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 3

	Scientific Enquiry	Animals including humans	Rocks	Forces and Magnets	Plants	Light
Content Declarative Knowledge 'I know'	*know what a fair test is *know how to use a results table to record and present results *know how to write a conclusion	 * Explore the five key food groups.* Know about the nutrition in the food we eat. * Know about the different types of skeletons.* Know about the human skeleton. * Know about animals and their skeletons. * Know about the role of muscles. 	 * Know the formation and properties of igneous rocks. * Know the formation and properties of sedimentary and metamorphic rocks. * Know how and why rocks might have changed over time. * 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. 	 * Know the difference between contact and non-contact forces. * Know how things move on different surfaces. * Know different types of magnets. * Know the properties of magnets and everyday objects that are magnetic. * Understand that magnetic forces can act at a distance. * Know the everyday uses of magnets 	 * Know the effect of different factors on plant growth. * Identify undescribed the functions of different parts of a flowering plant and how they are used in photosynthesis. * Know which way water is transported within plants. * Know the role that flowers play in the life cycle of flowering plants. * Understand the pollination process and the ways in which seeds are dispersed. 	* know the difference between light sources and non-light sources. *know that light comes from the sun and how to stay safe *Know materials which are reflective *discover how shadows are formed *know how shadows change throughout the day
Skills Procedural Knowledge 'I	* Ask relevant questions. And use different types of	* Gather, record, classify and present data in a variety of	* Report on findings from inquiries, including oral and	* Report on findings from inquiries, including oral and	* Ask relevant questions and use different types of	* Gather, record, classify and present data in a variety of

know how to'	scientific inquiries to answer them. * Make systematic and careful observations and where appropriate, take accurate measurements using standard units using a range of equipment including thermometers and data loggers. * Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. * Gather, record, classify, and present data in a variety of ways to help in answering questions. * Identify differences, similarities, or changes related to simple scientific ideas and	ways to help in answering questions. * Use straightforward scientific evidence to answer questions or to support their findings. * Report on findings from inquiries, including oil and written explanations, displays, or presentations of results and conclusions. * Record findings using simple scientific language, drawings, label diagrams, keys, bar charts, and tables. * Identify differences, similarities, or changes related to simple scientific ideas and processes.	written explanations, displays, or presentations of results and conclusions. * Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. * Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment including thermometers and data loggers. * Identify differences, similarities, or changes related to simple scientific ideas and processes.	written explanations, displays, or presentations of results and conclusions. * Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment including thermometers and data loggers. * Set up simple, practical inquiries, comparative and fair tests. * Record findings using simple scientific language, drawings, label diagrams, keys, bar charts, and tables.	scientific enquiries to answer them. * Set simple practical enquiries, comparative and tests. * Make systematic and careful observations. * Report on findings from inquiries, including oral and written explanations, displays, or presentations of results or conclusions. * Gather, record, classify and present data in a variety of ways to help in answering questions. * Record findings using simple scientific language drawings, labelled diagrams, keys, bar charts and tables. * Use results to draw	ways to help in answering questions. * Record findings using simple scientific language drawings, labelled diagrams, keys, bar charts and tables. * Report on findings from inquiries, including oral and written explanations, displays, or presentations of results or conclusions. * Identify differences, similarities, or changes related to simple scientific ideas and processes.
	 data in a variety of ways to help in answering questions. * Identify differences, similarities, or changes related to simple 	scientific ideas and	* Identify differences, similarities, or changes related to simple scientific ideas and	language, drawings, label diagrams, keys,	simple scientific language drawings, labelled diagrams, keys, bar charts and tables.	processes.

	 * Set up simple practical enquiries, comparative, unfair tests. * Use straightforward scientific evidence to answer questions or to support their findings. * Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. 					
Vocabulary	Solar, renewable energy, scientific investigation, prediction, plausible, record, results, data, table graph, acid, alkali, PH, method, practical, conclusion, evidence, explanation, compare, enquiry, baking, measurements, fair test, control experiment, variable, conclusive, scientific knowledge, equipment, diagram, collated	Nutrition, food types, carbohydrates, protein, vitamins, mineral, Nutrition label, portion, energy, balanced diet, vertebrate, invertebrate, and a skeleton common exit skeleton, hydrostatic skeleton, humorous, owner, radius, tibia, fibular., skull, rib cage, spine, muscle, contract, hamstrings, biceps, diaphragm.	Igneous rocks, intrusive igneous rock, extrusive igneous rock, extrusive igneous rock, crystals, magma, sedimentary rock, metamorphic rock, M Stone, marble, sandstone, weathering, chemical weathering, physical weathering, biological weathering, acid rain, appearance, texture from a submerged, erosion, receding., fossil, extinct, sediment, embedded, amber, decompose, fragments, clay soil, chalky soil, sandy soil.	Force, contact force, non-contact force, air resistance, friction, motion, surface, resistance, texture, tilt, magnet, tract, repel, bar magnet from horseshoe. Magnet, Magnetism, magnetic, magnetic field, iron, steel., magnetism, tract, non magnetic materials common recycle, compass, magnetic needle, magnetic north, direction, orienteering.	Nutrients, fertiliser, nursery, potassium, stunted, chlorophyll, stomata., xylem, photosynthesis, UV light, phloem, absorb, stomata, transpiration, anther, stigma, style, filament, reproduction, pollination, Poland, nectar, seed dispersal, pollinator, germination, vulnerable, anchor, sapling, formation.	Light, source, natural, artificial, reflect, vitamin D, Ultraviolet ray, sunburn, exposure, protection, flourescent, high visibility, reflective, surface, materials, shadow, opaque, sundial, rays, blocks, position, cast, opposite, direction, length, size, shape, closer, further, puppet
Key Questions	What is a fair test experiment? How can we write a scientific conclusion? How can	How do our bodies work? What happens to our food once we have eaten it? What do	Are all rocks the same? Why and how are they different? How can	How can forces help us reach our goals? How have forces been used throughout history?	How do plants pollinate? What is inside a plant?	How can you change the length of a shadow?

	we use a recording table effectively?	animals and humans need to survive and can they survive without these?	rocks and fossils inform us about the past?	How do magnets work? Why do some items attract and some repel?		
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-assessmen	t opportunities				
	Option to use Developin	g Experts End of Block asse	essments at teacher's disc	retion		
Cross Curricular Links/Charac ter Education	Social – cooperating and working together Analytical thinking	Spiritual – learning about the world around them and reflecting on experiences. Social – cooperating and working together DT – link to food and nutrition – making healthy soup	Spiritual – learning about the world around them and reflecting on experiences. Social – cooperating and working together	Spiritual – learning about the world around them and reflecting on experiences. Social – cooperating and working together	Spiritual – learning about the world around them and reflecting on experiences. Social – cooperating and working together	Spiritual – learning about the world around them and reflecting on experiences. Social – cooperating and working together Art and Design/Design Technology – reflective playground signs and clothing for cycle school