

# Year 4 Red Kites Science Autumn 2

## Classification of Plants and

| Key Vocabulary        | Definition  |
|-----------------------|---|
| <b>animal</b>         | Animals are living things that need food and water to grow, they eat other plants or animals for food, and can sense what is happening around them and can move (humans are animals). |
| <b>cold-blooded.</b>  | Animals that cannot regulate their internal body temperature with the change in the environment.  |
| <b>classification</b> | Grouping and ordering things according to criteria; plants and animals have been grouped and ordered by scientists according to their features.                                       |
| <b>endoskeleton</b>   | All the higher animals have an internal skeleton (endoskeleton) with a central spine, or backbone.  |
| <b>exoskeleton</b>    | A hard covering that supports and protects the bodies of some types of animals.   |
| <b>hot-blooded.</b>   | Animals that can adjust their body temperature and maintain a constant internal temperature regardless of the surroundings.   |
| <b>invertebrate</b>   | An animal without a backbone, e.g., bumble bee, spider, snail.  |
| <b>metamorphosis</b>  | A process which sees animals changing their physical form drastically in a series of stages.  |
| <b>plant</b>          | Plants are living things that need food and water to grow, plants make their own food from sunlight.  |
| <b>vertebrate</b>     | An animal with a backbone, e.g., human, dog, horse.   |

### Plants

Scientists classify plants into flowering and non-flowering.

Poppy: Flowering



Fern: Non-flowering



### MRS.GREN

This is a useful way to remember the necessary features of living organisms:

**MOVEMENT**

It can change its position.

**RESPIRATION**

It releases energy from a food source.

**SENSITIVITY**

It responds to things. e.g. light.

**GROWTH**

It can develop and get larger.

**REPRODUCTION**

It can make copies of itself or reproduce.

**EXCRETION**

It can get rid of waste products.

**NUTRITION**

It consumes chemical material or food.

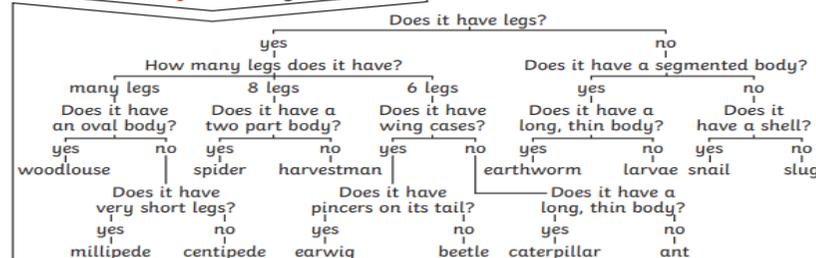
### Vertebrate or Invertebrate?

**Vertebrates** can be separated into five broad groups.

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**.

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

#### Invertebrate Classification Key



### Vertebrates

|                   |  |   |
|-------------------|--|---|
| <b>Amphibians</b> | Cold-blooded live part in water and part on land usually have moist skin with no scales. |    |
| <b>Birds</b>      | Warm-blooded hatch from eggs can usually fly.  |    |
| <b>Fish</b>       | Cold-blooded live in water use gills to breathe.   |    |
| <b>Mammals</b>    | Warm-blooded have hair on their bodies produce milk to feed their young.                 |   |
| <b>Reptiles</b>   | Cold-blooded hatch from eggs have dry, thick, scaly skin.                                |  |

### Invertebrates

|                  |   |   |
|------------------|---|---|
| <b>Arachnids</b> | Have eight legs have two body parts: head and abdomen         |  |
| <b>Insects</b>   | Have six legs have three body parts: head, thorax and abdomen |  |
| <b>Molluscs</b>  | are soft-bodied and many have a shell                         |  |