



**Driving Question:** See Ancient Greece

**Power Skill:** See Ancient Greece

### National Curriculum Learning Objectives

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- recognise that environments can change and that this can sometimes pose dangers to living things

### Key Vocabulary

classify	vertebrate	invertebrate	classify	mammal
bird	fish	reptile	amphibian	habitat

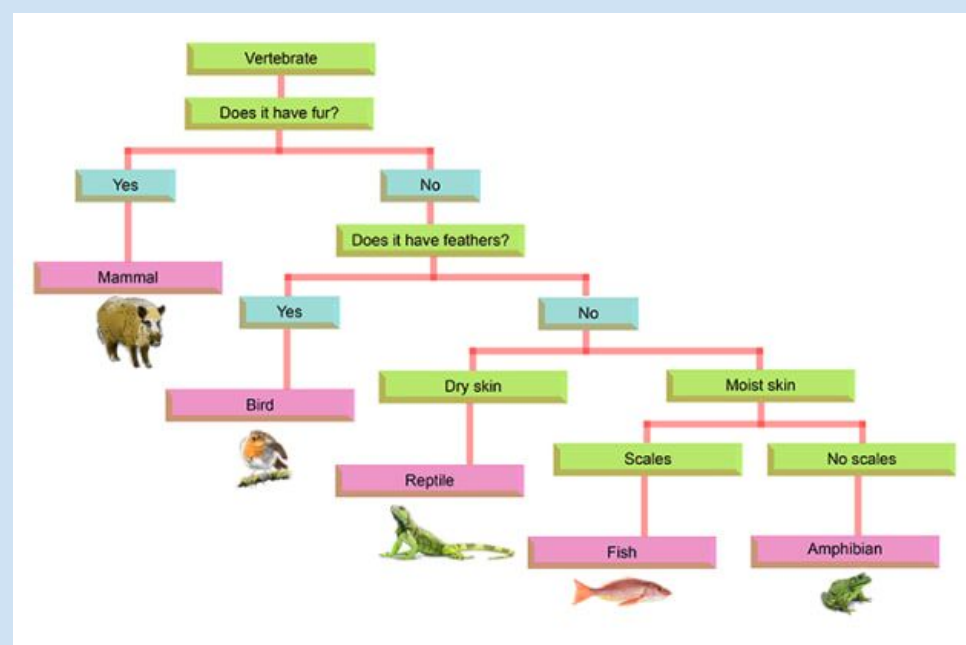
## Key Learning

### Classification

Classification is the method used by scientists to order living organisms into groups by characteristics they have in common. Within each group, there are more specific classification groups until you can, eventually, classify/name an individual organism.

### Classifying Vertebrates (have a backbone):

- Fish: Fish are animals that live in the water. They have gills that allow them to breathe underwater.
- Birds: Birds are animals that have feathers, wings, and lay eggs. Many, but not all, birds can fly.
- Mammals: Mammals are warm-blooded animals that feed their young with milk and have fur or hair.
- Amphibians: Amphibians are cold-blooded animals. They start out their lives living in the water with gills just like fish. Later, they develop lungs and can move to dry land.
- Reptiles: Reptiles are cold-blooded animals which lay eggs. Their skin is covered with hard and dry scales.



### Classifying Invertebrates (no backbone):

Invertebrates do not have a skeleton inside their bodies. They include:

- Molluscs (squid, snails, slugs, octopuses, oysters etc)
- Crustaceans (crabs, lobster, shrimp etc)
- Insects (grasshoppers, dragonfly, ants, butterfly, praying mantis etc)
- Arachnids (spiders, scorpions etc)

### Thinking Point

Why do you think it is useful to classify animals?



### Explore and Investigate

Use classification keys to identify insects found in school grounds/on a field trip.

### Resources:

Insect pooters

## Key Learning

### Impact of humans on the Earth

#### Humans' negative impact:

- **Rising population:** The rising population of humans means that more wild space is being flattened and built on to create more housing, factories, shopping centres, wider roads and more space for farming. By destroying the wild space, we are destroying the habitats of the local wildlife. If this wildlife is unable to find a new habitat, it will die.
- **Littering:** The rise in plastic and synthetic packaging has had a negative impact on wildlife across the world. Animal habitats are being ruined by vast amounts of litter and dangerous chemicals are released in to nature by this synthetic packaging. Many animals are dying through suffocation when being caught up in plastic litter in their natural habitat. Plastic packaging takes thousands of years to biodegrade (naturally disappear).
- **Burning Fossil Fuels and pollution:** To create energy (electricity, power, heat) factories are burning fossil fuels like oil, coal and natural gases which are being taken from deep in the ground. Burning these fuels creates poisonous and dangerous smoke and gases to be released into the air making it harder for plants to take in the carbon dioxide that they need and also contributing to global warming by harming the atmosphere.

#### Humans' positive impact:

- **Conservation projects:** Without human intervention, many species of plant and wild life would die out and become extinct. There are many human-led conservation projects, which are protecting the wild spaces of the world, protecting species from extinction and maintaining and restoring habitats. Conservation projects ensure that wildlife is well looked after and flourishes in a healthy habitat.
- **Ecologically planned reserves/gardens/parks:** More and more humans are designing havens for wildlife - the perfect habitats for wildlife to thrive. In schools, businesses, hotels and individual homes, people are creating mini-reserves to encourage wildlife to grow: bug hotels, ponds, wild gardens... This supports wildlife and encourages their development.
- **Sustainable use of resources:** Major companies and corporations are now being regulated to ensure that they are using their resources sustainably. For example, companies who use wood as a product must plant a tree for every tree that they chop down and there are limits on what they are allowed to use. Areas of land and wildlife are now protected and are not allowed to be farmed or destroyed.
- **Changing perceptions and raising awareness:** Humans are being made more aware of the impact that they are having on the natural world and what they have a responsibility to do to ensure that we look after our Earth. For example: Major governments are making plans to be 'emissions and waste free' in the near future. Lots of companies are reducing the amount of plastic they use too. Major contributors to litter and pollution come from plastic packaging, bags straws and bottles. Lots of shops are offering paper alternatives now.

#### Thinking Point

Do you think we are doing enough to stop and reverse the negative impacts?

