Year 4 Key Knowledge								
Sound (7 lessons)	Electricity (5 lessons)	Living things & their habitats (6 lessons)	Animals including humans (5 lessons)	States of Matter (7 lessons)				
What is sound?	What is electricity?	Which living things can be found in the local area?	What happens to the food we eat?	Can materials change state?				
*know how sound is made and identify what is vibrating when sounds are made	*know which electrical appliances run off mains electric and which are battery powered understanding how mains electricity is transported from power stations and why batteries run out of charge	*name each of the seven life processes explaining how animals and plants complete each of the life processes distinguishing between living and non-living objects	*name twelve main parts of the digestive system and describe their basic functions	*identify and group solids, liquids and gases,				
*know how vibrations from sounds travel through either solids, liquids or gases to the ear, using knowledge of particle structure to explain why sound travels more quickly through solids when compared to gases	*know how to construct a variety of simple circuits using different components	*name the five main animal groups and name characteristics of an animal using terms such as herbivore, omnivore and carnivore	*name different teeth and relate the shape of the teeth to the function	*describe the characteristics of each state of matter including how the particles are organised				
*describe the parts and functions of the outer, middle and inner ear	*know which circuits will work and which won't, providing an explanation as to why, making suggestions as to how a circuit can be fixed	*understand the terms vertebrate and invertebrate	*know which drinks cause the most tooth decay	*know that heating and cooling can change the state of materials				
*know what pitch is describing the relationship between the lengths of pipes and the pitch of the note	*know common conductors and insulators and explain how insulators and conductors are used in everyday life	*know that classification keys are used to identify living things	*understand the terms herbivore, camivore and omnivore and identify animals in each of these groups	*explain the water cycle and identify the part played by evaporation and condensation in the cycle				
*know which materials are the best at muffling sound	*know how switches affect a circuit	*know the effect that human activity has on the environment	*identify the producers, prey or predators in food chains	*know the relationship between temperature and the rate of evaporation and know conditions that will accelerate or decelerate the rate of evaporation				
		Key Vocabulary & Definitions						
<pre>vibrate/vibrations - forward and backward movement of an object (usually rapidly) volume - how loud or quiet a sound is pitch - how high or low a sound is pinna - the outer portion of the ear (ear flap) cochlea - the sound reception part of the inner ear ear drum - the membrane which collects sound from the pinna and passes it to the inner ear</pre>	appliance – a device or piece of equipment that has been made to perform a specific task battery – a small item used to power small appliances circuit – a route through which electricity flows components – the parts of a circuit conductor – allows electricity to flow through it current – the rate of flow of electricity measured in amps electrical – something that uses electricity to work insulator – doesn't allow electricity to flow through it main power – electricity provided by power stations portable – can be easily carried around pylon – a tower used for keeping electrical wires above ground switch – a decide for controlling the flow of electricity in a circuit	environment – the conditions (both living and non-living) that surround an organism classify – to arrange a group of people or things in classes or categories according t shared qualities or characteristics vertebrate – an animal that has a backbone invertebrate – an animal without a backbone exoskeleton – a rigid external covering for the body in some invertebrate animals key – a questioning device that allows the progressive narrowing down of the classification of an unknown living thing based on an observable or testable features adaptation – the way in which an organism is particularly suited t its environment pollution – the introduction into the environment of a substance which has harmful effects	canines – ripping teetn carnivore – animals that only eat other animals digestion – the process of breaking down food into simple chemicals for the body to absorb herbivore – animals that only eat plants incisor – cutting teeth large intestines – where water is absorbed into the blood molars – grinding teeth oesophagus – food and water pipe omnivore – animals that eat both plants and animals peristalsis – muscular action to move food along the digestive tubes predator – an animal that hunts, kills and eats other animals for food prey – a term used to describe organisms that predators kill for food producer – a plant in a food chain saliva – a lubricating digestive juice produced in the mouth small intestines – where food is broke down and nutrients are absorbed into the blood stomach – a rounded vessel in the body	<pre>change - to make different collection - when water flows back into rivers, streams and lakes and gets carried back to sea condensation - when water vapour cools and turns back into water evaporation - when water is heated and turns into water vapour freeze - when something is put at a very low temperature gas - a state of matter that has no defined shape or volume heath - a state of matter that flows freely but keeps the same volume precipitation - when water falls from the clouds in the sky property - a characteristic solid - a state of matter that is firm and stable temperature - how hot or cold something is thermometer - an instrument used for</pre>				

			where acid and digestive juices break down food	measuring temperature
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