

# Fens Primary School Knowledge Organiser



**Science Focus:**

Living things and their habitats

**Year 4**

**Term: 1A**

## Grouping living things

Animals can be put into one of two groups  
Vertebrates or Invertebrates

## Vertebrates

Vertebrates  
Are animals with a backbone

There are 5 ways  
Vertebrates can be grouped

Fish  
Amphibians  
Reptiles  
Birds  
Mammals

How to spot a Fish

- Breathes with gills/lays eggs in water/ has fins and scales/its body temperature changes

How to spot an Amphibian

- Born with gills then develops lungs/ lays eggs in water/damp skin/body temperature changes

How to spot a Reptile

- Breathes with lungs/lays eggs on land/ dry scaly skin/body temperature changes

How to spot a Bird

- Breathes with lungs/lays eggs with hard shells/has feathers/steady body temperature

How to spot a Mammal

- Breathes with lungs/babies are born live/ body hair or fur/steady body temperature/ feeds babies milk

## Invertebrates

Invertebrates  
Invertebrates are animals with no backbones.

There are 3 ways  
Invertebrates can be grouped

Insects  
Arachnids  
Molluscs

How to spot an Insect

- 3 body sections/6 legs

How to spot an Arachnid

- 2 body sections/8 legs

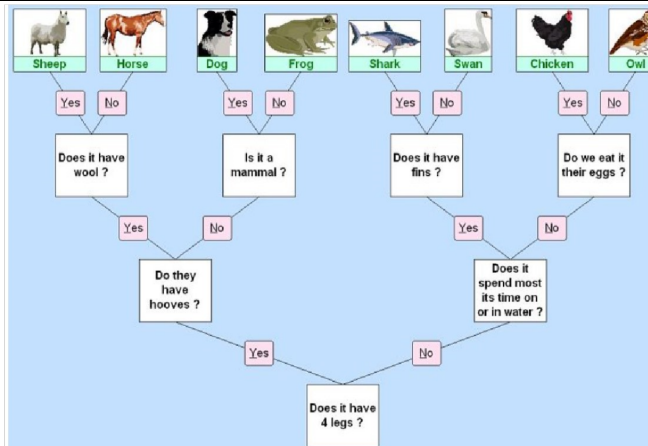
How to spot a Mollusc

- Slimy foot/Often have a shell

## All organisms are made up of one or more cells

Cells  
Organisms are organised as a result of their cells. Animals and plants have different cells.

## Diagrams and Symbols



## What? (Key Vocabulary)

Cells	The basic part of all living things
Gills	Slits on the side of a fish to help it breathe.
Fins	Part of a fish that helps it move and balance.
Scales	Thin plates protecting the skin of fish or reptiles.
Lungs	Spongy bags in the chest used when breathing.
Body Temperature	How hot or cold the inside of an animals body is.
Section	A part of something.
Deciduous	A tree that loses its leaves in Autumn and grows new ones in Spring.
Coniferous (Evergreen)	A plant or tree that keeps its leaves all year.
Algae	A small plant that is found in water. It has no stems, roots or leaves.

## Plant Groups

Plants can be put into one of two groups  
Flowering plants or Non-Flowering plants

## Flowering Plants

Flowering plants are made of four groups

- Grasses/Cereals/Garden Shrubs/ Deciduous Trees (Lose their leaves)

## Non-Flowering Plants

Non-Flowering plants are made of three groups

- Algae/Coniferous (Evergreen) Trees/ Ferns

## Changing Habitats

What is a habitat?  
Where a plant or animals lives.

How can habitats change?  
The seasons can change habitats with the weather and plant life in the habitat changing.

Humans can change habitats, for example by dropping litter or chopping down trees.

## Classifying Animals and Plants

What is classifying?  
Grouping things that are similar.

How can we group?  
We can create branched diagrams to help us. **Have a look at the diagram.**

## Working as a Scientist

- Locate a range of habitats on the school site.
- Classify the animals and plants on the school site. (Locate one type of each animal and plant)
- Design own keys and branch diagrams to identify animals and plants.
- Create an online database of animals and plants on the school site (Invite other users of the school grounds to update with sightings) = height?