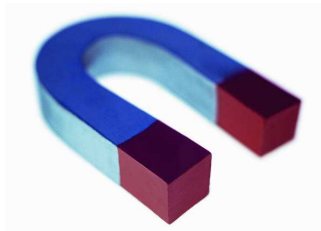


Science Revision Guide



Key Words in KS2 Science – with definitions



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Key Words in KS2 Science

Living Things Plants

Leaf	This is the part of the plant that produces the food for the plant using light energy
Trunk	Supports a tree and allows water to pass through from the roots to the leaves
Stem	Supports the plant and allows water to pass through from the roots to the leaves
Flower	This part of the plant contains the reproductive organs of a plant
Petal	These are brightly coloured to attract insects
Pollination	When pollen from another plant enters a plant
Fertilisation	When the egg is fertilised by pollen to make a seed
Photosynthesis	The process where light is changed in to energy (food) by a plant
Root	The part of the plant that anchors it in the soil. The root carries water and nutrients from the soil to the plant
Nutrients	The goodness in the food that is eaten (or in plants is the goodness of the soil)
Pollen	A powdery substance held on the male part of the flower
Chlorophyll	A green chemical found in plants that helps them to make food using the energy in sunlight
Light energy	Energy from the sun
Germinate	When a seed starts to grow
Ovary	Holds eggs, the female cells in humans and plants

The Life Cycle of a Plant - 4 Main stages:

- 1) **GERMINATION** - the plant begins to grow
- 2) **POLLINATION** - the plant produces pollen in order to reproduce
- 3) **FERTILISATION** the egg is fertilised by the pollen to produce a seed
- 4) **DISPERSAL** - the seeds are scattered by the plant

Living Things

Animals and the ecosystems

Larva	The young of an insect before it has changed into adult form
Pupa	The stage of of an insect changing from a larva to an adult during metamorphosis
Puberty	The stage of human development when a child starts to develop into an adult
Metamorphosis	When a creature undergoes a complete physical change when growing from young to adult
Food chain	Shows the way in which energy is passed from the sun to plants, which are then eaten by animals, who are then eaten by other animals
Carnivore	An animal that eats meat
Organism	A living thing
Primary producer	is the source of energy in a food chain. It is a plant.
Secondary producer	The animal in the food chain that eats primary consumers
Tertiary producer	The top carnivore in a food chain. That is it is not eaten by anything else
Herbivore	An animal that eats only plants – i.e. a vegetarian
Food web	Similar to a food chain but but shows more complicated feeding relationships
Primary producer	The name given to herbivores in a food chain- animals that eat plants, the primary producer
Secondary producer	The animal in a food chain that eats primary consumers
Environment	The natural surroundings of an animal or plant
Camouflage	A disguise to match an environment
Adapt	The way in which plants and animals change over time to cope with the conditions of the environment
Predators	Animals which hunt and eat other animals
Prey	Is hunted by the predator
Consumer	Eats the producer or the primary consumer
Habitat	Where a creature or plant lives
Primary consumer	Eats the producer

Secondary consumer	Eats the primary consumer
Micro-organism	A very, very tiny living thing such as a virus and bacteria
Bacteria	Tiny micro-organisms that can cause illnesses or can be helpful like the bacteria that turns milk into yoghurt
Virus	Often called germs and can make people ill
Fungi	Plants that do not make energy using sunlight, but instead absorb the goodness made when other plants and animals decay
Community	Is the name given to the animals and plants that live together in a particular place
Ecosystem	The scientific name that describes the community and its habitat
Species	A group of similar animals which can breed with one another

Living Things Humans

Circulatory system	The system that moves blood around the body
Heart	The very strong pump that pumps blood around the body
Veins	The blood vessels that carry blood back to the heart
Artery	The blood vessels that carry blood away from the heart
Red cells	Cells that carry dissolved oxygen around the body
White cells	Cells that attack microbes and fight disease
Blood	Contains red cells, white cells, platelets and plasma
Platelets	Bits of dead cells that clump together to help clot blood
Cells	Tiny building blocks that make up all living things
Plasma	A liquid that contains proteins, salts and sugars
Pulse	The beating you can feel to show how fast your blood is flowing around your body

Incisor	Front teeth used for biting in to food and cutting
Canine	Used for tearing food, these are the teeth next to the incisors
Molars	Back teeth used for grinding and chewing the food
Plaque	A sticky material that causes tooth decay if it is not cleaned away.
Internal organs	Organs inside the body
Hinge joint	A joint of the body that works like a hinge
Biceps	The large bulgy muscle on on the upper side of the upper arm
Triceps	The muscle on the underside of the upper arm
Protein	Found in foods the body needs protein for growth and repair
Carbohydrate	A food group that gives you lots of energy
Fats	A food group that includes nuts and oils
Fibre	Found in foods such as cereal, fruit and vegetables
Energy	Food gives us chemical energy. Other energy forms include sound, heat, light and electrical energy
Digestive System	The system made up of internal organs that breaks down food inside the body

The processes of life – 7 processes that all living things share

- 1) They all **feed**
- 2) They all **move**
- 3) They all **feel**
- 4) They all **breathe**
- 5) They all get rid of **waste**
- 6) They all grow and **change**
- 7) They all produce **babies**

Materials and their Properties

Materials	What things are made of
Properties	Features such as hard/ soft/heavy/strong
Pliable	Materials that bend and do not snap easily
Brittle	Materials that are stiff and will break easily
Opaque	A material that you cannot see through
Transparent	A material which you can see through
Translucent	A material that allows some light to pass through but you cannot clearly see through it
Filtration	A process used to separate soluble and insoluble
Insoluble	Materials that will not dissolve
Dissolve	When a solid combines with a liquid and cannot be seen
Soluble	Something that dissolves
Filtration	A process used to separate soluble and insoluble materials
Evaporation	Where a liquid is turned into a gas after heating
Water vapour	Another name for steam
Condensation	When steam hits a cold surface it changes state from a gas to a liquid and turns back into water – the water is called condensation
Reversible change	A change that can be reversed
Irreversible change	A change that cannot be reversed
Granite	A hard rock
Chalk	A soft rock
Conductor	Allows heat or electricity to pass through
Insulator	Does not allow heat or electricity to pass through it
Thermal conductor	A material that allows heat to pass through easily
Thermal insulator	A material that does not allow heat to pass through
Impermeable	Does not allow water to pass through
Permeable	Allows water to pass through

Physical Processes

Gravity	The force that makes objects fall to the ground when you drop them
Mass	The amount of matter that something contains: how heavy an object is depends on its mass
Zero gravity	The scientific term for there being no gravity in deep space
Friction	The rubbing together of moving objects that slows them down
Electricity	Energy transported by wires and stored in batteries
Mains electricity	The electricity that we use in the home when we plug something into a wall socket
Battery	Source of energy created by by a chemical reaction
Current	A flow of energy
Vibration	A quick shaking backwards and forwards movement
Cochlea	The part inside the ear that helps us to hear sounds
Oscilloscope	A piece of equipment used to measure sound waves
Amplitude	How loud a sound is
Decibels (dB)	The unit that sound is measured in
Orbits	The journey made by a planet or asteroid around another planet or star
Pole	Magnets have a north pole and a south pole
Repel	To push away from; two north poles or south poles on magnets will repel each other
Source of light	Something that gives off light / does not just reflect it
Reflected	Light/ heat bouncing off a surface has been reflected
Shadow	Made when light is blocked by an opaque object; shadows are the absence of light
Attract	When a magnet pulls the material towards it
Magnetic	Material will attract to a magnet
Pitch	How high or low a sound is
Air Resistance	This acts in the opposite direction to which an object is moving through the air
Circuit diagram	A diagram that uses symbols to represent a picture of a circuit

1 **Year** is 365 and a quarter days or 365.25 days
 A **leap year** is every four years and has 366 days
 It takes the EARTH 1 YEAR to **orbit** the sun
 1 Day = 24 hours
 It takes the EARTH 1 Day to spin on its axis
 The Moon orbits the earth
 It takes the Moon 28 days to orbit the earth
 Day happens when the earth faces the sun when spinning on its axis

Scientific Vocabulary

Factor	The things you need to do the experiment
Variable	The factor that you will change
Constant	The factors that will be kept the same to ensure a fair test.
Measurement	The factor that will be measured during the experiment.
Observe	When the factor being measured is looked at.
Results	The list of observations being made
Conclusion	What has been learned from the list of results.
Resource	The equipment you will use during the experiment.
Reliable	To ensure that results are reliable (you can trust them) repeat the experiment.
Fair test	A test where everything is judged to be equal at the start of an experiment -except the particular thing being tested for
Characteristics	Features such as colour or size
Classification	The process of sorting things into sets
Classification key	A key used to sort plants and creatures into groups
Diagram	A scientific drawing
Venn diagram	A diagram made from 2 circles to show how items may be grouped or classified according to characteristics they share