

Y4 Science Curriculum



Autumn	States of Matter	Sound
Year 4	-Understand what a solid, liquid and gas is -Identify, compare and group materials together, according to whether they are solids, liquids or gases -Understand how materials change state when heated or cooled -Explore what temperatures in degrees Celsius (°C) materials change state in -Understand what evaporation is in the water cycle -Understand what condensation is in the water cycle	-Understand that sounds are vibrations that travel through the air. -Understand Sound travels through a medium to the ear -To identify how the pitch of a sound is telling us how high or low the sound is. -To identify how the volume of a sound is how loud or quiet the sound is. -Identify good and bad insulators for sound and how this helps soundproofing. -Explore how sound changes based on the distance from the sound source.

Spring	Electricity	Animals including Humans
Year 4	-Many metals, such as copper, iron and steel, are good electrical conductors. That is why the parts of electrical objects that need to let electricity pass through are always made of metal. -Some materials do not allow electricity to pass through them. These materials are known as electrical insulators. -Construct a simple series electrical circuit, identifying and naming its basic components, including cells, wires, bulbs and switches. -A switch helps control the flow of electricity within a circuit. -Electricity is dangerous, you must be careful when using electrical appliances. -To identify common familiar appliances that run on electricity, powered by mains and batteries.	-To identify the names and functions of teeth - incisors, canines, molars, premolars. -To identify actions that can be taken to look after teeth. -To identify the basic parts of the digestive system, including the mouth, oesophagus, stomach, large intestine and the small intestine -To identify that digestion happens in the digestive system. This is a series of organs that break the food down so it can be absorbed into our bloodstream. -To identify that a producer is at the beginning of a food chain and that everything else after this is a consumer. -To know a food chain is a chain of living things which depend on each other for a source of food.

Summer	All Living Things
Year 4	-To identify a range of living things using knowledge of the 7 life processes (MRS GREN) -To be able to show how to group a range of living things. -Understand how to use a classification key to identify a living thing. -Create a classification key to help group, identify and name a variety of living things in their local and wider environment -Give examples of how an environment may change both naturally and due to human impact -Understand how changes to an animal's environment or habitat can cause animals to become endangered.