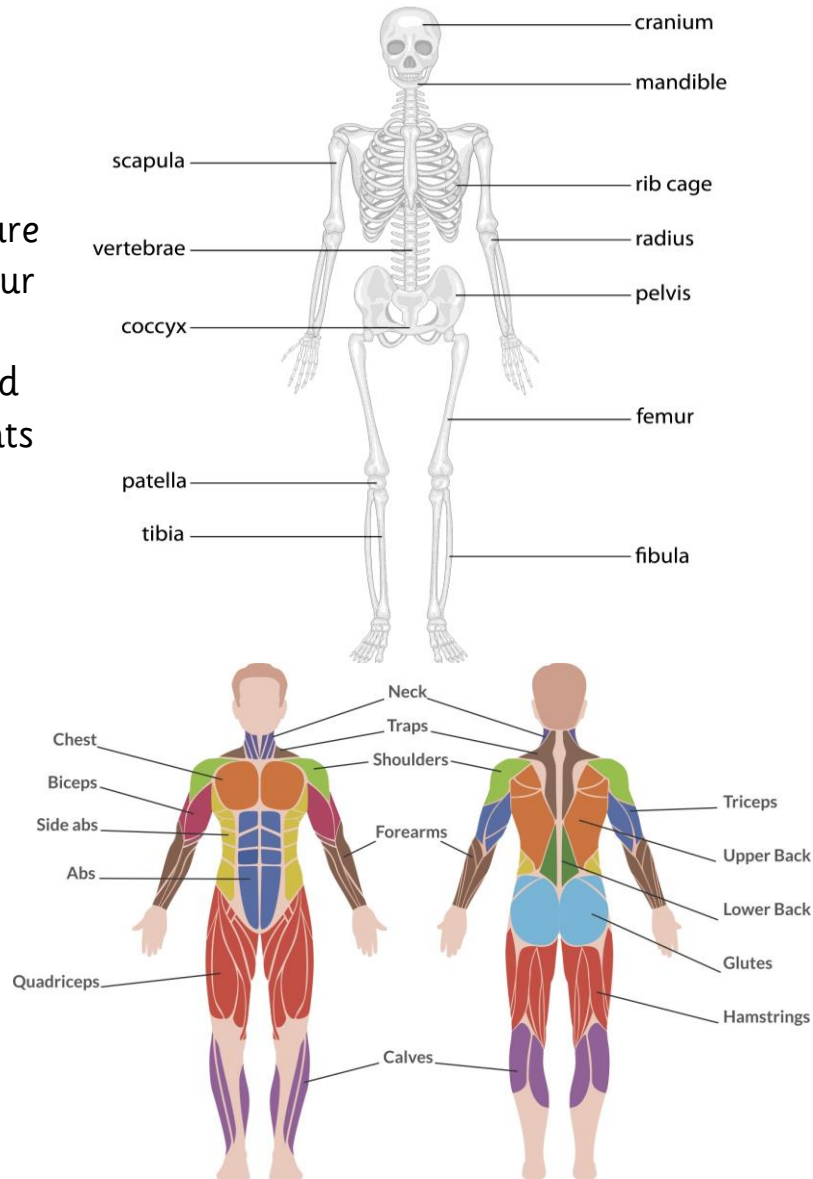




Key Facts:

- The five key groups are: fruits, vegetables, grains, protein and dairy.
- It is important to consumer a variety of foods from each of these groups to ensure that you are getting all the nutrients your body needs.
- Nutrition refers to the study of how food affects the body and the various nutrients that are present in food.
- These nutrients include: carbohydrates, proteins, fats, vitamins and minerals.
- Eating a balanced and varied diet that includes foods from all five food groups can help to ensure that you get all the nutrients your body needs.
- There are three main types of skeletons found in animals: hydrostatic, exoskeletons and endoskeletons.
- The human skeleton is the internal framework of bones that supports and protects the body's organs, muscles and other tissues.



Key Scientists:

- **Adelle Davis** – was an American nutritionist. She was an advocate for improved health through better nutrition.

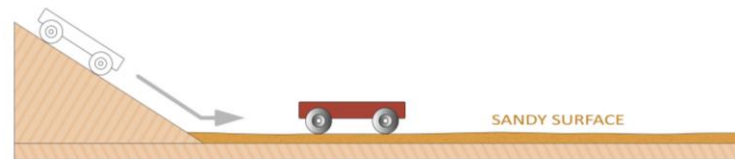
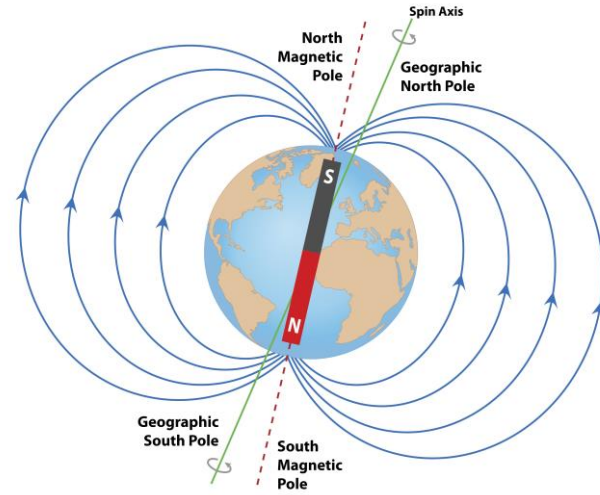
Key Vocabulary:

- vitamin
- mineral
- nutrition label
- balanced
- endoskeleton
- exoskeleton
- radius
- tibia
- rib cage
- spine
- hamstrings
- biceps



Key Facts:

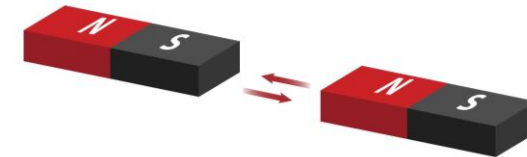
- The ends of a magnet are called poles.
- One end is called the north pole and the other end is called the south pole.
- Opposite poles attract; similar poles repel.
- If you place two magnets so the south pole of one faces the north pole of the other, the magnets will move towards each other. This is called attraction.
- Forces act in opposite directions to each other.
- When an object moves across a surface, friction acts as an opposite force. Some surfaces create more friction than others.
- On a ramp, the force that causes the object to move downwards is gravity.



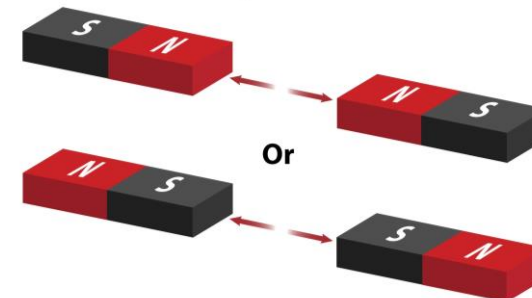
Key Scientists:

- **Pierre Curie** – He discovered that all magnetic materials sharply lose their magnetic properties when heated to a specific temperature. This was later called the 'Curie Point'.

Attraction



Repulsion



Key Vocabulary:

- force
- friction
- motion
- texture
- magnet
- attract
- repel
- magnetic field
- non-contact force
- magnetism
- compass
- orienting



Scientific Enquiry

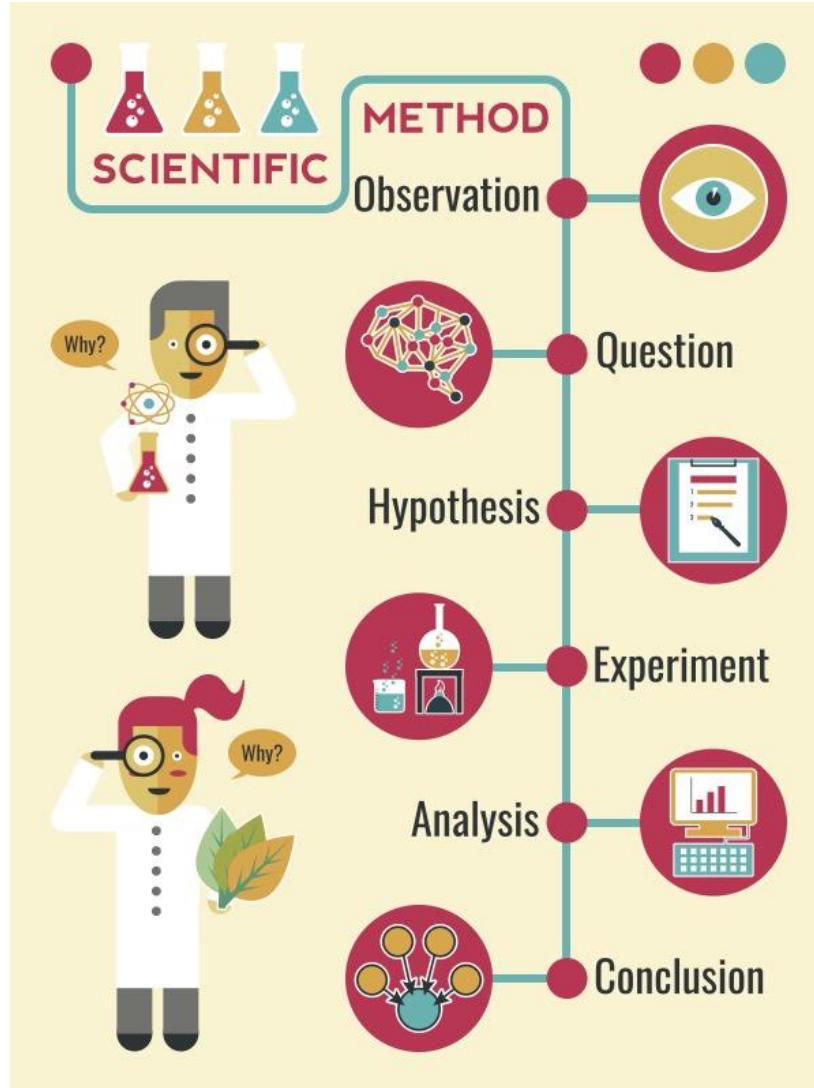
How can a solar oven be made more effective?

YEAR 3
Term 3

Key Facts:

- A fair test is where one variable is changed and all other elements are kept the same.
- A variable is something that is changed.
- A control experiment is an experiment that is used to compare other experiments where there are variables.
- Pattern seeking is identifying patterns and looking for relationships in enquires where variables are difficult to control.
- It is important to problem solve and apply prior scientific knowledge to find answers to problems/

The Scientific Method



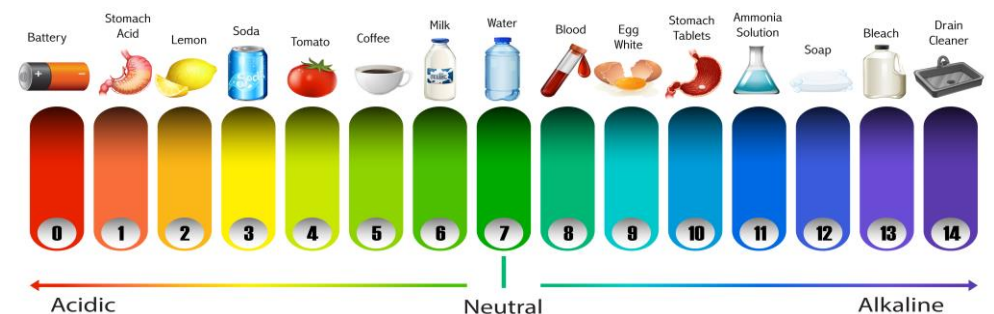
Key Scientists:

Maria Telkes – a Hungarian-American biophysicist and inventor who worked on solar energy technologies. She was often called “The Sun Queen” by her colleagues. She is also considered one of the founders of Solar thermal storage systems.

Key Vocabulary:

scientific investigation
prediction
plausible
record
data
method
control experiment
equipment
enquiry
practical
conclusion
fair test

The pH Scale





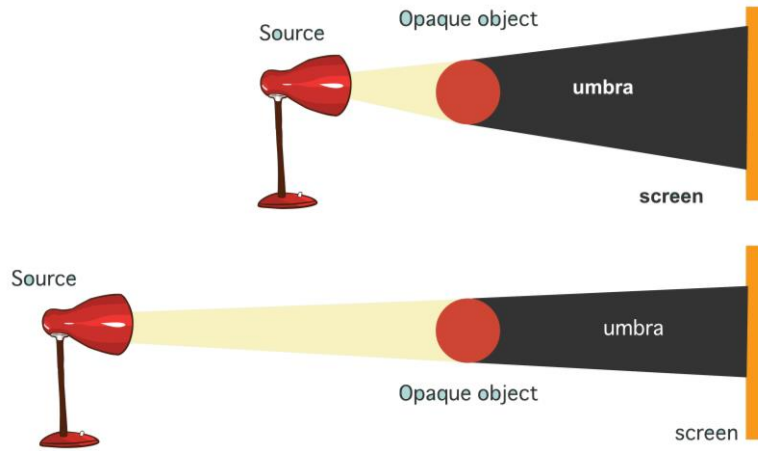
Light

What is light? What is the dark?

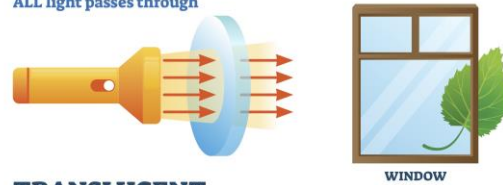
YEAR 3
Term 4

Key Facts:

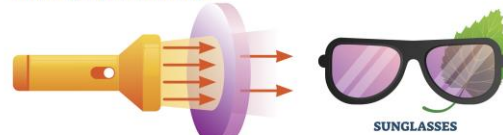
- A shadow is caused when light is blocked by an opaque object.
- A shadow is larger when an object is closer to the light source. This is because it blocks more of the light.
- We need light to be able to see things.
- Light travels in a straight line.
- When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object.
- Some surfaces and materials reflect light well.
- Reflective surfaces and materials can be very useful.
- Mirrors reflect light very well, so they create a clear image. An image in a mirror appears to be reversed.



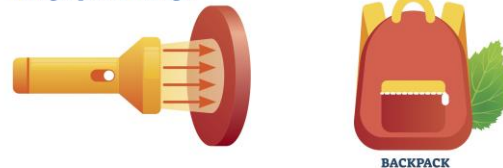
TRANSPARENT
ALL light passes through



TRANSLUCENT
SOME light passes through



OPAQUE
NO light passes through



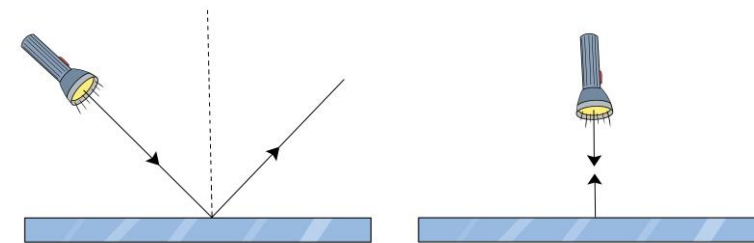
Key Scientists:

James Clark Maxwell -

Maxwell is regarded as a founder of the modern field of electrical engineering. He discovered that electricity, magnetism and light were different manifestations of the same phenomenon.

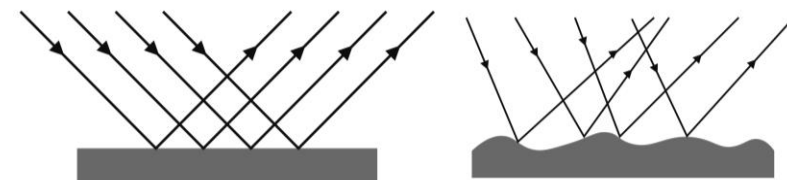
Key Vocabulary:

light
reflect
vitamin D
ultraviolet rays
fluorescent
high visibility
shadow
ray
cast
position
shape
puppet



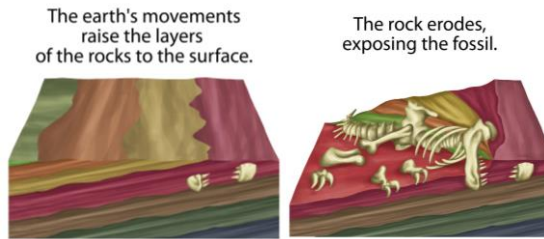
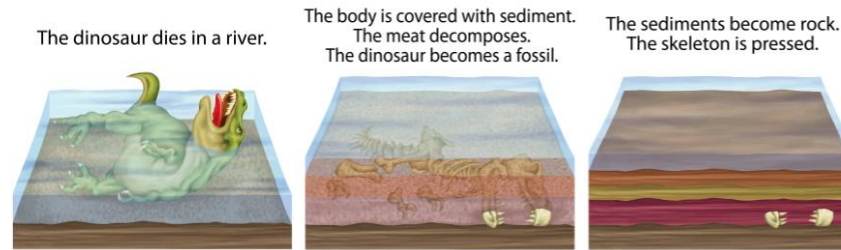
regular reflection

irregular reflection



Key Facts:

- Soil is made from: air, organic matter, water and minerals.
- Far underground the temperature is so hot, rock melts into a liquid (molten rock). When the liquid is underground, it is called magma and it can cool to form igneous rock.
- Metamorphic rocks are formed under the surface of the earth from the change that occurs under the intense heat and pressure.
- Sedimentary rocks form under the sea. Rocks are broken into small pieces by wind and water (erosion). They settle as mud, sand, minerals and even remains of living things. Over time layers build up and the pressure turns this sediment into rock.



Key Scientists:

- **Mary Anning** - Anning was an English fossil collector, dealer and palaeontologist who became known around the world for the discoveries she made in Jurassic marine fossil beds in the cliffs along the English Channel. Anning's findings contributed to changes in scientific thinking about prehistoric life and the history of the earth.

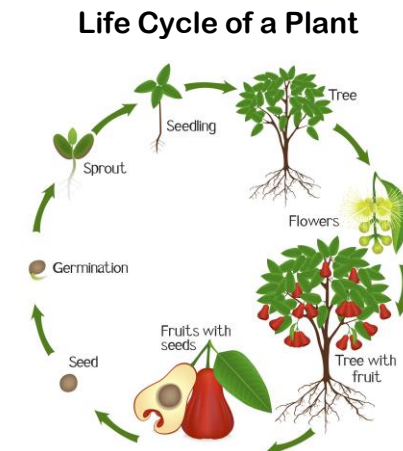
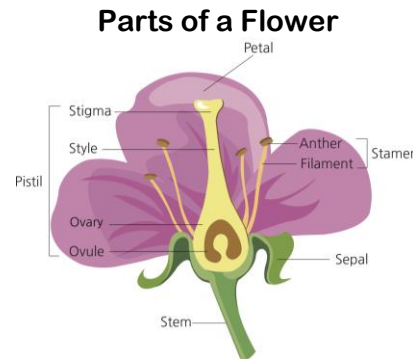
Key Vocabulary:

igneous rocks
intrusive igneous rocks
extrusive igneous rocks
magma
sedimentary rock
metamorphic rock
weathering
acid rain
erosion
fossil
decompose
fragments

chalk	flint	marble	limestone	sandstone	granite

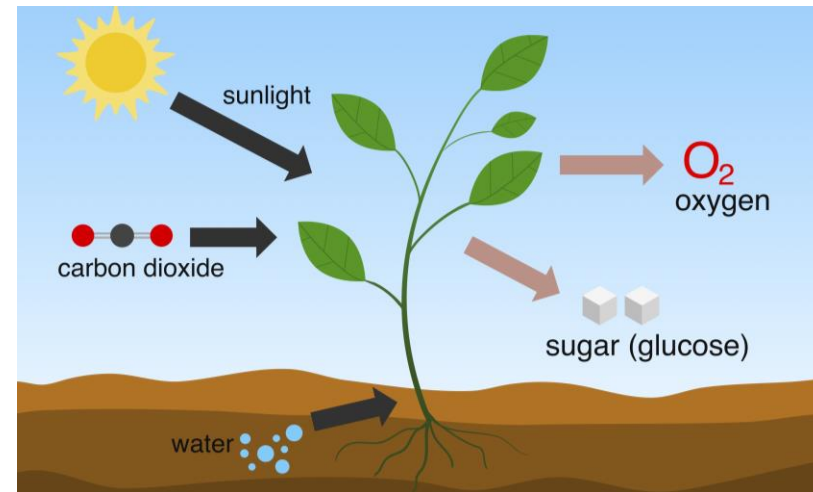
Key Facts:

- The roots of a plant absorb water from the soil.
- The stem transports water to the leaves.
- Water evaporates from the leaves.
- This evaporation causes more water to be sucked up the stem.
- The fruit is the part of a flowering plant that contains the seeds.
- There are four main factors that can affect the growth of plants: water, light, nutrients, and temperature.
- The main function of the xylem cells is to carry water and soluble minerals from the root to the leaves of the plant.
- The petals and flowers of flowering plants attract insects to the plant, which then means that the plant is germinated and that they can reproduce.
- Pollen is an essential part of plant reproduction.



Key Scientists:

- **Ahmed Mumin Warfa** - Warfa is a Somali scientist specializing in botany, who with his colleague Mats Thulin, discovered a new type of cyclamen flower, the newest species to be described.



Key Vocabulary:

- fertiliser
- potassium
- chlorophyll
- photosynthesis
- xylem
- phloem
- anther
- filament
- stomata
- transpiration
- pollen
- nectar