Year 5 Materials

Sticky Knowledge

Materials have different properties and can be used for different things.

Vocabulary

Conduct – electricity goes through **Insulate** – electricity can't go through

Transparent - see through,

Flexible- bendy

Hard – firm

Soft – squishy

Solid, liquid or gas – state of matter

Properties – how to describe something

Temperature – measurement of how hot

something is

Thermometer – equipment we use to

measure temperature °c

Soluble – Dissolves

transparent, flexible and can be sorted into groups. What are material properties?

Materials have different properties e.g. soft, hard,



4. You can recover a dissolved solid, through evaporating the liquid.

2. Different materials are good for different purposes, depending on their properties.



3. Some solids are 'soluble' and can dissolve in a liquid to form a solution

Year 5 Classifying living things

Sticky Knowledge Living things can be classified into groups according to their features.

Vocabulary

Classify – Put things into groups according to their features.

Vertebrate – Has a back bone

Invertebrate - Does not have a back bone

Amphibian – Lives on land and water, wet skin e.g. newt

Mammal – Warm blooded, gives birth to live young e.g. human

Reptile – Cold blooded, scaley skin e.g. snake.

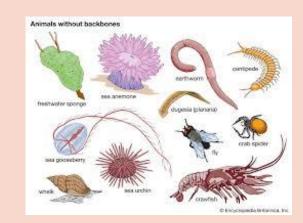
Insect - small animal with six legs, a body divided into three parts e.g. lady bird

Features - things that something has/does

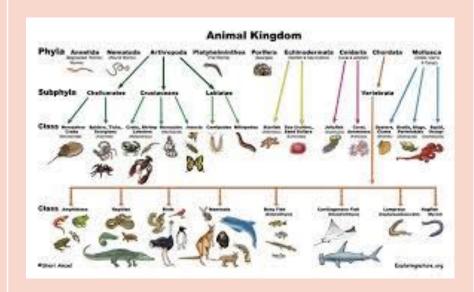
1. Vertebrates have a back bone. The vertebrate groups are Fish, amphibians, reptiles, birds and mammals.



2. Invertebrates do not have a back bone. Some invertebrate groups are insects, spiders, snails, worms



3. Living things can be grouped according to their features



Year 5 Gravity and Magnetism

Sticky Knowledge Gravity and magnetism are forces that act at a distance.

Vocabulary

Magnetism – A force between magnets

when they attract or repel each other

Gravity – A downwards force

Force – A push or pull

Attract – pull towards

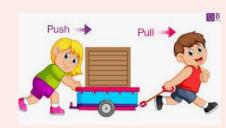
Repel – push away

Air resistance – air pushing

North

South

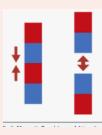
1. A force is a push or pull that can speed up, slow down, change the shape or direction of an object.



2. Magnetic forces can act at a distance



3. Magnets attract or repel each other and attract some materials and not others





4. Unsupported objects fall towards the Earth because of the force of gravity



Year 5 Life Cycles

Sticky Knowledge Living things change and develop as they get older.

Vocabulary

Life cycle – changes through a living things life.

Puberty – the change between a child and adult.

Fertilise – egg and sperm meet to form a baby

Sexually reproduce – Make more of themselves through the mating of a male and female (e.g. have a baby)

Develop – change

Rapid - fast

Sperm – male sex cell

Egg – female sex cell

Metamorphosis – a transformation into an adult.

1. Most animals reproduce sexually. This involves two parents where the sperm from the male fertilises the female egg.



2. When babies grow rapidly. They need their parents. As they develop, they learn many skills.

At puberty, a child's body develops. This means when they are adults they can reproduce.



3. Animals, such as chickens or snakes lay eggs that hatch to young which then grow to adults..



4. Some insects such as caterpillars and butterflies go through something called 'metamorphosis' to change into an adult.

Year 5 Earth and Space Sticky Knowledge The Earth moves around the sun and the moon moves around the earth.

Sun – Large star

Moon – A spherical object orbiting a

planet.

Earth – our planet

Sphere – Ball shaped object

Orbit – go around

Solar system - a system of a Sun and the

objects that move around it.

Planet - A large, spherical object orbiting a

star

Axis - an imaginary line an object turns

around.

1. The Sun is a star. It is at the centre of our solar system and the Moon is a large object that orbits the Earth.

4. The solar system is made up of 8 planets rotating around the sun. The planets are different sizes and are at different distances from the sun.

2. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night).

Day and Night

3. The moon orbits the Earth. Half of the moon is pointed towards the sun a changing shape