



Year 4 – Living things and their habitats



A habitat is a natural environment for any type of living organism.

In 2018, scientists discovered 230 new species of animals and plants on earth.






Vital Vocabulary

Key Word	Definition
vertebrate	animals with backbones
invertebrate	a cold-blooded creature with no backbone
organism	a living thing
classify	arranging (living things) into classes based on shared characteristics

Classifying animals





The features of each **vertebrate** group

Type	Food	Body	Blood
Mammal 	Can be carnivorous, omnivorous or herbivorous	<ul style="list-style-type: none"> Hair and fur Four-chambered hearts Females give milk Have teeth Vertebrates 	Warm-Blooded
Bird 	Can be carnivorous, omnivorous or herbivorous	<ul style="list-style-type: none"> Feathers Wings Beaks Lays eggs Vertebrates 	Warm-Blooded
Fish 	Mostly carnivorous	<ul style="list-style-type: none"> Breathe with gills Scales Fins Can swim Most are vertebrates 	Cold-Blooded
Amphibian 	Can be carnivorous or herbivorous	<ul style="list-style-type: none"> Live in water or land Can breathe through gills or lungs Vertebrates 	Cold-Blooded
Reptile 	Can be carnivores or omnivorous	<ul style="list-style-type: none"> Most lay eggs Has scales Live in water or land Vertebrates 	Cold-Blooded

Using keys to identify organisms

This is a **classification key** that you could use to help you identify **invertebrates** in a local habitat.




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graph TD
    Q1[Does it have legs?] -- yes --> Q2[How many legs does it have?]
    Q1 -- no --> Q3[Does it have a segmented body?]
    
    Q2 -- many legs --> W[woodlouse]
    Q2 -- 8 legs --> S[spider]
    Q2 -- 6 legs --> H[harvestman]
    
    Q3 -- yes --> E[earthworm]
    Q3 -- no --> Q4[Does it have a long, thin body?]
    
    Q4 -- yes --> L[larvae]
    Q4 -- no --> Q5[Does it have a shell?]
    
    Q5 -- yes --> S2[snail]
    Q5 -- no --> Q6[Does it have a very short legs?]
    
    Q6 -- yes --> M[millipede]
    Q6 -- no --> Q7[Does it have pincers on its tail?]
    
    Q7 -- yes --> B[beetle]
    Q7 -- no --> Q8[Does it have a long, thin body?]
    
    Q8 -- yes --> C[caterpillar]
    Q8 -- no --> A[ant]
  
```

Venn diagrams

Venn diagrams can be used to show common characteristics of different **organisms**.




Characteristics shown in the Venn diagram:

- Snake: Lays eggs
- Penguin: Has two legs
- Dragonfly: Can fly
- Butterfly: Can fly
- Kangaroo: Has two legs
- Human: Has two legs
- Duck: Can fly
- Parrot: Can fly
- Bat: Can fly

Deforestation

Deforestation is when humans cut down or burn down large areas of forests to make space for farmland or to use the trees as fuel.



Effects of deforestation

- Habitat loss (animals and plants lose their homes)
- Soil erosion (which can cause floods and landslides)
- Droughts (when an area becomes too dry due or lack of rain)
- Climate change

Changes to an environment

An **environment** contains many **habitats** and organisms in these **habitats** rely on the **environment** to give them everything they need. Therefore, changes to an **environment** affects the organisms that live there.

natural changes	man-made changes
drought	pollution
storms	deforestation
seasons	urbanisation
wildfires	litter
earthquakes	creation of nature reserves



This is **René Ngongo**, a Congolese biologist and environmentalist, who works hard to raise awareness about preserving forest habitats and preventing deforestation.