The Piggott School: Charvil Primary



'Go and do Likewise' Luke 10:25, -37 The Parable of the Good Samaritan We live with love and compassion, seeking help in times of need

Curriculum Map: Science Year 4

	Animals including	Living things and their	Living things and their	States of Matter	Sound	Electricity
	humans	habitats	habitats -			
			Conservation			
Content Declarative	* Name the organs in the digestive system.	* Name and explore different habitats.	* describe ecosystems and how they are	* Compare and group the three states of	*identify how sounds are made	*know about electrical appliances and
Knowledge 'I	* Describe the	* Know how animals	affected by changes in	matter.	*know how vibrations	electrical safety
know'	functions of the main organs in the digestive system. * Name the types of human teeth and their functions. * Know the effects of different liquids on teeth. * Understand food chains. * Understand food webs.	can be classified * Know how to create a classification key * Be able to explain adaptations on classification within species. * Know how to classify pond plants	the seasons. * Understand the human impact on the environment through deforestation. * Understand air pollution. * Understand water pollution. * Know methods that can be used to conserve water. * Understand that humans can have a positive impact on nature.	 * Know how particles behave in solids, liquids and gases. * Know what melting points are. * Know what freezing points are. * Know what boiling points are. * Know what evaporation is. * Know what condensation is. * Understand the water cycle. 	from sounds travel through a medium to the ear *understand sound insulation *know what volume is *know what pitch is *know how sounds change over distance	*know about electrical components in a series circuit *explore conductors and insulators, *know about electrical switches
Skills Procedural Knowledge 'I know how to'	* Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.	* Identify differences, similarities, or changes related to simple scientific processes and ideas	* Gather, record, classify and present data in a variety of ways to help answer questions.	* Gather, record, classify and present data in a variety of ways to help answer questions.	* Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	* Report on findings from enquiries, including oral and written explanations, displays or presentations of

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	* Make systematic and	* Report on findings	* Use straightforward	* Use straightforward	* Identify differences,	results and
	careful observations	from enquiries,	scientific evidence to	scientific evidence to	similarities, or changes	conclusions.
	* Report on findings	including oral and	answer questions or to	answer questions or to	related to simple	* Use straightforward
	from enquiries,	written explanations.	support their findings.	support their findings.	scientific processes and	scientific evidence to
	including oral and	* Gather, present data	* Record findings using	* make systematic and	ideas	answer questions or to
	written explanations.	in a variety of ways to	simple scientific	careful observations,	* Set up simple practical	support their findings.
	* Set up simple	help in answering	language, drawings,	and, where	enquiries, comparative	* Gather, present data
	practical enquiries,	questions.	labelled diagrams,	appropriate, take	and fair tests.	in a variety of ways to
	comparative and fair	* Record findings using	keys, bar charts, and	accurate	* make systematic and	help in answering
	tests.	simple scientific	tables.	measurements using	careful observations,	questions.
	* Use results to draw	language, drawings,	* make systematic and	standard units, using a	and, where appropriate,	* Set up simple
	simple conclusions,	labelled diagrams, keys,	careful observations,	range of equipment,	take accurate	practical enquiries,
	make predictions for	bar charts, and tables.	and, where	including	measurements using	comparative and fair
	new values, suggest		appropriate, take	thermometers and	standard units, using a	tests.
	improvements and		accurate	data loggers.	range of equipment,	* make systematic and
	raise further questions		measurements using	* Record findings using	including thermometers	careful observations,
			standard units, using a	simple scientific	and data loggers.	and, where
			range of equipment,	language, drawings,	* Record findings using	appropriate, take
			including	labelled diagrams,	simple scientific	accurate
			thermometers and	keys, bar charts, and	language, drawings,	measurements using
			data loggers.	tables.	labelled diagrams, keys,	standard units, using a
			* Report on findings	* Use results to draw	bar charts, and tables.	range of equipment,
			from enquiries,	simple conclusions,		including
			including oral and	make predictions for		thermometers and
			written explanations,	new values, suggest		data loggers.
			displays or	improvements and		*ask relevant
			presentations of	raise further		questions and use
			results and	questions.		different types of
			conclusions.	* Record findings using		scientific enquiries to
				simple scientific		answer them
				language, drawings,		
				labelled diagrams,		
				keys, bar charts, and		
				tables.		
Vocabulary	Digestive system,	habitat, microhabitat,	Ecosystem, northern	Matter, solid, liquid,	Vibration, medium,	Electricity, batteries,
-	oesophagus, stomach.,	conditions, adapted,	hemisphere, southern	gas, volume, particle,	waves, eardrum, signals,	mains electricity,
	small intestine, large	camouflage, Coastal,	hemisphere, migrate,	bored, arranged, cold,	source, energy, particles,	appliance, socket,

	interting coling	Crassland	monoon reinforest	bootod porticle	acho vocuure materiala	oirquit corige sizevit	
	intestine, saliva,	Grassland,	monsoon, rainforest,	heated, particle,	echo, vacuum, materials,	circuit, series circuit,	
	peristalsis, absorb, liver,	Environment, Climate,	deforestation, drought,	melting, melting point,	reflect, absorb, insulate,	component, cell,	
	gall bladder, incisors,	exposure, classify,	biodiversity, recycling,	temperature,	defenders, volume,	voltage, current,	
	canines, molars, jaw,	characteristics,	fossil fuels, pollution,	thermometer,	decibels, decibel metre,	power, battery, wire,	
	gum, enamel, plaque,	vertebrate,	greenhouse gases,	freezing, reverse,	amplitude, power, pitch,	bulb, conductor,	
	tooth decay, cavity,	Invertebrate, species,	emissions, climate	boiling, sublimation,	high pitch, low pitch,	insulator, metal,	
	fluoride, ecosystem,	sub-groups, identify,	change, chemicals,	deposition,	instruments, orchestra,	copper, rubber, switch,	
	producer, consumer,	criteria, classification	sewage, contaminate,	evaporation,	energy, particles, travel,	current, control,	
	prey, predator, food	Keys, Organism,	pesticides, water	condensation, absorb,	sound source, fade	complete circuit,	
	web, tundra, hide,	adapted, region, features, colouring,	treatment, plant,	water vapour, process,		incomplete circuit, non-renewable energy,	
	interdependence,	blubber, ecosystem,	conserve, drought, fresh water, pure,	water vapour, process, water cycle,		renewable energy,	
	threatened.	oxygenized, flowering	water, but,	precipitation, surface		wind turbines, solar	
	threatened.	plant, common non-	endangered, marine	runoff, transpiration,		panels, hydropower	
		flowering plant, pond	sanctuaries, protect,	groundwater		pariers, riyuropower	
		dipping.	conservation areas,	groundwater			
		dipping.	recycling.				
Кеу	How do we digest out	How do all living things	What are the main	What are the states of	How does sound travel?	How is electricity	
Questions	food and what happens	survive?	threats to certain	matter? Can an object	How does the ear work?	made? How does	
	to it once it is digested?		species?	change state? If an	What makes different	electricity travel?	
	Why do we have some			object changes state,	sounds?		
	many different teeth?		How or does this affect	can it change back			
	What different jobs do		our daily lives?	again? Are there only			
	they do? How do our		What changes can we	four states of matter?			
	teeth decay?		make to reduce the	Why do some solids			
			impact?	behave like liquids and			
				vice versa?			
Assessment	Assessment on Insight every term as well as lesson by lesson observations based on knowledge, skills and key questions outlined above						
	Peer and self-assessment opportunities						
	Option to use Developing Experts End of Block assessments at teacher's discretion						
Cross	Spiritual – learning	Spiritual – learning	Classification keys,	Spiritual – learning	Spiritual – learning about		
Curricular	about the world around	about the world around	environment, fish,	about the world	the world around them	about the world	
Links/Charact	them and reflecting on	them and reflecting on	amphibians, reptiles,	around them and	and reflecting on	around them and	
er Education	experiences. Social –	experiences. Social –	birds, mammals,	reflecting on	experiences. Social –	reflecting on	
	cooperating and	cooperating and	vertebrates,	experiences. Social –	cooperating and working	experiences. Social –	
	working together	working together	invertebrates, names		together		

PE – body s	ystems Geography – huma impact on the	impact, positive,	cooperating and working together	Music – pitch and volume	cooperating and working together
	environment	negative (impact).	Geography – The Water Cycle		Life learning – safety around electricity
					DT – incorporate a
					circuit into a 3D model