

Science - Year 6

Autumn 1

Living Things and Their Habitats

- Classification is the sorting of things into different groups based on their characteristics.
- Characteristics are special qualities or appearances that make an individual or group of things different to others.
- You can classify living things (plants, animals, micro-organisms) by comparing similarities and differences.
- A micro-organism is a living thing that is too small to be seen with your eye (eg. bacteria, viruses, some moulds).

Autumn 2

Light

- Light travels from light sources (something that makes light) in straight lines.
- Light travels in a straight line and bounces off an object and travels in a straight line into the eye, enabling us to see.
- A shadow is an area of darkness where light has been blocked.
- Shadows are the same shapes as the objects that cast them.
- When an object gets closer to a light source, the shadow becomes larger as the object blocks more light.

Spring 1

Animals Including Humans

The circulation system

- The circulatory system transports substances around the body. It includes the heart, veins, arteries, capillaries and blood.
- The heart is an organ. It constantly pumps blood around the circulatory system. The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.
- Veins, arteries and capillaries are the three types of blood vessels.
- Water and nutrients (substances needed by the body to function) are transported around the body through the digestive and circulatory systems.

Spring 2

Evolution & Inheritance

- When living things reproduce, they pass on characteristics to their offspring. This is known as inheritance.
- Offspring are not identical to their parents – these are known as variations (changes and differences) of the same species.
- Living things have changed and adapted over many years.
- Adaptation is when a characteristic changes to increase a living thing's chances of surviving in their environment.
- Natural selection is where animals have adapted over time in order to survive and reproduce - Giraffes now have long necks so that they can reach food on the taller trees.
- Evolution is the gradual change of things over time as they adapt and grow.

Summer 1

Electricity

- A circuit is a pathway for electricity to flow around.
- The cell is a power source.
- The greater the number of cells or voltage, the brighter the lamp will be or the louder the buzzer will be.
- To make a bulb/buzzer brighter/louder, use more cells or voltage or shorter wires. The shorter the pathway is the less electricity is used getting to the bulb.
- The bulb/buzzer will be dimmer/quieter if there are more than one because the voltage is having to be shared amongst more things.

Summer 2

Animals Including Humans

The impact of lifestyle

- Having a balanced diet that contains all the food groups is important.
- A healthy lifestyle (diet and exercise) has a positive effect on the body's functions.
- A drug is a substance containing natural or man-made chemicals that have an effect on your body when it enters your system.
- Drugs, alcohol and smoking have a negative effect on the body's functions.