Enquiry Skills Progression – Y4

	Observe changes over time	Pattern seeking	Grouping and classifying	Fair and comparative Tests	Secondary Sources/Research
Living things and their habitats		Do animals with … have …? Do plants with … have …? *How has the use of insectides affected the bee population?*	Based on children's own criteria. For example: Classifying living things in local/wider environment Introduce branching databases/dichotomous keys		Research global environmental issues and the impact on living things. **Famous Scientists:** Jacques Cousteau -Marine Biology Cindy Looy-Environmental Change and Extinction Joean Beauchamp Procter Zoologist
Animals inc humans		*Explore the effects of different liquids on tooth enamel? Is there a link between the amount of sugar and the amount of damage?*	Compare and contrast different types of teeth (linking to simple functions) Classify jaw bones/teeth to aid making food chains *How can we organise teeth into groups?* *Can we tell if an animal is a herbivore/ omnivore/ carnivore from their teeth?*		Research different parts of digestive system Research what different animals eat within specific environment **Famous Scientists:** Joseph Lister-Antiseptic Ivan Pavlov- Digestive System Mechanisms Washington & Lucius Sheffield- Toothpaste in a tube
States of matter	Watch ice melt/ water evaporate/ water turn into steam from a kettle.	*Is there a connection between the temperature of an object and the speed at which it melts?*	Based on own criteria: Classify solids, liquids *Can you group these materials and objects into solids, liquids and gases?*	*What affects the melting rate of chocolate?* *What affect the rate an 'ice pole' melts?* *What affects the rate of evaporation?* *How does the mass of a block of ice affect how long it takes to melt?*	Research melting point of metals. Research the water cycle **Famous Scientists:** Joseph Priestly – Discovered oxygen Lord Kelvin -Absolute zero (temperature) Anders Celsius - Temperature Scale

					Daniel FahrenheitTemperature Scale / Invention of the Thermometer George Washington Carver- chemist
Sound		*Is there a link between the pitch made by an instrument and the length of the string/pipe?* *Is there a link between the volume of an instrument and the force at which it is struck/blown into?* Make pan pipes or straw flute.	Based on own criteria – sort musical instruments: percussion/ wind/ string/ etc..	Measure the volume of different instruments. Measure how the volume changes away from a source. Investigate string telephones. *Which material is best to use for muffling sound?* *How does the volume of a drum change as you move further away from it?*	*Since the 1800s, how has science helped people who are deaf?* **Famous Scientists:** Alexander Graham Bell - Invented the telephone Aristotle - Sound Waves Gailileo Galilei - Frequency and Pitch of Sound Waves
Electricity	*Who actually invented the lightbulb, Thomas Edison or Joseph Swan?*		Based on children's own criteria: classifying household appliances and/or toys (leading to electrical/not electrical, battery/mains) Test materials to classify into insulators and conductors	Making circuits to explore how changing various variables affect the brightness of a bulb or volume of a buzzer. *Which material is the best conductor of electricity?* *How does the thickness of a conducting material affect how bright the lamp is?*	**Famous Scientists:** Michael Faraday- Discovered relationship between magnets and electricity Thomas Edison- Lightbulb Joseph Swan- Incandescent Light Bulb