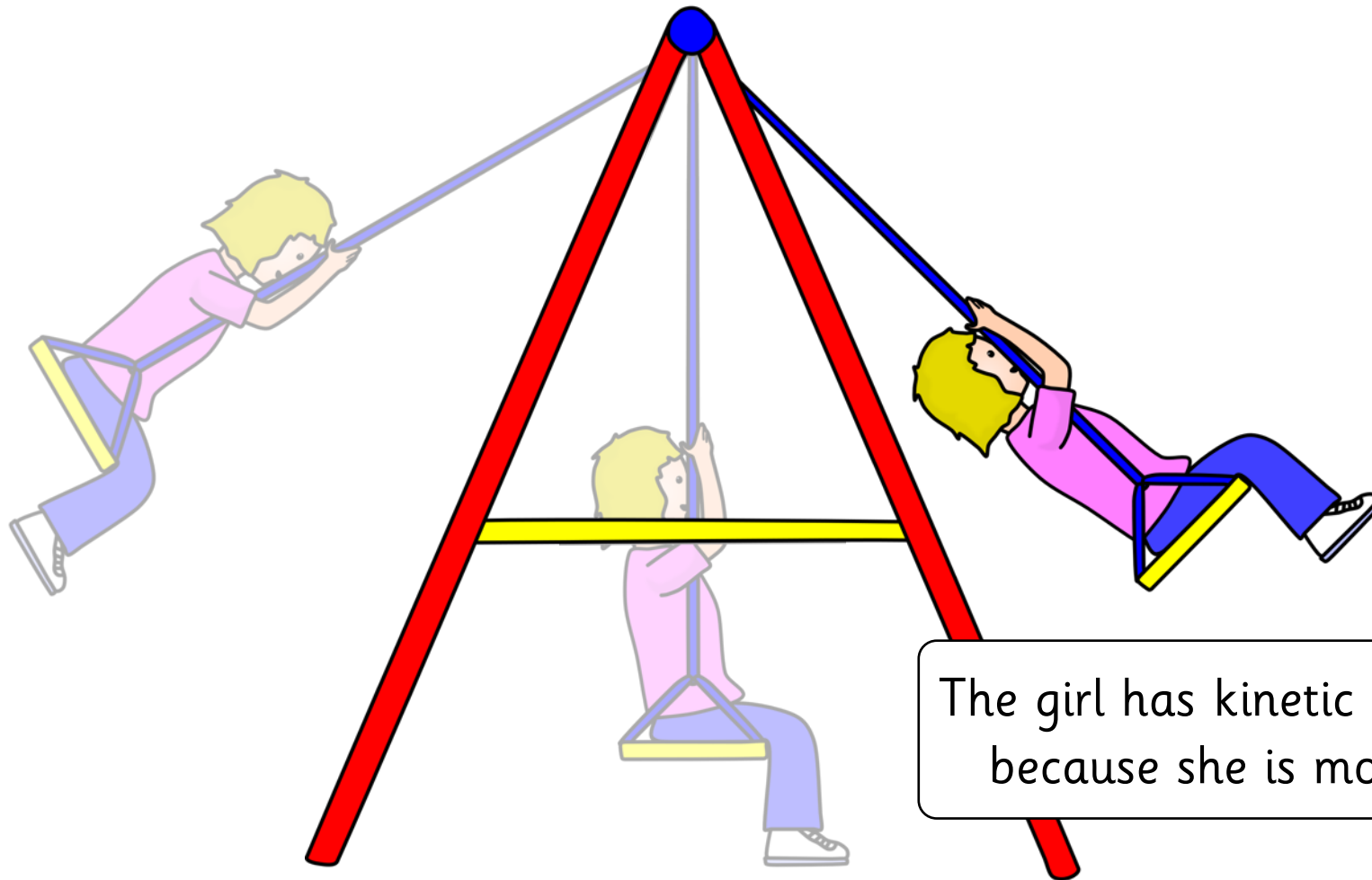


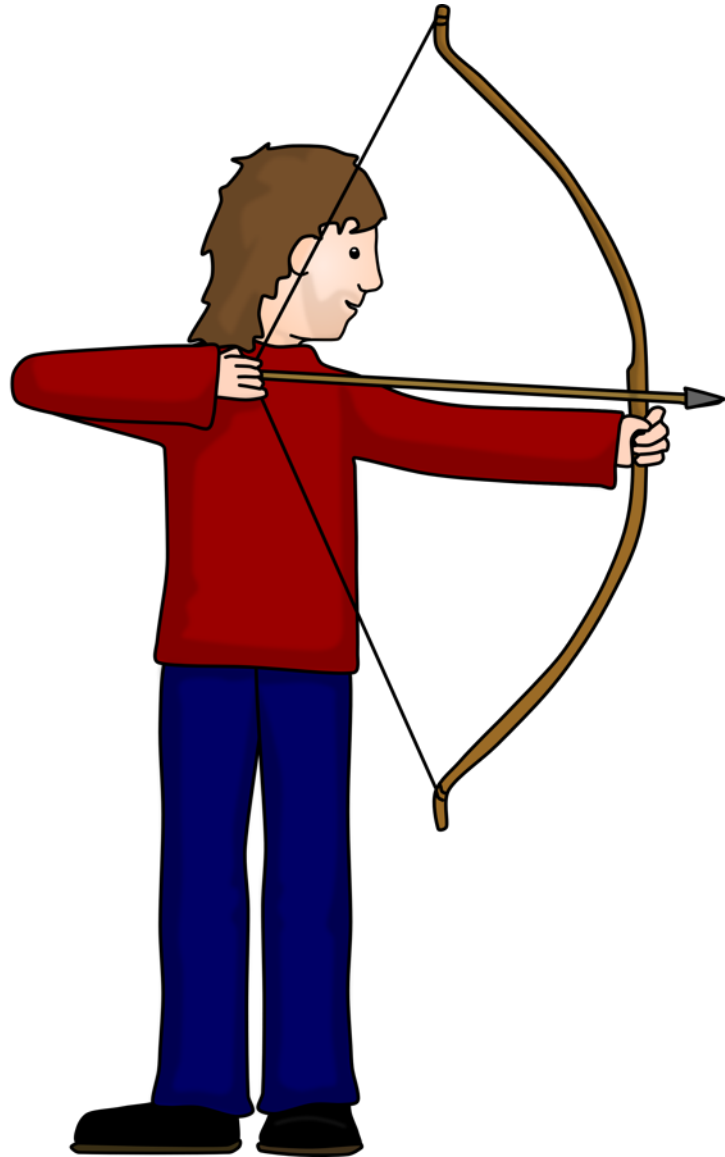
# Kinetic Energy

The energy an object has because it is in motion.



The girl has kinetic energy because she is moving.

# Potential Energy

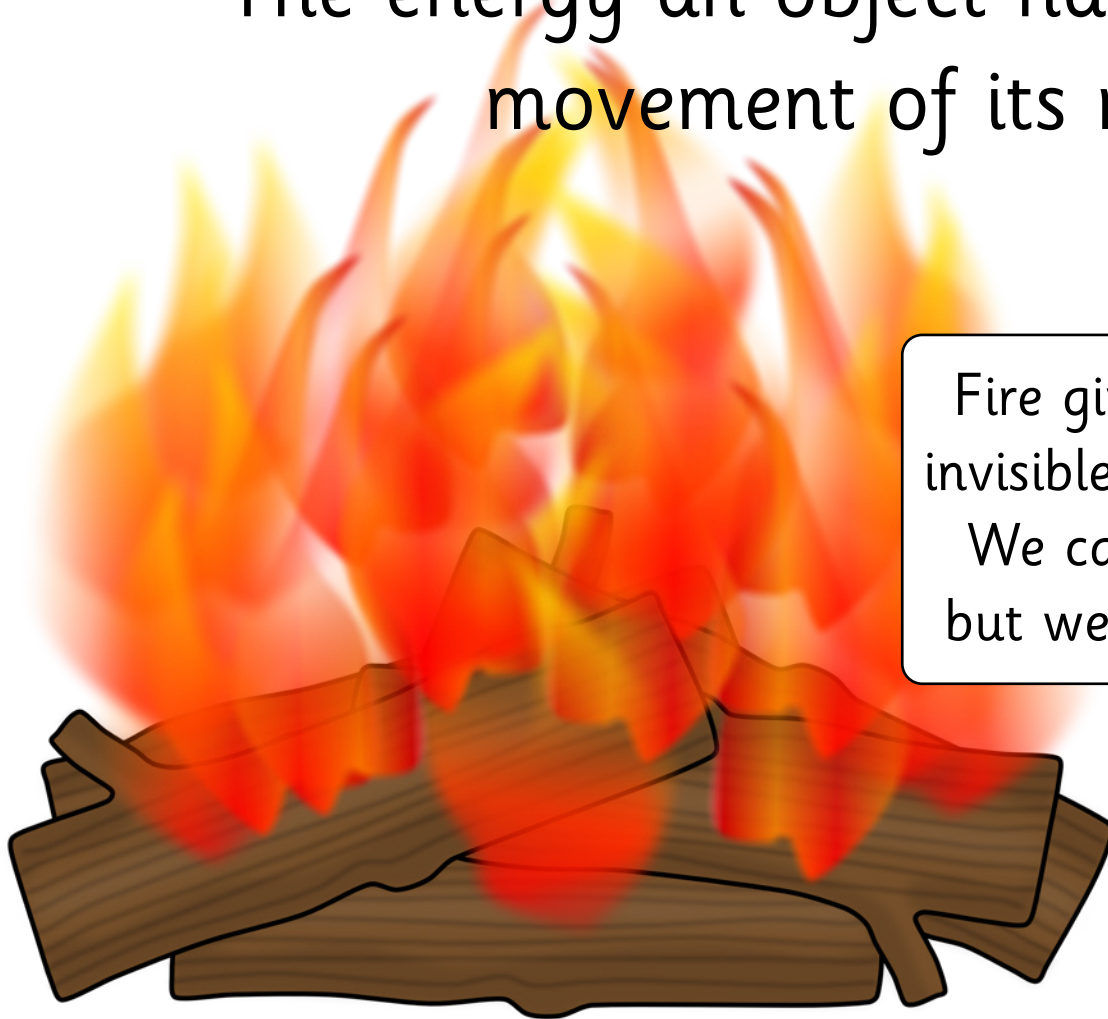


The stored energy because of an object's position or configuration.

The archer's arrow has potential energy because it is pulled back on the bow string.

# Heat Energy

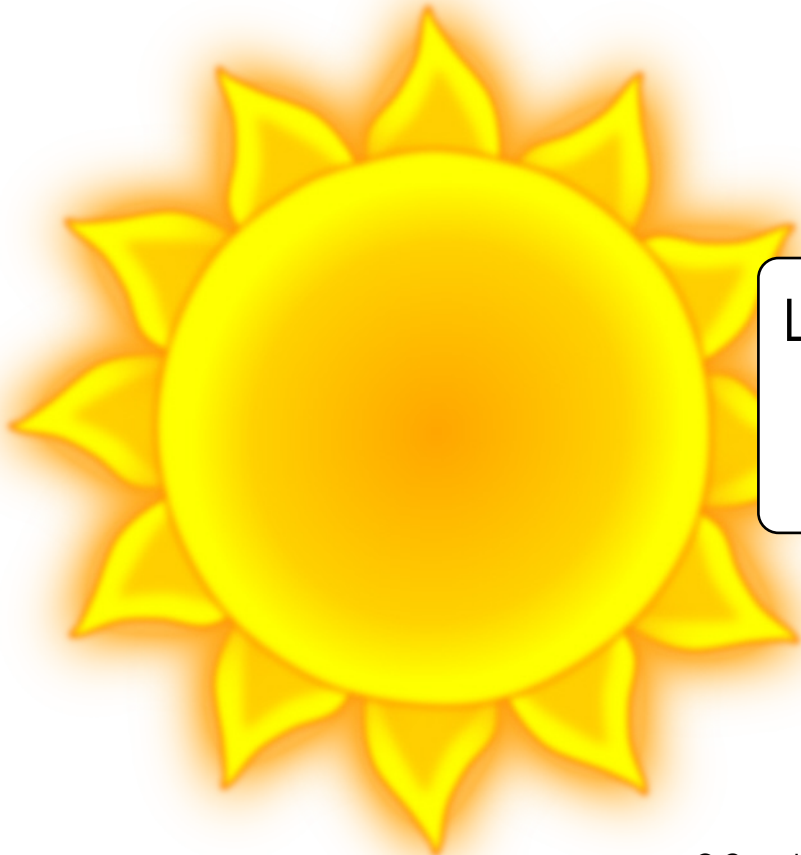
The energy an object has because of the movement of its molecules.



Fire gives off two forms of radiation: invisible infrared (heat) and visible light. We can't see infrared with our eyes, but we can feel it as heat on our skin.

# Light Energy

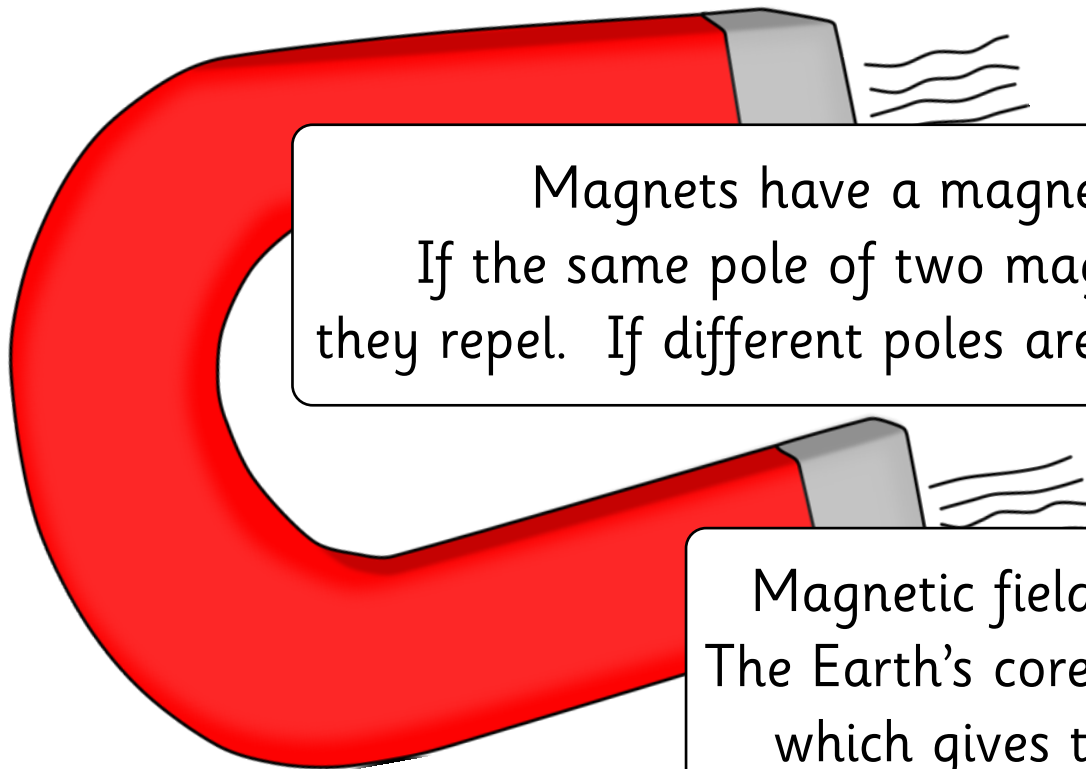
A type of kinetic energy with the ability to form types of visible light as well as invisible waves.



Light is a form of electromagnetic radiation and hot objects, such as light bulbs, lasers and the sun, emit it.

# Magnetic Energy

The energy within a magnetic field that makes some metals repel or attract each other.



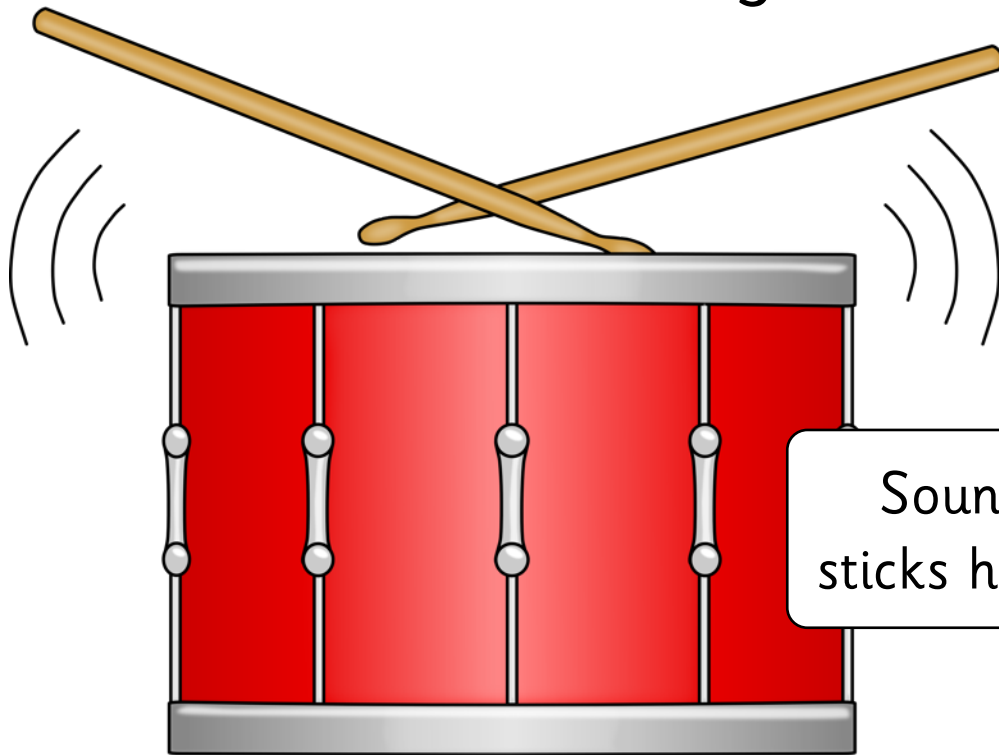
Magnets have a magnetic north and south pole. If the same pole of two magnets are put near each other they repel. If different poles are put near each other they attract.

Magnetic fields are invisible to the human eye. The Earth's core is a mix (alloy) of iron and nickel which gives the Earth its own magnetic field.

# Sound Energy

Sound is the movement of energy through substances in waves.

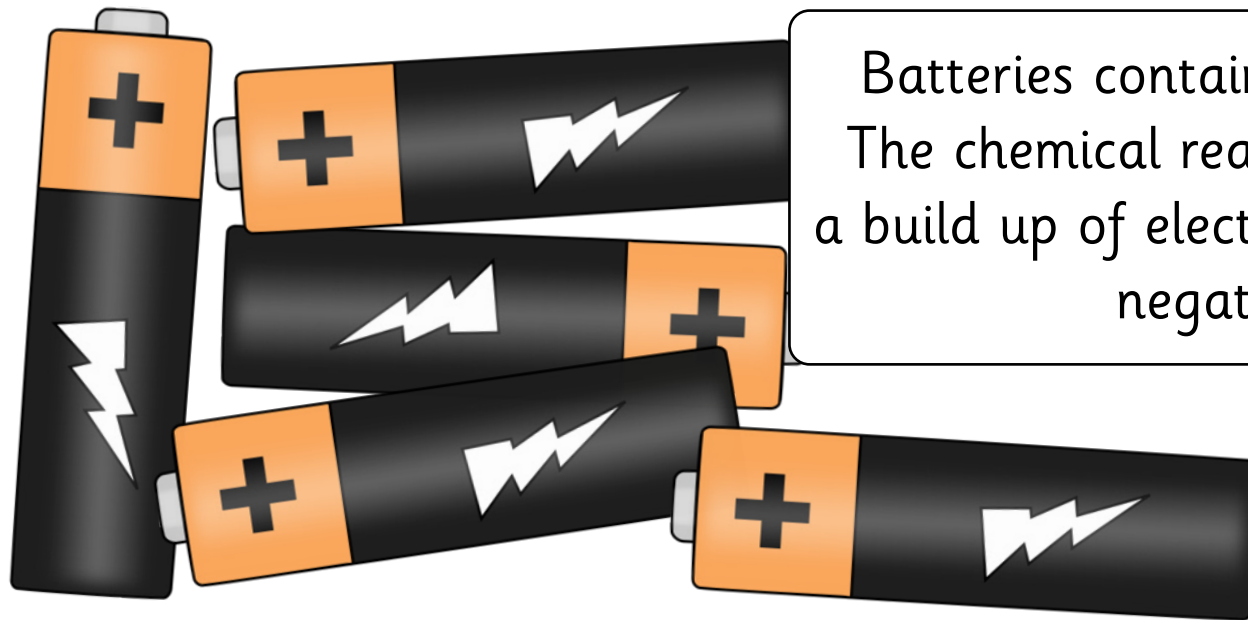
It is caused by the vibration of matter.



Sound waves are produced when the sticks hit the drum and cause it to vibrate.

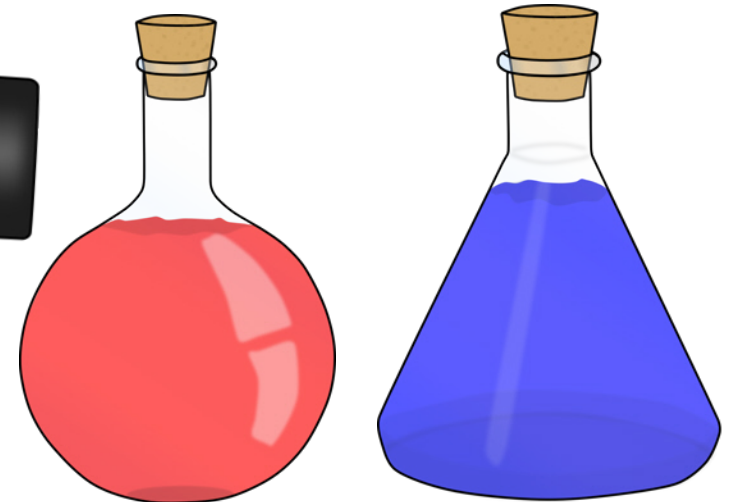
# Chemical Energy

Stored energy that is released in a chemical reaction. Heat is often produced as a byproduct.



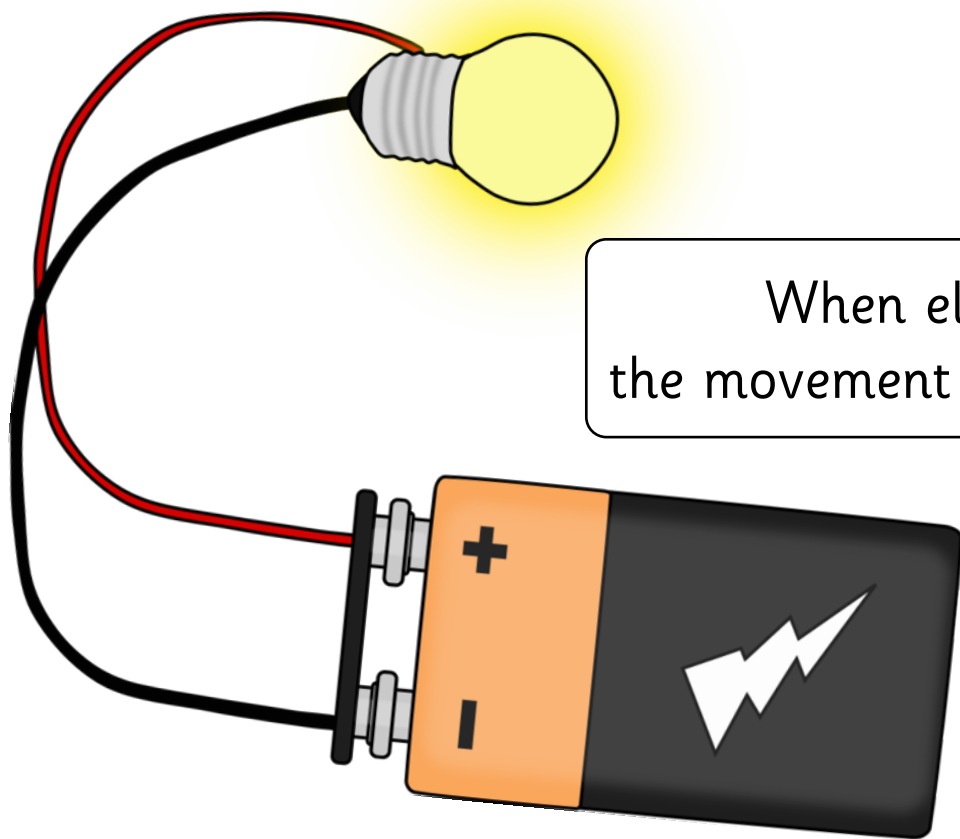
Batteries contain stored chemical energy. The chemical reactions in a battery cause a build up of electrons which then flow from negative to positive.

Biomass, petroleum, natural gas, and coal are other examples of stored chemical energy.



# Electrical Energy

The energy created by electrons moving through an electrical conductor.

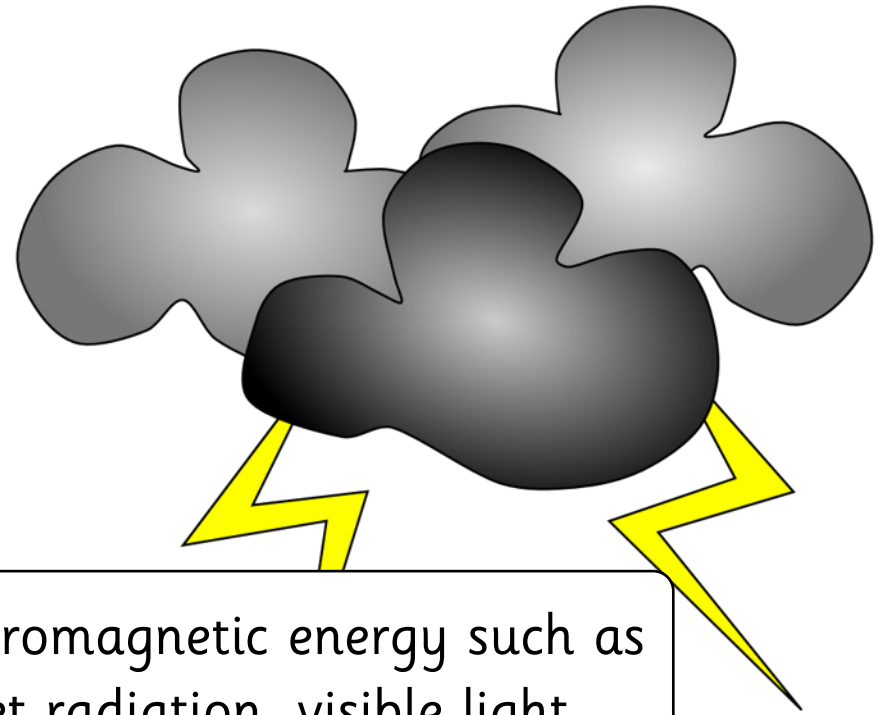
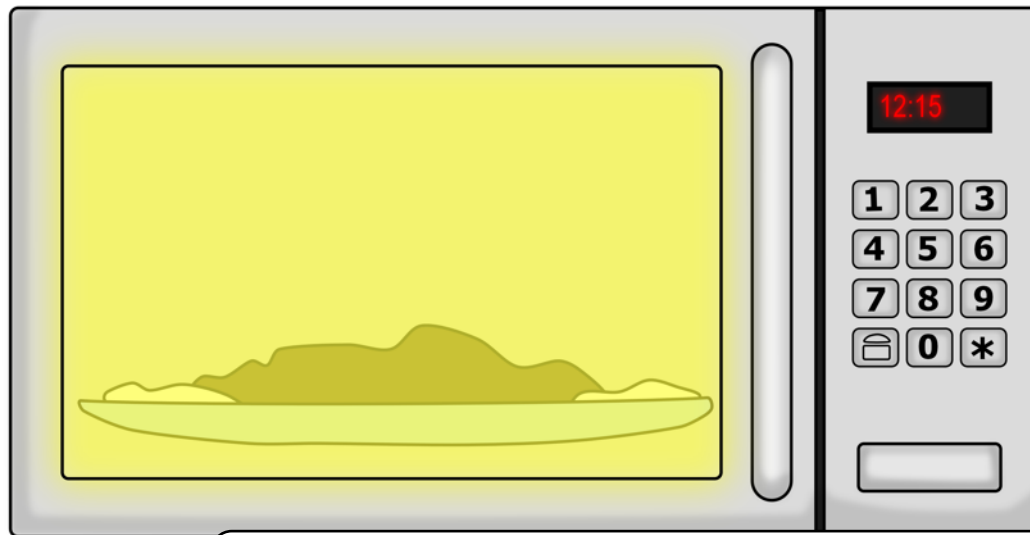


When electrons are forced down a wire the movement produces electricity, or electric energy.



# Electromagnetic Energy

Energy that can be emitted or reflected from objects through electrical or magnetic waves.

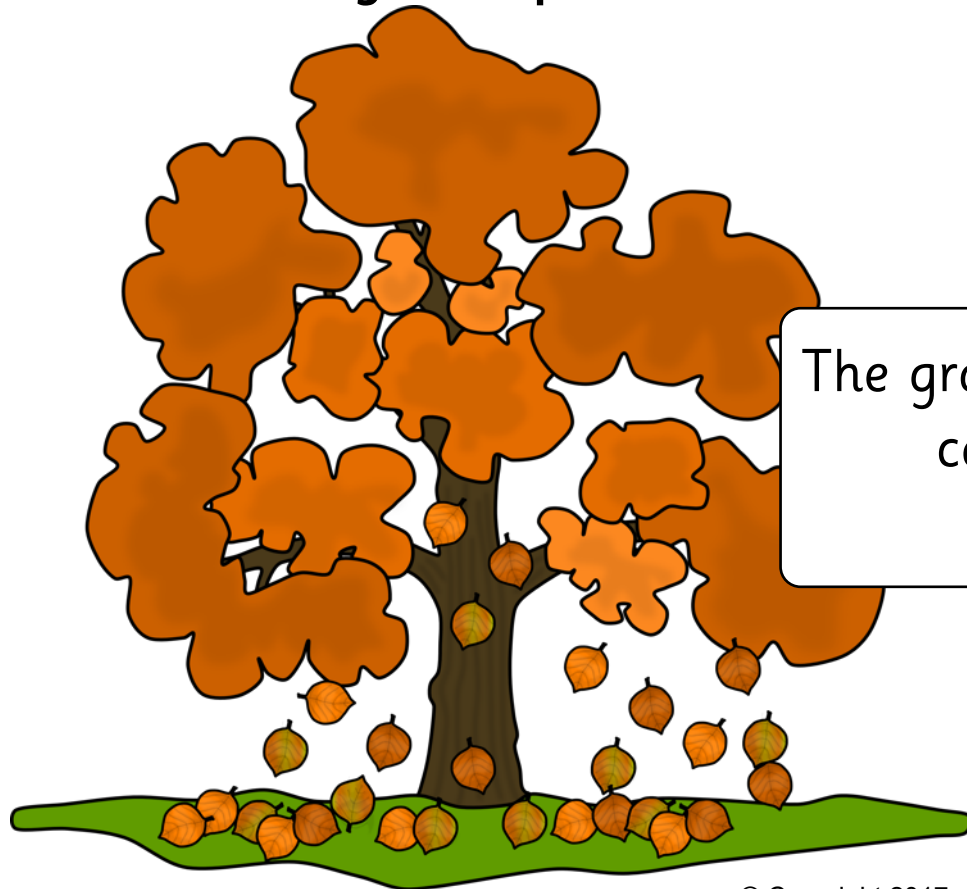


There are many examples of electromagnetic energy such as gamma rays, X-rays, ultraviolet radiation, visible light, microwaves, radio waves and infrared radiation.



# Gravitational Energy

The energy an object possesses because of its position in a gravitational field.



The gravitational field produced by the Earth causes leaves to fall to the ground rather than float in the air.