



St Mary's Catholic Junior School

Year 4

Science Long Term Planner



Autumn I	Autumn II	Spring I	Spring II	Summer I	Summer II
States of matter	Working scientifically	Living things and their habitats	Animals including humans	Sound	Electricity

CURRICULUM DOCUMENT				
States of matter	Living things and their habitats	Animals including humans	Sound	Electricity
<p>Compare and group materials together, according to whether they are solids, liquids or gases</p> <p>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 (°C)</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p>Recognise that living things can be grouped in a variety of ways</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p>Describe the simple functions of the basic parts of the digestive system in humans</p> <p>Identify the different types of teeth in humans and their simple functions</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>	<p>Identify how sounds are made, associating some of them with something vibrating</p> <p>Recognise that vibrations from sounds travel through a medium to the ear</p> <p>Find patterns between the pitch of a sound and features of the object that produced it</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>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</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>

CURRICULUM ENTITLEMENT

	Key Scientific Knowledge	Vocabulary	Assessment Criteria – ‘Can I...? statements’
States of Matter	<ul style="list-style-type: none"> • Water Cycle • Solids, Liquids and Gases • Use of Heat 	Water cycle Molecule Solute Solvent Evaporation Condensation Water vapour distillation	<ul style="list-style-type: none"> • Can I compare and group materials together, according to whether they are solids, liquids or gases? • Can I observe that some materials change state when they are heated or cooled? • Can I measure or research the temperature at which things heat or cool in degrees Celsius (°C) • Can I identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature?
Living things and their habitats	<ul style="list-style-type: none"> • Classification keys 	Classify Vertebrate Invertebrate Cold-blooded Warm-blooded Sample Exoskeleton creature	<ul style="list-style-type: none"> • Can I recognise that living things can be grouped in a variety of ways? • Can I explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment? • Can I recognise that environments can change and that this can sometimes pose dangers to living things?
Animals Including humans	<ul style="list-style-type: none"> • Digestive system • Human teeth • Food chains 	Salivary gland Oesophagus Intestines Food pyramid Nutrient Vitamin Digest decomposer	<ul style="list-style-type: none"> • Can I describe the simple functions of the basic parts of the digestive system in humans? • Can I identify the different types of teeth in humans and their simple functions? • Can I construct and interpret a variety of food chains, identifying producers, predators and prey?
Sound	<ul style="list-style-type: none"> • Vibrations • Sound travel • Pitch and volume 	Vibration Speed of sound Soundproof Soundwave Frequency Decibel Eardrum pitch	<ul style="list-style-type: none"> • Can I identify how sounds are made, associating some of them with something vibrating? • Can I recognise that vibrations from sounds travel through a medium to the ear? • Can I find patterns between the pitch of a sound and features of the object that produced it? • Can I find patterns between the volume of a sound and the strength of the vibrations that produced it? • Can I recognise that sounds get fainter as the distance from the sound source increases?

Electricity	<ul style="list-style-type: none">• Electrical circuit construction• Conductors and insulators	Series circuit Circuit diagram Parallel circuit Conductor Insulator Loop Switch resistance	<ul style="list-style-type: none">• Can I construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers?• Can I 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?• Can I recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit?• Can I recognise some common conductors and insulators, and associate metals with being good conductors?
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