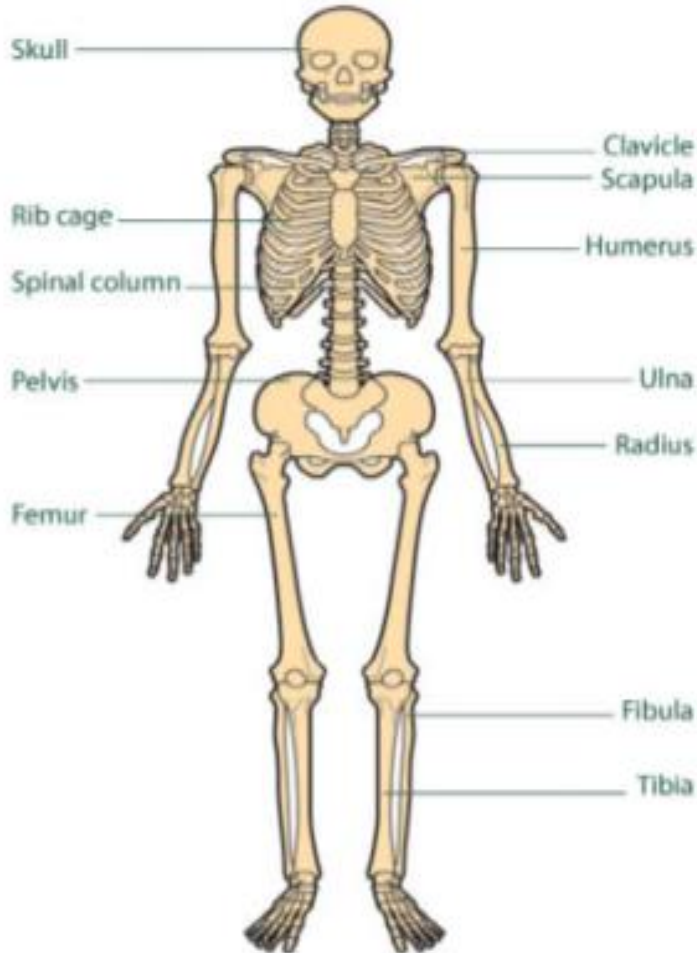




ANIMALS, INCLUDING HUMANS

Can humans make our own food?

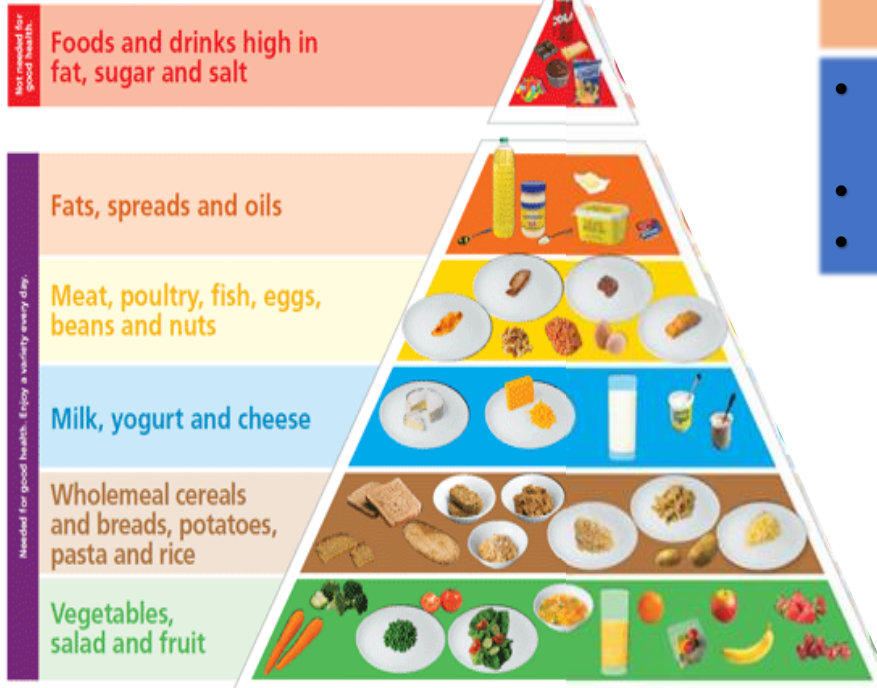
NO. Humans gather, grow or hunt their food.



Skeletons

1. Protect our organs
2. Help us to move
3. Support our bodies

To survive animals need: **water, food, air and shelter**



Key Vocabulary

Energy

The property that gives us strength

Nutrition

Food necessary for health and growth

Contract

When a muscle becomes smaller, shorter and tighter

Skeleton

Bones surrounding our important organs

Muscle

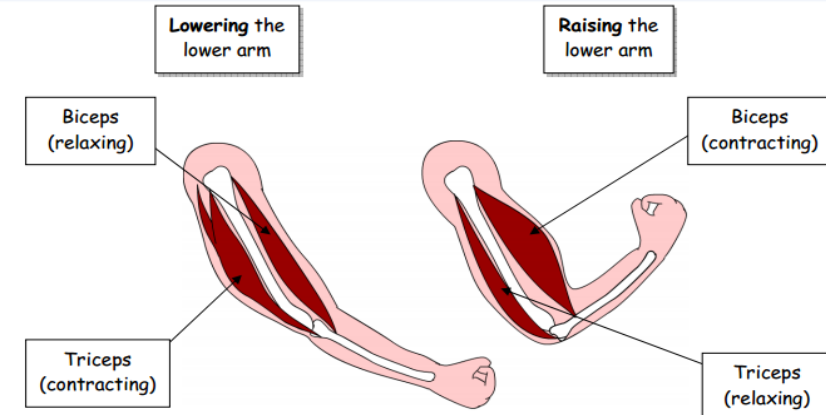
A soft tissues in the body that contracts and relaxes to cause movement of the skeleton

Healthy

In good physical condition

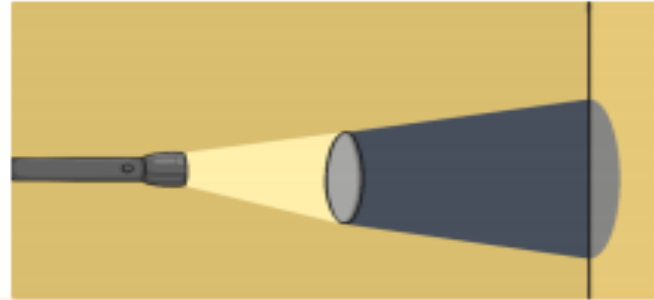
Things humans need to be healthy:

- To have a balanced diet of the right amount of different types of food and drink
- To exercise regularly
- To be hygienic



LIGHT

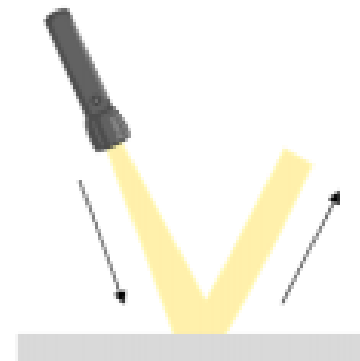
Example: an opaque object causing a shadow.



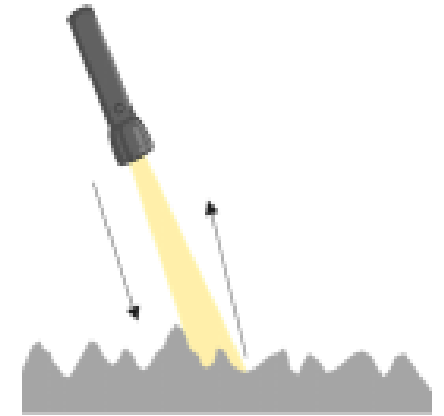
The shape and size of a shadow can be altered depending on the angle of and distance between the object and light source.



Example: light travelling and reflecting from a smooth surface.



Example: light travelling and reflecting from a rough surface.



Key Vocabulary

Transparent

When an object lets light past through so objects can be seen behind

Translucent

When an object lets some light through

Opaque

When an object lets no light through

Reflection

When a light ray hits a surface and bounces off

Shadow

A dark shape that appears on a surface when something moves between the light source and an object.

Light source

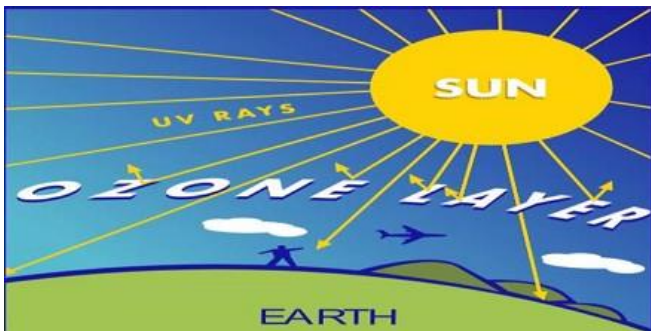
An object that emits its own light

UV light

A form of radiation which isn't visible to the human eye

Key Facts

- Darkness is caused by the absence of light
- Light can come from a range of sources
- Light travels in straight lines



UV rays which come from the sun can be harmful which is why you must protect yourself appropriately.



PLANTS

To grow and survive plants need:

Light

Warmth

Carbon Dioxide

Water

How does a plant get water?



How does pollen get from one plant to another?



Insects look for nectar and pollen get stuck to them. They move to another plant and the pollen gets stuck to that flower.



Pollen is blown from one flower to another.

Key Vocabulary

Function

Something's job or role

Seed dispersal

The movement of seeds away from the original plant

Nutrients

Substances that are important for life and growth

Pollination

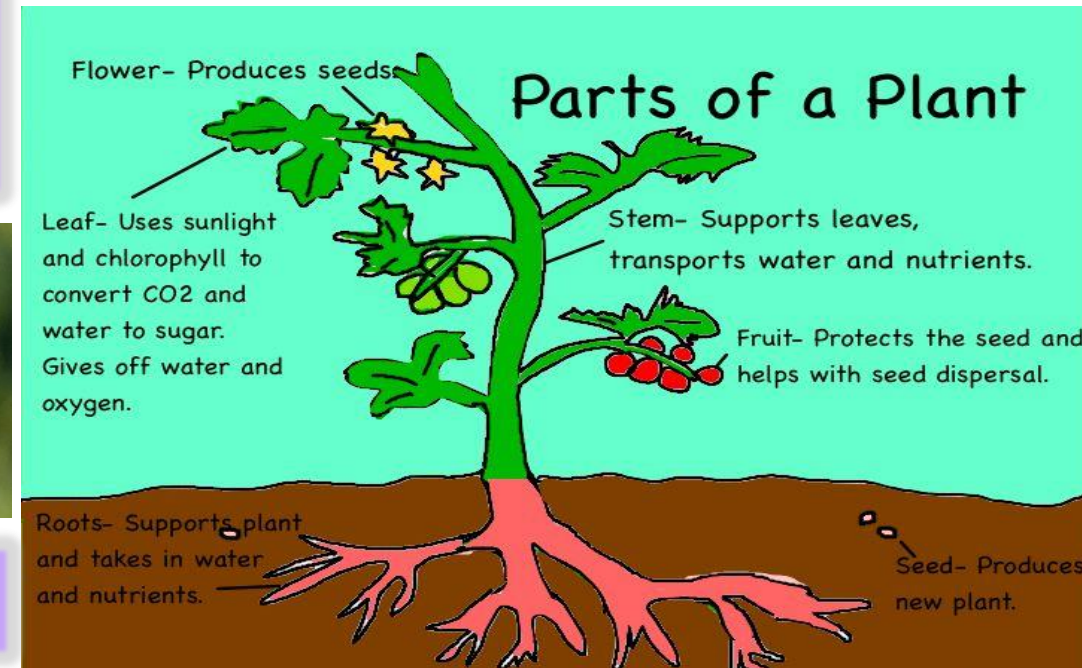
The transfer of pollen to another flower to allow a plant to grow a new seed.

Fertilisation

When the pollen joins the egg of a new flower and seeds are formed.

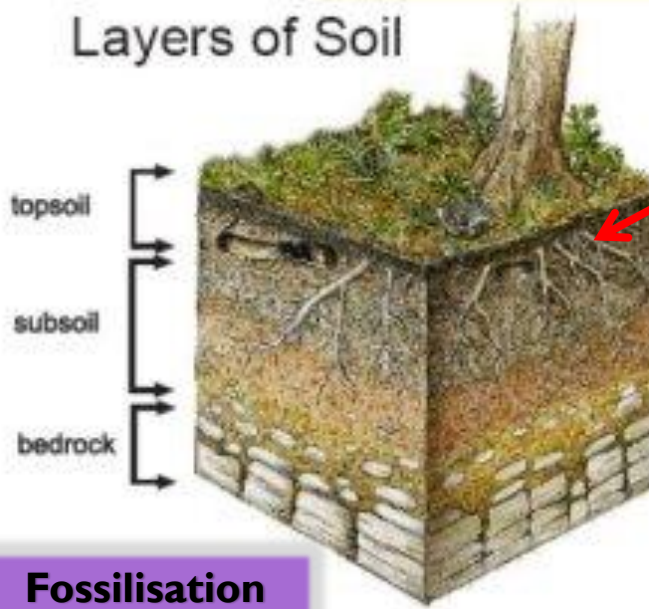
Flowering

Produces flowers



ROCKS

Layers of Soil



Humus

Humus is decayed matter in soil. It adds nutrients to soil. It is located in topsoil

Soil

- Rock
- Clay
- Silt
- Sand
- Humus

Fossilisation

1. An animal dies.
2. The soft parts break down (decompose) leaving the hard parts behind.
3. The hard parts are buried by small bits of rock called sediment.
4. As layers build up, the sediment becomes rock.
5. The bones dissolve, minerals replace the bone, leaving a rock replica of the original bone called a fossil.



Key Vocabulary

Crystals

Transperent, tinged

Rough

Uneven, not level

Permeable

Able to soak up liquid easily

Fossils

The remains or impression of an animal or plant in a rock

Soil

The upper layer of earth in which plants grow

Appearance

The way something looks

Texture

The way something feels

Appearance

The way something looks

Chalk



Granite



Sandstone



Marble



FORCES AND MAGNETS

Magnets

These are objects that pull or push things with an invisible force called magnetism

Magnets attract things made of iron.

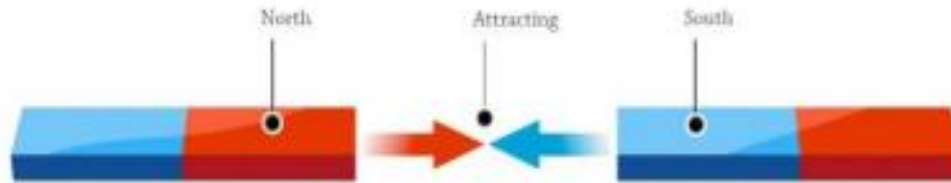


Magnets do not attract copper or aluminium.

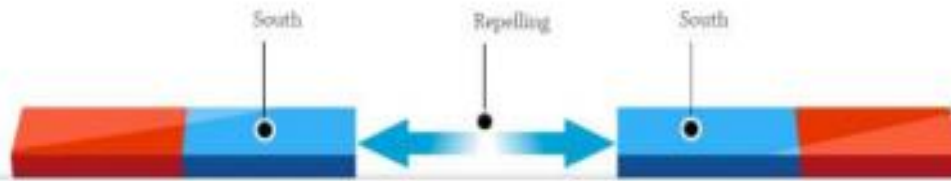


Objects that are pulled by magnets are said to be **magnetic**.

Objects that are **not** pulled by magnets are said to be **non-magnetic**



Same poles = Repel
Different poles = Attract



FRICTION

When two surfaces slide together, a force called **friction** makes them stick slightly together.

Smooth surfaces have less friction than bumpy surfaces. It takes more force to move on rough ground.

Force

Push

Pull

Surface

Attract

Friction

Repel

Key Vocabulary

A push or pull on an object

Moving something away from something else with force

Moving something towards something else with force

The outside part or upper level of something

To bring towards

The action when a surface or object rubs against another

To push away

Chalk



Rough ground