

	Autumn Term Ancient Greece		Spring Term Stone Age	Summer Term Coasts	
Area of Science	Y4: Electricity	Y4: Sound	Y3: Rocks	Y4: States of Matter	Y4: Living things and their Habitats
Knowledge	<ul style="list-style-type: none"> 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 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 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit Recognise some common conductors and insulators, and associate metals with being good conductors 	<ul style="list-style-type: none"> Identify how sounds are made, associating some of them with something vibrating Recognise that vibrations from sounds 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 and the strength of the vibrations that produced it Recognise that sounds get fainter as the distance from the sound source increases 	<ul style="list-style-type: none"> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock Recognise that soils are made from rocks and organic matter 	<ul style="list-style-type: none"> Compare and group materials together, according to whether they are solids, liquids or gases 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 Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature 	<ul style="list-style-type: none"> 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 in their local and wider environment Recognise that environments can change and that this can sometimes pose dangers to living things
Key Vocabulary	electricity, cell, battery, plug, mains, cable, appliance, device, connection, power, danger, safety, circuit, wire, lead, crocodile clip, bulb, bulb holder, buzzer, energy, flow, current, switch, motor, component, conductor, pressure, insulator, disconnect, design, test, adapt, modify	music, sound, noise, investigate, explain, vibration, ears, hear, travel, air, water, solid, source, sound waves, sound proof, medium, transmit, detect, energy, decibel, fair test, loudness, volume, strength, rhythm, stronger, weaker, pitch, note, high/low, tune, instrument, change	sandstone, limestone, chalk, granite, slate, marble, petrologist, man-made, igneous, sedimentary, metamorphic, permeable, impermeable, acid, erosion, bedrock, fossil, ichthyosaur, plesiosaur, ammonite, sediment, minerals, mould, cast, soil, micro-organisms, organic matter, particles, sand, silt,	states of matter, solid, liquid, gas, natural, man-made, molecule, atom, bonds, oxygen, nitrogen, carbon dioxide, argon, bromine, ice, freeze, melt, heat, energy, solidify, vapour, evaporation, condensation, water vapour, invisible, particles, precipitation, water cycle	reproduction, sensitivity, nutrition, excretion, respiration, growth, oxygen, vertebrates, invertebrates, warm blooded, cold blooded, ecosystem, pollution, climate change, adaptation, global warming, greenhouse gases, landfill, deforestation, sustainable, unsustainable
Cross-curricular Links	DT – Using electrical circuits in toys	Music – Recall sounds with increasing aural memory, recognising and understanding change in pitch	Geography – Physical geography, recognising and locating rock formations and describing the structure	Maths – Measuring changes in temperature Geography – The Water Cycle, locations	English – Information texts, reports about living things Maths – group using keys and other diagrams (e.g. Venn)
Scientific Enquiry Methods		<ul style="list-style-type: none"> Observe changes over time Notice patterns and pattern seeking Group and classify 	<ul style="list-style-type: none"> Fair and comparative testing Researching/secondary sources 		
Working Scientifically Skills		<ul style="list-style-type: none"> Ask relevant questions and use different types of enquiries to answer them Set up practical enquiries, comparative and fair tests Make careful observations and take accurate measurements using a range of equipment Gather, record, classify and present data to help answer questions Record findings using scientific language, drawings, labelled diagrams, keys, bar charts and tables 		<ul style="list-style-type: none"> Report on findings from enquiries using oral or written explanations, presentations of results and conclusions Use results to draw conclusions, make predictions, suggest improvements and raise further questions Identify differences, similarities or changes Use scientific evidence to answer questions or support their findings 	