



KS2 Cycle B Science Medium Term Plan

	Autumn	Spring	Summer
Unit of Work	<p style="text-align: center;">Sound</p> <p style="text-align: center;">What happens to the volume of a noise when it is closer/further away? (comparative/fair testing)</p> <p style="text-align: center;">Living things and Their Habitats</p> <p style="text-align: center;">Why do different animals live in different places? (research)</p>	<p style="text-align: center;">Electricity</p> <p style="text-align: center;">Which material is the best conductor of electricity? (comparative/fair testing)</p> <p style="text-align: center;">Animals Including Humans</p> <p style="text-align: center;">Do different liquids effect erosion? (observation over time)</p>	<p style="text-align: center;">States of Matter</p> <p style="text-align: center;">What happens to water when it is heated up for different lengths of time? (observation over time)</p>
Vocabulary to support Substantive and Disciplinary Knowledge	<p>Sound, sound wave, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation</p> <p>Classification, classification keys, environment, habitat, human impact (positive and negative), migrate, hibernate, fish, reptiles, amphibians, mammals, birds, insects, vertebrae, non-vertebrae</p> <p>comparative/fair testing, research, observation over time, identifying grouping and classifying, problem solving, investigate, question, predict, method, fair test, answer, results, record, data, diagram, present, describe, conclusion, identify, compare, observe, group, sort, classify, equipment</p>	<p>Electricity, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol</p> <p>Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small/large intestines, rectum, anus, teeth, incisor, canine, molars, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain</p> <p>comparative/fair testing, research, observation over time, identifying grouping and classifying, problem solving, investigate, question, predict, method, fair test, answer, results, record, data, diagram, present, describe, conclusion, identify, compare, observe, group, sort, classify, equipment</p>	<p>Solid, liquid, gas, particles, state change, melting, freezing, melting point, boiling point, thermometer, Celsius, evaporation, condensation, temperature, water cycle</p> <p>comparative/fair testing, research, observation over time, identifying grouping and classifying, problem solving, investigate, question, predict, method, fair test, answer, results, record, data, diagram, present, describe, conclusion, identify, compare, observe, group, sort, classify, equipment</p>

<p>I will know....</p>	<ul style="list-style-type: none"> • I can identify how sounds are made, associating some of them with something vibrating. • I can recognise that vibrations from sounds travel through a medium to the ear. • I can find patterns between the pitch of a sound and features of the object that produced it. • I can find patterns between the volume of a sound and the strength of the vibrations that produced it. • I can recognise that sounds get fainter as the distance from the sound source increases. • I can recognise that living things can be grouped in a variety of ways. <ul style="list-style-type: none"> • I can explore and use classification keys to help group, identify and name a variety of living things in my local and wider environment. • I can recognise that environments can change and that this can sometimes pose dangers to living things. • I can construct and interpret a variety of food chains, identifying producers, predators and prey. 	<ul style="list-style-type: none"> • I can identify common appliances that run on electricity. <ul style="list-style-type: none"> • I can construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. • I can identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. • I can recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. <ul style="list-style-type: none"> • I can recognise some common conductors and insulators, and associate metals with being good conductors. • I can describe the simple functions of the basic parts of the digestive system in humans. • I can identify the different types of teeth in humans and their simple functions. 	<ul style="list-style-type: none"> • I can compare and group materials together, according to whether they are solids, liquids or gases. • I can observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$). • I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
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Working Scientifically
runs throughout and will be covered in some way during each lesson

Vocabulary	comparative/fair testing, research, observation over time, identifying grouping and classifying, problem solving, investigate, question, predict, method, fair test, answer, results, record, data, diagram, present, describe, conclusion, identify, compare, observe, group, sort, classify, equipment
I will know....	<p>I can ask relevant questions and use different types of scientific enquiries to answer them.</p> <p>I can set up simple practical enquiries, comparative and fair tests.</p> <p>I can make systematic and careful observations and, where appropriate, take accurate measurements using standard units, use a range of equipment, including thermometers and data loggers.</p> <p>I can gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</p> <p>I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>I can use results to come to simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p> <p>I can identify differences, similarities or changes related to simple scientific ideas and processes.</p> <p>I can use straight forward scientific evidence to answer questions or to support my findings.</p>