



Earth and Space - Science Knowledge Organiser

Vertebrates

These are animals with backbones.

Vertebrates are divided into five groups:

1. Mammals
2. Birds
3. Fish
4. Reptiles
5. Amphibians

Some examples of vertebrates: humans, elephants, cows, dolphins, cats, sparrows, frogs, fish and crocodiles.



twinkl.co.uk

Invertebrates

These are animals without backbones.

Invertebrates are divided into further groups. These include:

Molluscs, Insects, Arachnids, Annelids, Crustaceans and Echinoderms.

Some examples of invertebrates: ladybirds, squids, bees, snails, centipedes, wasps and flies.



twinkl.co.uk

Plants

These are divided into two groups.

Flowering plants have flowers and non-flowering plants have no flowers.

Some examples of flowering plants: apple trees, tulips, sunflowers and grasses.

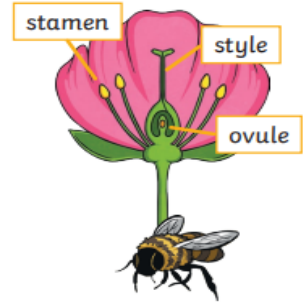
Some examples of non-flowering plants: conifers, ferns and mosses.



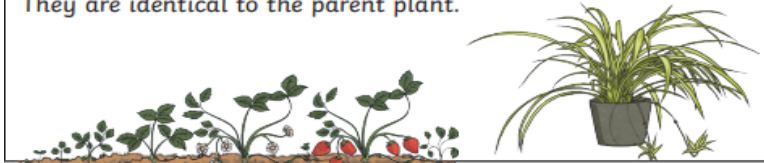
twinkl.co.uk

Plants

Most plants contain both the male sex cell (pollen) and female sex cell (ovules), but most plants can't **fertilise** themselves. Wind and insects help to transfer pollen to a different plant. The pollen from the stamen of one plant is transferred to the stigma of another. The pollen then travels down a tube through the style and fuses with an ovule.



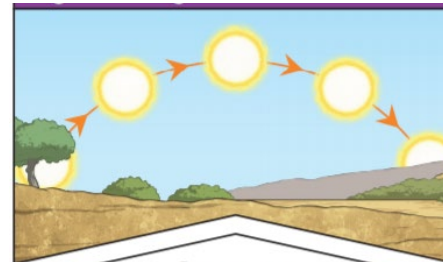
Some plants, such as strawberry plants, potatoes, spider plants and daffodils use **asexual reproduction** to create a new plant. They are identical to the parent plant.



Planet Size Comparisons



twinkl



It appears to us that the **Sun** moves across the sky during the day but the **Sun** does not move at all. It seems to us that the **Sun** moves because of the movements of Earth.

The relative movement speed of different planets around the Sun

- **Earth:** 29.78 km/s (66,615 miles per hour), or a period of about 365.256365 days.
- **Mars:** 24.077 km/s (53,853 miles per hour), or a period of about 686.93 days.
- **Jupiter:** 13.07 km/s (29,236 miles per hour), or a period of about 11.86 years.
- **Saturn:** 9.69 km/s (21,675 miles per hour), or a period of about 29.42 years