

Year 6 Heart and circulation Autumn

Vocabulary

Organs – parts inside your body that do important jobs.

Heart - a muscle that pumps blood to all parts of your body

Muscle – a body tissue that causes movement.

Blood vessels - tubes of muscle that your blood flows through

Blood -A red liquid that circulates around the body.

Nutrients – chemicals used by the body to keep healthy.

Oxygen – a gas we breath in to keep us alive.

Lungs – a pair of breathing organs in the chest.

Sticky Knowledge

The heart is a pump that pumps blood around the body to deliver oxygen and nutrients.

1. The heart is a muscle that pumps oxygen rich blood around the body through vessels.



2. Nutrients from food and Oxygen from the lungs is pumped in the blood around the body.



3. Muscles work harder during exercise and need more energy so the heart pumps faster to transport more blood around the body to transport more oxygen and nutrients.



4. Poor diet through over or under eating can lead to diseases and ill health.



5. Drugs can cause physical effects to organ function and also affect a person's mind.



Vocabulary

Freezing – liquid to solid.

Melting – Solid to liquid

Reversible – can be changed back.

Irreversible – can't be changed back.

Burning – chemical change to a material through heat and oxygen.

Evaporating – Liquid to gas

Condensing – Gas to liquid

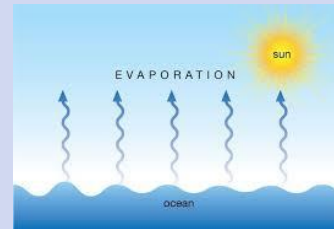
Dissolving – some solids are broken down so small in a liquid that we can't see them.

Chemical reaction – change that is permanent .

1. Melting and freezing are reversible changes



2. Evaporating and condensing are reversible changes.



3. Mixing and dissolving are reversible changes



4. Chemical reactions are irreversible e.g. lemon and bicarbonate of soda. (new materials)



5. Burning is irreversible.





Vocabulary

Ray – a line of light

Straight line

Light source – something that produces light e.g. torch

Reflect – When light bounces off an object

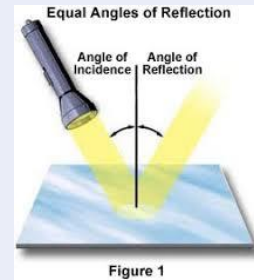
Shadow – A shape created when the light is blocked by an object.

Transparent – see through

Opaque – not see through

Translucent – Partly see through

1. Light is reflected from surfaces.



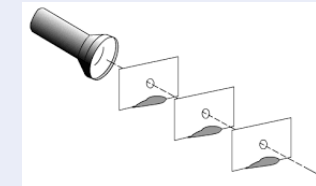
2. Investigate light through different materials.



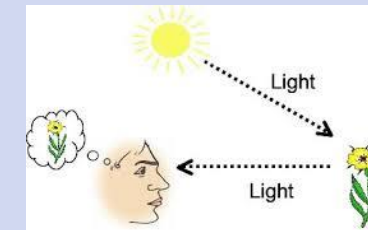
3. Recognise how shadows are formed.



4. Recognise that light travels in straight lines.



5. We see things because light is reflected into our eyes.



Year 6 Contact Forces and resistance

Spring

Vocabulary

Force – a push or pull

Friction - a force between two surfaces that are sliding against each other.

Resistance – a force that stops or slows down another force.

Contact – touching

Sticky Knowledge

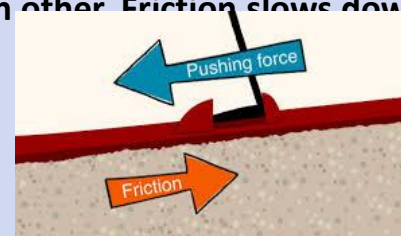


Friction, air and water resistance are forces that slow down moving objects.

1. A contact force happens when two surfaces move in opposing directions.



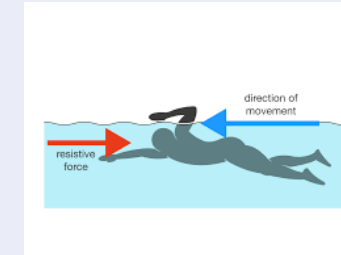
2. Friction is a contact force created by two opposing surfaces moving against each other. Friction slows down an object and creates heat.



3. Air resistance slows an object down.



4. Water resistance slows an object down.



Sticky Knowledge

Living things have changed over time and that fossils provide information of what use to be alive.



Vocabulary

Habitat – where something naturally lives.

Reproduce – make more of the same species.

Species – different types of living things
e.g. fox

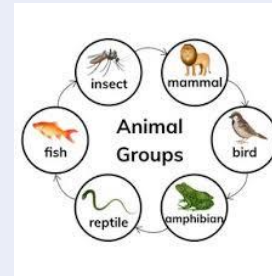
Features – what they look like

Adapted – changed to survive

Survive – stay alive

Fossils – Skeleton imprints trapped in rocks from millions of years ago.

1. Animals are grouped according to their features.



2. Animals produce young of the same kind but are different to the parents



3. Animals are adapted to suit their environments



4. Habitats can change and pose dangers to living things.



5. Fossils give information of what lived on earth millions of years ago.



Year 6 Electricity

Summer

Vocabulary

Component -Wire, bulb, buzzer, cell Single battery), power pack, switch

Circuit - A path for electricity to move through.

Insulator – Electricity cannot pass through.

Conductor – Electricity can pass through

Current – Flow of electricity

Flow – move steadily in a current

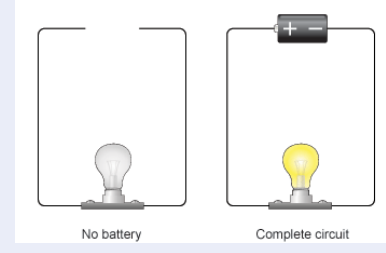
Complete – no gaps

Incomplete – some gaps

Sticky Knowledge

The brightness of bulbs or loudness of a buzzer if affected by what else is in the circuit.

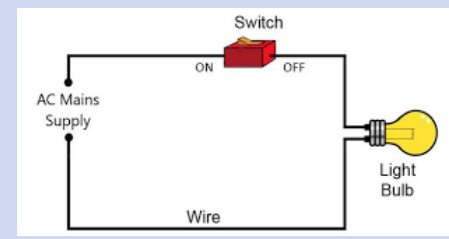
1. Identify whether or not a lamp will light in a simple series circuit.



4. What happens to bulb brightness when I change the number of batteries?



2. A switch opens and closes a circuit



5. What happens to the volume of the buzzer when I add more components to the circuit?



3. Some materials conduct and some insulate.

