







Y3/4 Science Knowledge Organiser: Classifying Living Things and their Habitats

There are over 8 million different species of living things on our Earth.

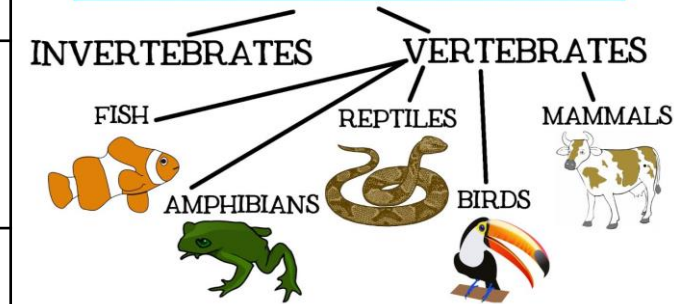
Words to Learn

Key Word	Definition
classify	To arrange or group things into categories depending on characteristics.
vertebrate	An animal with a backbone.
invertebrate	An animal without a backbone.
cold-blooded	An animal whose body temperature varies with the environment they are in, i.e. fish.
warm-blooded	Animals that maintain a regular body temperature
sample	A small amount of something to show what the whole of it may be like.
exoskeleton	An external covering of the body found in some invertebrates such as arthropods.
creature	An animal, distinct from a human being.

Type	Food	Body	Blood
Mammal 	Can be carnivorous, omnivorous or herbivorous	<ul style="list-style-type: none"> Hair and fur Four-chambered hearts Females give milk Have teeth Vertebrates 	Warm-Blooded
Insect 	Can be carnivorous or herbivorous	<ul style="list-style-type: none"> Made up of a head, thorax and abdomen Six legs Invertebrates 	Cold-Blooded
Bird 	Can be carnivorous, omnivorous or herbivorous	<ul style="list-style-type: none"> Feathers Wings Beaks Lays eggs Vertebrates 	Warm-Blooded
Fish 	Mostly carnivorous	<ul style="list-style-type: none"> Breathe with gills Scales Fins Can swim Most are vertebrates 	Cold-Blooded
Amphibian 	Can be carnivorous or herbivorous	<ul style="list-style-type: none"> Live in water or land Can breathe through gills or lungs Vertebrates 	Cold-Blooded
Reptile 	Can be carnivores or omnivorous	<ul style="list-style-type: none"> Most lay eggs Has scales Live in water or land Vertebrates 	Cold-Blooded

Scientists classify living things by their different characteristics.

ANIMAL CLASSIFICATION



A habitat is a natural environment for any type of living organism.





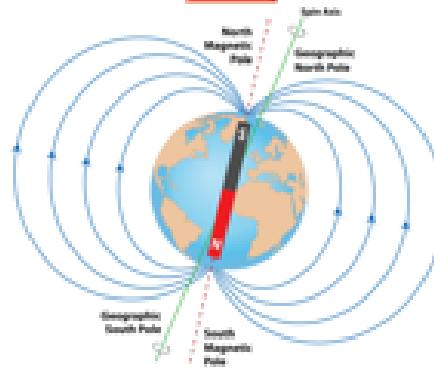
Y3/4 Science Knowledge Organiser: Forces and Magnets



Words to Learn

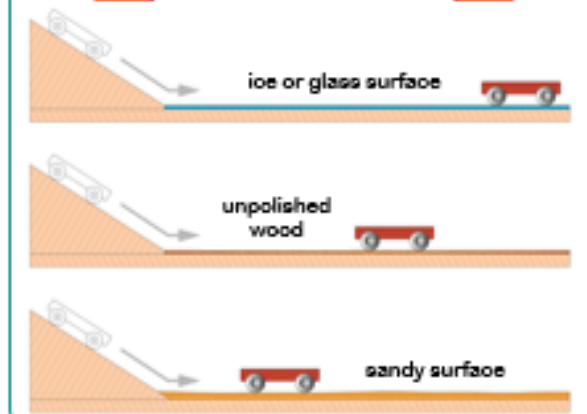
Key Word	Definition
force	A power or strength that can cause an object to move.
friction	The force that pulls backwards when objects rub against each other.
motion	The process of movement.
texture	The feel or look of a surface.
magnet	An object that can pull some metal items towards it.
attract	To pull towards.
repel	To force back or push away.
magnetic field	The force that surrounds a magnet and attracts magnetic objects.
non-contact force	A force that occurs without objects touching each other.
magnetism	The force of a magnet.
compass	An instrument which shows direction.
orienteering	A sport where you have to find your way across a route with the aid of a map and compass.

How do magnetic poles work?



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. If you place the magnets so that two of the same poles face each other, the magnets will move away from each other. They are repelling each other.

Friction



Forces

- Forces act in opposite directions to each other.
- When an object moves across a surface, friction acts as an opposite force. Friction is a force that holds back the motion of an object.
- Some surfaces create more friction than others, meaning that objects move across them more slowly.
- On a ramp, the force that causes the object to move downwards is gravity.
- Objects move differently depending on the surface of the object itself and the surface of the ramp.

non-magnetic

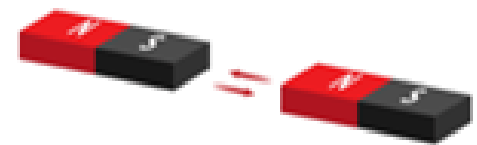


magnetic



Magnetic Forces

Attraction



Repulsion

