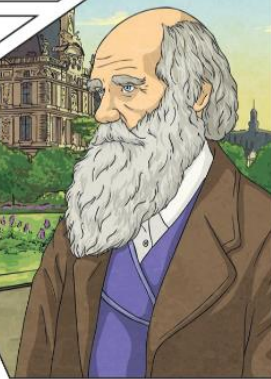# Science – Classification

Concept – Understand reproduction and how living things have adapted over time

Vocabulary

- **Characteristics**: Special qualities or appearances that make an individual.

- **Classify**: To sort things into different groups.

- **Key**: A key is used to identify a living thing or decide which group it belongs to by answering 'yes' or 'no' questions.

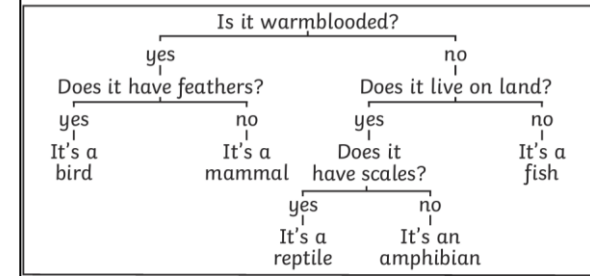- **Species**: A group of animals that can reproduce to produce fertile offspring.

Domain: Eukarya	jackal, clownfish, cat, dog, ladybird, daisy, rabbit, fox
Kingdom: Animalia	jackal, clownfish, cat, dog, ladybird, rabbit, fox
Phylum: Chordata	jackal, clownfish, cat, dog, rabbit, fox
Class: Mammalia	jackal, cat, dog, rabbit, fox
Order: Carnivora	jackal, cat, dog, fox
Family: Canidae	jackal, dog, fox
Genus: Canis	jackal, dog
Species: Lupus	dog

Each group allows scientists to observe and understand the **characteristics** of living things more clearly. They group similar things together then split the groups again and again based on their differences.

Scientists, called Taxonomists, sort and group living things according to their similarities and differences.

Is it warmblooded?
- yes → Does it have feathers?
  - yes → It's a bird
  - no → It's a mammal
- no → Does it live on land?
  - yes → Does it have scales?
    - yes → It's a reptile
    - no → It's an amphibian
  - no → It's a fish

Brown Bear		Channel Catfish	
Kingdom:	Animalia	Kingdom:	Animalia
Phylum:	Chordata	Phylum:	Chordata
Class:	Mammalia	Class:	Actinopterygii
Order:	Carnivora	Order:	Siluriformes
Family:	Ursidae	Family:	Ictaluridae
Genus:	Ursus	Genus:	Ictalurus
Species:	Ursus arctos	Species:	Ictalurus punctatus

Microorganisms are viruses, bacteria, moulds and yeast. Some animals (dust mites) and plants (phytoplankton) are also microorganisms.

Helpful Microbes	Harmful Microbes
Bacteria – cheese	Bacteria – salmonella is a bacterium that can lead to food poisoning
Yeast – wine	Virus – chicken pox and flu are examples of viral diseases
Bacteria – yoghurt	Fungi – athlete's foot
Yeast – bread dough	Bacteria – plaque
Penicillium fungi - antibiotics	Fungi - mould