

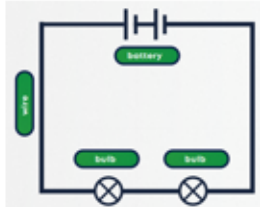
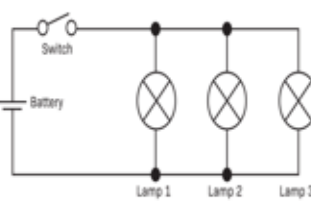
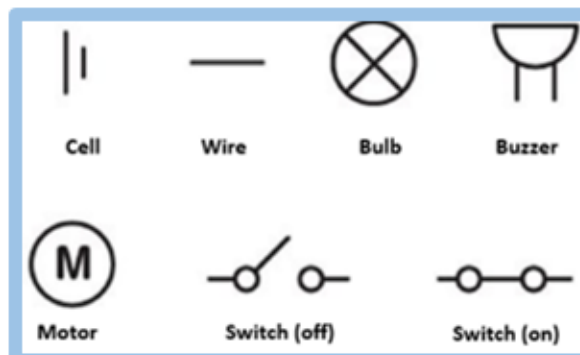
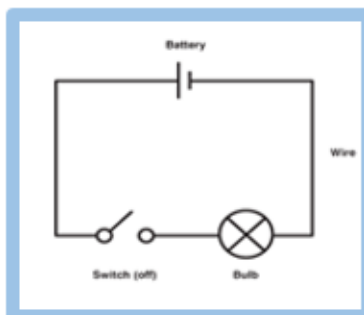


Electricity (Year 6)

Vocabulary

filament	voltage	electrical current	series circuit	parallel circuit
	1.5 V (volts) 			
A fine wire in a bulb which glows when electricity travels through it.	The power of the cell which pushes the current through the circuit.	The flow of electricity.	A single pathway where components are connected in a loop.	Where the electrical current divides to flow along multiple paths.

A circuit drawn using recognised symbols



Things I already know that I can connect new knowledge with:

- Circuits allow electricity to travel through them. It must be closed for this to happen. (Y4)
- Conductors allow electricity to flow through them but insulators do not. (Y4)

Knowledge:

- Electricity can flow from one place to another. This is called an electrical current. We can control the movement of electricity by causing it to flow in a circuit.
- Voltage is the pressure that pushes electricity through a circuit. Increasing the voltage in a circuit affects how components function.
- A switch makes a gap in a circuit which prevents electricity from flowing. Switches can be used for safety reasons and to save money.
- Different components can be used for different purposes.

Living Things & Their Habitats (Year 6)

Vocabulary

biology	organism	micro-organism	species	taxonomy
Study of living things.	An individual animal, plant or single-celled life form.	Single cell organism.	Group of living things with similar characteristics.	The practice of classifying organisms.

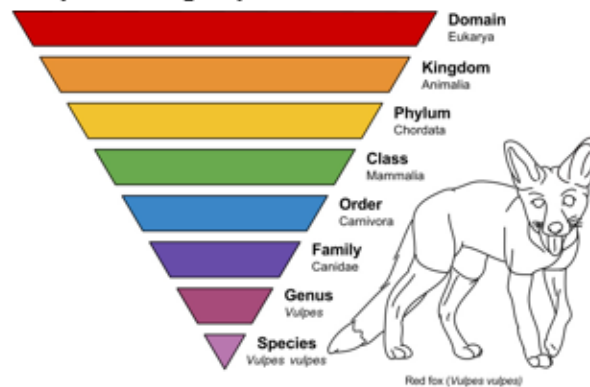
Important People:

Carl Linnaeus:
Created the modern system for naming organisms – taxonomy.



Linnaeus's classification system

- Classified living things into groups based on their structure and characteristics.
- There are seven major levels of classification which divide organisms into smaller and more specialised groups.



Knowledge:



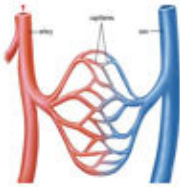

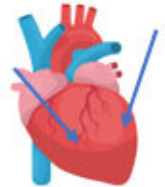
- Living things are classified into five main kingdoms. The members of each kingdom share features that are unique to that group. They are plants, animals, fungus, protist and monera.
- Scientists use a microscope to study protist and monera.
- Taxonomy is a way of classifying animals by dividing them into groups, then into even smaller groups.
- All organisms have a scientific name based on this taxonomy.

Things I already know that I can connect new knowledge with:

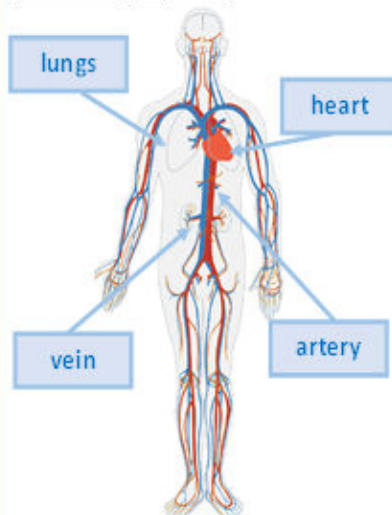
- I can describe characteristics of fish, birds, mammals, reptiles, amphibians, insects and arachnids. (Y4)
- I know that their life cycles are different. (Y5)
- I know that some plants reproduce sexually and others reproduce asexually. (Y5)

Animals Including Humans (Year 6)

Vocabulary

atrium	artery	blood vessel	oxygenated	deoxygenated	vein	ventricle
						
Two upper chambers of the heart.	Carries oxygenated blood away from the heart.	Tubes carrying blood through tissues and organs.	This has been supplied with oxygen.	This has had oxygen removed from it.	Carries deoxygenated blood to the heart.	Two lower chambers of the heart.

Circulatory System








Things I already know that I can connect new knowledge with:

- Mammals have lungs to help them breathe air. (Y4)
- The heart is an involuntary muscle. (Y3)
- I can describe the basic function of the digestive system. (Y4)

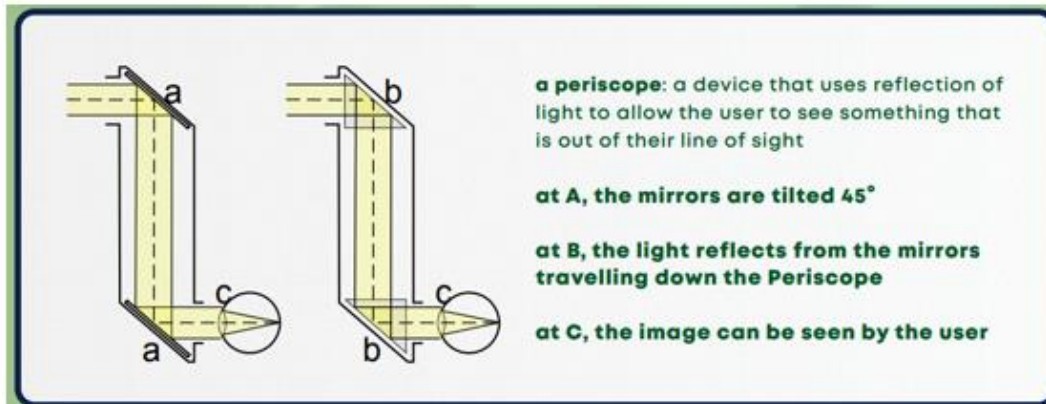
Knowledge:

- The heart pumps blood around the body.
- The left atrium and left ventricle carry oxygenated blood which is pumped around the body.
- The right atrium and right ventricle carry deoxygenated blood which is pumped out to the lungs.
- Blood vessels, called arteries, carry oxygenated blood away from the heart. Blood vessels, called veins, carry deoxygenated blood back to the heart to be pumped back to the lungs.
- When we exercise, the heart pumps faster so that more oxygen is carried around the body.
- Some drugs can make the heart pump too fast or too slow, which can lead to poor health.

Light (Year 6)

<u>Vocabulary</u>				
shade	ray of light	artificial light source	natural light source	ray diagram
				
A dark patch where light has been blocked.	The path that light takes.	Something that produces light and is man-made.	Something that produces light naturally.	Shows how light travels.

How we know that light travels in straight lines and how we can use it to help us



Knowledge:







- Some light sources are natural and some are artificial.
- Light travels in straight lines.
- Light enables us to see by entering our eyes or by reflecting off objects and then entering our eyes.
- Shadows are the same shape as the object that cast them.
- The size of shadows can change but the outline shape remains the same.

Things I already know that I can connect new knowledge with:

- Light travels in straight lines from a source. (Y3)
- Light reflects off objects. (Y3)
- When light is blocked, a shadow is created. (Y3)

Evolution and Inheritance (Year 6)

Vocabulary

adaptation	characteristics	Natural selection	evolution	extinct	inheritance
					
Change that improves the chance of survival.	Features or qualities.	The most beneficial characteristics get passed down to later generations.	Change in a species over a long period of time.	No longer existing.	Passing on characteristics to offspring.

Important People

Charles Darwin:

He proposed that all species of life have descended over time from common ancestors.

Alfred Wallace:

Proposed a theory of evolution and natural selection independent of Darwin.

Animal Evolution

- Finches on the Galapagos Islands evolved to match the food available.

Large beak to crush tough seeds.

Small beak to feed on soft seeds.



Short beak to hold tools to find insects.

Long, sharp beak to tear flowers.

Knowledge:

- Living things have changed over time. Fossils are the remains of organisms that lived millions of years ago. Fossils provide evidence for evolution.
- Offspring are usually similar but not identical to their parents.
- Inheritance is passing on characteristics from a parent to their offspring. There are differences in characteristics within an individual species, known as variation. Evolution is the change in inherited traits.
- Animals and plants that adapt well to an environment have more chance of survival. Adaptation plays an important part in evolution as species change over time.

Things I already know that I can connect new knowledge with:

- Fossils are imprints in rocks of dead animals or plants. (Y3)
- I can describe the life cycle of some animals. (Y5)