



	Autumn 1/Autumn 2			Spring 1/2		Summer 1/2		
Year 4								
	Animals including humans Week 1-3	Data collection Week 4	States of matter Week 5-11	Sound Week 1-5 (Data collection week 6)	Electricity /Energy Week 7-11	Data collection (week 1/2) Living things and their habitats (classification, changing environments) Week 3-6	Digestive system Week 6-10	Food chains Week 11/12
Previous knowledge Knowledge check for start of unit.	In Year 3 pupils were identifying and grouping animals with and without skeletons, observing and comparing their movement. Different diets of animals, grouping animals according to what they eat.	In year 1 & 2 pupils identified, named and compared a variety of materials including: wood, metal, plastic, glass, brick, rock, paper and cardboard. Materials were grouped on their physical properties. In year 3 pupils will have studied rocks, comparing and grouping different kinds of rocks based on appearance and physical properties.	This is the first-time pupils will have studied sound as a scientific subject.	This is the first-time pupils will have studied electricity as a scientific subject.	In year 2 pupils explored the difference between things that are living, dead and things that have never been alive. They identified different habitats and how they provide for the basic needs of different plants / animals. They named a variety of plants and animals in their habitats, including micro habitats. They described how animals and plants obtain food and looked at simple food chains.	In Year 3 pupils were identifying and grouping animals with and without skeletons, observing and comparing their movement. Different diets of animals, grouping animals according to what they eat.	In Year 3 pupils were identifying and grouping animals with and without skeletons, observing and comparing their movement. Different diets of animals, grouping animals according to what they eat.	
Key concepts	Construct and interpret a variety of food chains, identifying producers, predators and prey. Children will focus on 5 different food chains: - Grassland - Ocean - Desert - Rainforest - Pond	Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when they are heated and cooled, and measure or research the temperature at which this happens in degrees celcius. - Melting Chocolate (crispy cakes)	Identify how sounds are made, associating some of them with something vibrating. Recognise that vibrations from sound travel through a medium to the ear. Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound	Identify common appliances that run on electricity Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers (draw as a simple pictorial representation) identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp	Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things. - Plants: flowering / non-flowering - Vertebrates: fish/ amphibians/ reptiles/ birds/ mammals	I can name the parts of the digestive system. I can identify the function of each organ of the digestive system. I can identify the different types of teeth in humans and their functions. -	Construct and interpret a variety of food chains, identifying producers, predators and prey. Children will focus on 5 different food chains: - Grassland - Ocean - Desert - Rainforest - Pond	

		<ul style="list-style-type: none"> - Freezing Cream (icecream) - Water / ice melting and freezing <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. (puddles, washing on a line)</p> <p>Observe water as a solid, liquid and gas and identify changes when it is heated or cooled.</p>	<p>and the strength of vibrations that produced it.</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>is part of a complete loop with a battery</p> <p>recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>recognise some common conductors and insulators, and associate metals with being good conductors.</p>	<ul style="list-style-type: none"> - Invertebrates: snails and slugs/ worms/ spiders/ insects <p>Recognise that environments can change and that this can sometimes pose danger to living things i.e. human impact ...</p> <ul style="list-style-type: none"> - Positive effects of: nature reserves, ecologically planned parks, garden ponds - Negative effects: population and development, litter, deforestation 		
Vocabulary	<p>Food chain Producer Predator Prey Consumer</p>	<p>Solids: hold their shape Liquids: form a pool not a pile Gases: escape from an unsealed container. Changing state Heated Cooled Evaporation Condensation Water cycle Temperature Degrees Celsius</p>	<p>Vibrating Pitch Volume Insulation Outer, middle and inner ear. Insulation Cochlea Auditory Frequency - Hammer</p>	<p>Circuit Buzzers Conductor Battery Cells Wires Bulbs Switch Socket Appliance series circuit - Insulator</p>	<ul style="list-style-type: none"> - Plants: flowering (including grasses) / non flowering (including mosses and ferns) - Vertebrates: fish/ amphibians/ reptiles/ birds/ mammals - Invertebrates: snails and slugs/ worms/ spiders/ insects <p>Grouping Classification key Categories Environment</p>	<p>pancreas oesophagus intestine organ molars canine food chain salivary gland</p>	<p>Food chain Producer Predator Prey Consumer</p>
Link books	<ul style="list-style-type: none"> + Food chains (engage literacy) + Who ate the frog + Staying alive <p>Food chains: who eats what?</p>	<p>Once upon a rain drop</p>	<p>Pied Piper of Hamelin Sound: Lets investigate</p>	<p>Charging about – the story of electricity</p>			<ul style="list-style-type: none"> + Food chains (engage literacy) + Who ate the frog + Staying alive <p>Food chains: who eats what?</p>
Knowledge mat	<p>Year 4: Digestive systems and food chains</p>	<p>Year 4: water cycle</p>	<p>Year 4: sound</p>	<p>Year 4: electricity</p>		<p>Year 4: Digestive systems and food chains</p>	<p>Year 4: Digestive systems and food chains</p>

Enrichment							
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