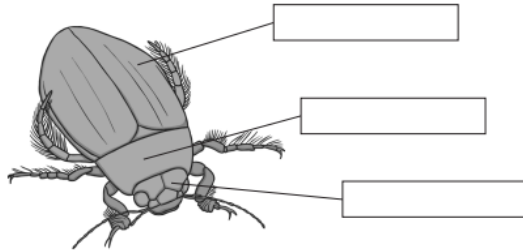
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