








Year 3 Summer Term Science Knowledge Organiser

KEY QUESTIONS: How does our skeleton and muscle work? How do plants grow?

Nutrient	Found in... (examples)	What it does/they do
carbohydrates		provide energy
protein		helps growth and repair
fibre		helps you to digest the food that you have eaten
fats		provide energy
vitamins		keep you healthy
minerals		keep you healthy
water		moves nutrients around your body and helps to get rid of waste

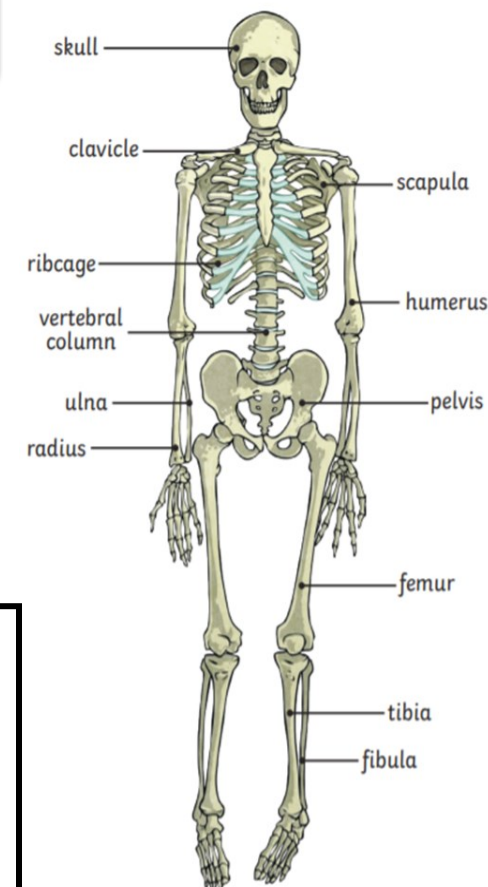
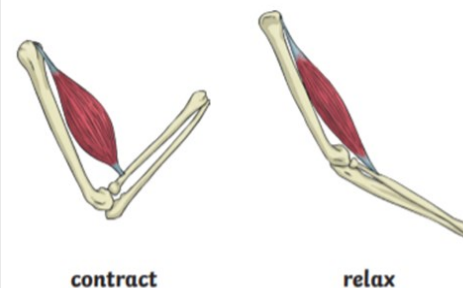
- Living things need food to grow and to be strong and **healthy**.
- Plants can make their own food, but animals cannot.
- To stay **healthy**, humans need to exercise, eat a **healthy** diet and be hygienic.
- Animals, including humans, need food, water and air to stay alive.

Plant and animals, including humans vocabulary

Roots	Carbon dioxide	Movement	Skeleton
Stem	Oxygen	Respiration	Vertebrate
Leaves	Sepals	Sensitivity	Invertebrate
Flowers	Anther	Growth	Muscle
Nutrients	Stigma	Reproduction	Tendon
Photosynthesis	Stamen	Excretion	Joints
Energy	Petals	Nutrition	

THE SKELETON AND MUSCLE SYSTEM

Skeletal **muscles** work in pairs to move the bones they are attached to by taking turns to contract (get shorter) and relax (get longer).

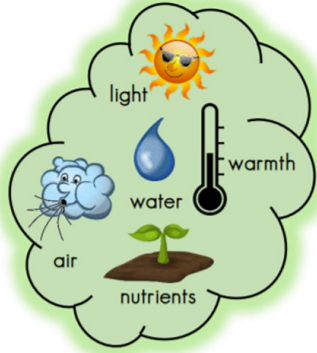


Skeletons do three important jobs:

- protect organs inside the body;
- allow movement;
- support the body and stop it from falling on the floor.



What does a plant need to grow?



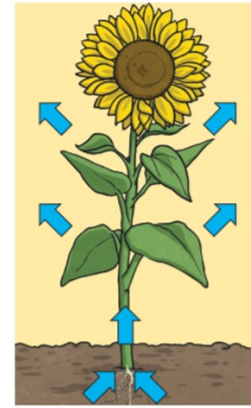
Did you know?

Small plants find it difficult to grow when larger plants have taken up the space and light around it. Think about it... When did you last see grass on a dense forest floor?

How Water Moves through a Plant

1. The **roots** absorb water from the soil.
2. The **stem** transports water to the **leaves**.
3. Water **evaporates** from the **leaves**.
4. This **evaporation** causes more water to be sucked up the **stem**.

The water is sucked up the **stem** like water being sucked up through a straw.

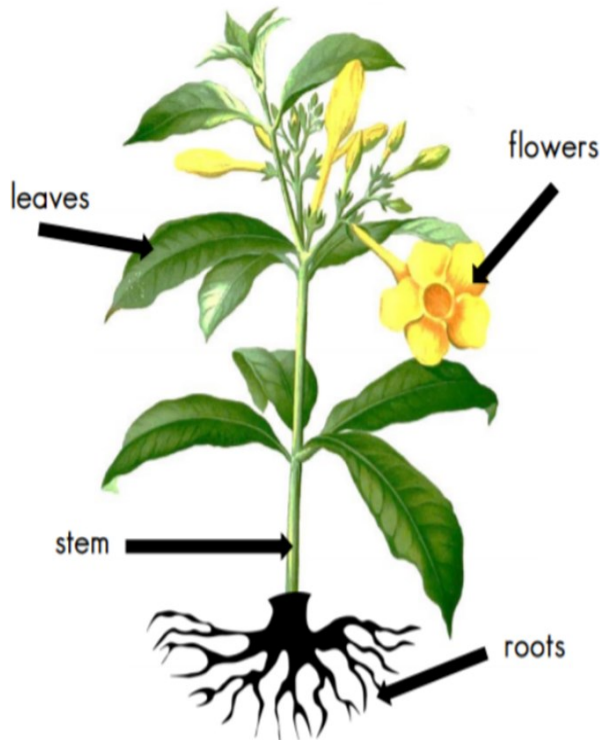


PLANT REPRODUCTION

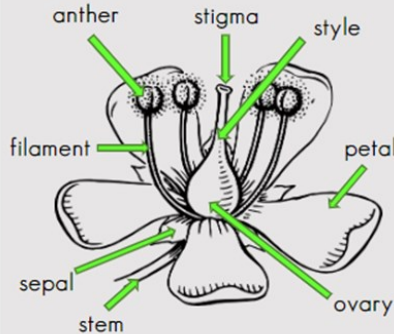
Pollination - Pollen is carried by insects or blown by the wind from one flower to another. This process is called **pollination**.

Fertilisation - Pollen reaches the carpel of the new flower. Pollen then travels to the ovary where it fertilises egg cells (ovules) to make seeds. This process is called **fertilisation**.

Seed Dispersal - The seeds are scattered by animals or the wind. This process is called **dispersal**. Some of the seeds will grow into new plants.

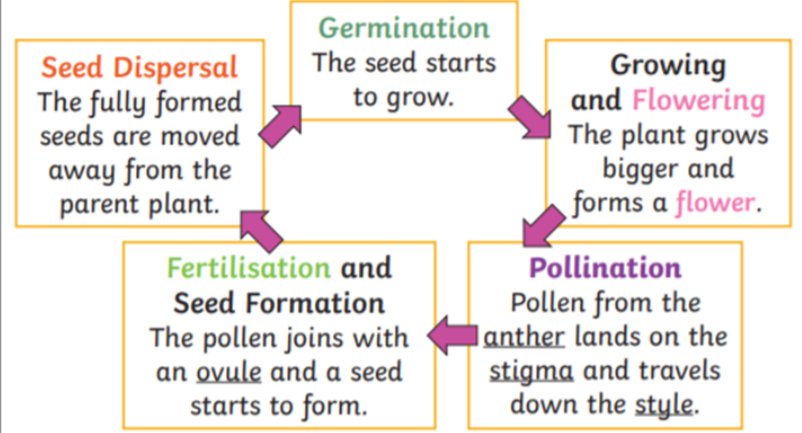


PARTS OF A FLOWER



Not all plants have flowers. These non-flowering plants, like ferns and mosses, grow from spores instead of seeds. All plants make their food through photosynthesis.

Life Cycle of a Flowering Plant



Seed Dispersal

Seeds can be dispersed by:

