

# Concept Map – Science



## Us

(Animals including humans)

### In Year 3 we will learn...

We get nutrition from the food we eat.  
The skeleton gives the body its shape, allows movement and protects organs.

### In Year 4 we will learn...

The digestive system starts in the mouth and finishes at the anus.  
The different types of teeth are molars, canines and incisors.

### In Year 5 we will learn...

The human body changes over time.

### In Year 6 we will learn...

The circulatory system delivers oxygen and nutrients to cells and takes away waste.  
Adaptation is the process of changing to become better suited to the environment.

## Our World and Beyond

(Living things and their habitat, Space, plants, classification)

### In Year 3 we will learn...

The roots anchor the plant to the ground and absorbs nutrients.  
The stem provides stability to the plant and transports nutrients.  
The leaves use energy from the sun to make 'food' for the plant in a process called photosynthesis.  
The flower attracts bees and insects.  
A healthy plant needs water, light air & warmth.

### In Year 4 we will learn...

Living things can be grouped into mammals, reptiles, amphibians, birds & fish.  
The arrows in a food chain mean 'eaten by'  
A herbivore eats vegetation only.  
A carnivore eats meat only.  
An omnivore eats meat and vegetation.

### In Year 5 we will learn...

A life cycle is a series of changes in the life of an organism, including reproduction.  
1 year = 365 and 1/4 days. The time it takes for the Earth to rotate around the Sun once.  
The rotation of the Earth causes night and day.

### In Year 6 we will learn...

Observable characteristics is an individual organisms traits such as size, height, eye colour, blood type.  
There are 7 classifications of organism.

## Materials

(Rocks and fossils, states of matter, changing state, evolution and inheritance)

### In Year 3 we will learn...

There are 3 main types of rock: igneous, sedimentary and metamorphic.  
A fossil is made by an animal or plant being covered in layers of sediment. This is compacted over time.

### In Year 4 we will learn...

The main states of matter are gas, liquid and solid.  
The process of changing a liquid to a gas is called evaporation.  
The process of changing a gas to a liquid is called condensation.

### In Year 5 we will learn...

Some changes result in new materials being formed.  
A reversible change is a change which can be undone or reversed.  
An irreversible change which can not be changed back again. A new material is formed.

### In Year 6 we will learn...

Living things have evolved over time.

## Energy

(Magnets, electricity, forces)

### In Year 3 we will learn...

Magnets attract or repel.  
Magnets have two poles, a north and a south pole.

### In Year 4 we will learn...

A simple circuit has to be closed to work.  
An insulator is a material which doesn't allow electricity to pass through it.  
A conductor is a material which does allow electricity to pass through it.

### In Year 5 we will learn...

Gravity is a force which pulls objects towards each other.  
Air resistance is a force that acts in the opposite direction of moving objects.  
Slowing objects down which are moving through the air.  
Water resistance is a force that acts in the opposite direction of moving objects. Slowing objects down which are moving through water.

### In Year 6 we will learn...

A current is the flow of electrical charge carriers like electrons. It flows from negative to positive points.  
Different electrical components can be represented by different symbols.

## Senses

(Light and seeing, sound)

### In Year 3 we will learn...

Dark is the absence of light.  
There are different types of light sources. These are either natural or man made.  
Shadows are formed when an object blocks a light source.

### In Year 4 we will learn...

Sound is caused by a series of vibrations.  
Pitch is how high or low a sound is.  
Volume is how quiet or loud a sound is.

### In Year 5 we will learn...

### In Year 6 we will learn...

Light travels in straight lines.  
We see an object because light has reflected off of that object and has entered our eyes.  
The eye changes the light into electrical signals which are interpreted by the brain.