

Science Year Planner Year 3

Term	Autumn 1	Autumn 2	Spring 1	Summer 1	Summer 2
Topic or Stand-Alone?	Animalmania	Set in Stone	Mighty Metals	Stand-Alone	Let there be light
Enquiry Questions:	<i>How do humans stay health? Which bones offer support, movement and protection</i>	<i>Why don't all rocks look the same?</i>	<i>Which surface has the most friction? Are all metals magnetic?</i>	<i>What does a plant need to survive? Isn't soil just earth or mud?</i>	<i>How is a shadow formed? Does a shadows size and shape change over a period of time?</i>
Science Knowledge NC Focus	Animals (including Humans)	Rocks and Soils	Forces and Magnets	Plants Rocks and Soils (<i>but just the soil objective</i>)	Light
Working Scientifically NC Focus:	<p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <ul style="list-style-type: none"> gathering, recording, classifying-and presenting data in a variety of ways to help in answering questions. 	<ul style="list-style-type: none"> setting up simple practical enquiries, comparative and fair tests gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. recording findings using simple scientific language, drawings, labelled 	<ul style="list-style-type: none"> setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. 	<ul style="list-style-type: none"> setting up simple practical enquiries, comparative and fair tests. making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. 	<ul style="list-style-type: none"> setting up simple practical enquiries, comparative and fair tests. making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

		<p>diagrams, keys, bar charts,-and tables.</p> <ul style="list-style-type: none"> • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • using straightforward scientific evidence to answer questions or to support their findings. 	<ul style="list-style-type: none"> • gathering, recording, classifying-and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. • identifying differences, similarities or changes related to simple scientific ideas and processes. • using straightforward scientific evidence to answer questions 	<ul style="list-style-type: none"> • gathering, recording, classifying-and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. • identifying differences, similarities or changes related to simple scientific ideas and processes. 	<ul style="list-style-type: none"> • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. • using straightforward scientific evidence to answer questions or to support their findings.
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			or to support their findings.	<ul style="list-style-type: none"> using straightforward scientific evidence to answer questions or to support their findings. 	
Sequence of lessons	<p>At start of topic, trip to Owl Screech Sanctuary. Look at the difference between meerkats and owls</p> <p>SUPER LEARNING DAY L1-L4 L1: Why do humans and some animals have skeletons and muscles L2: What are the scientific names for the bones in our body? L3: What are the main purposes of a skeleton? L4: Classification of animal skeletons: invertebrate, vertebrate, exoskeleton L5: Why is it important that animals (including humans) get the right types and amount of nutrition? Food groups, design a healthy meal.</p>	<p>Trip to Wheal Martyn – Rock workshop (some lessons below will be covered during the workshop)</p> <p>L1: What are rocks? How are they formed? Compare different types of rock. L2: What is the rock cycle? What are the 3 main types of rock? (Experiment: Starburst) L3: Can you group rocks according to their properties? L3: Which rock is the most porous? L4: Which rock is the hardest? Carry out simple investigation (scratch test) L5: Which rocks are man-made and which rocks are natural? L6: How are fossils formed? Describe what happens when living things are trapped within a rock.</p>	<p>SUPER LEARNING DAY L1: What is a force? (Visit the park) Push and Pull L2: How do objects move? L3: What are the effects of friction on different surfaces? (Investigation/test) L4: What is a magnet? (North and South poles) L5: Magnetic and non-magnetic materials L6: How strong are magnets? (Test the strength of different magnets) L7: Design your own magnetic game (cross curricular with DT?)</p>	<p>L1: What are the parts of a plant and their functions? L2: What do plants need to live and grow? (Ongoing Investigation) L3: How is water transported through plants? (Ongoing Investigation: using celery and a carnation) L4: What role do flowers play in the life cycle of flowering plants? L5: What is pollination and what is the process? L6: Types of seed dispersal L7: What is soil?</p>	<p>SUPER LEARNING DAY L1: Sources of light: Natural and manmade L2: What is a shadow and how is it formed? L3: How and why do shadows change? (Investigation) L4: Is a material, opaque, transparent or translucent? L5: What are UV rays? Investigation: UV beads) L6: How can I protect my eyes and skin from the sun? (Make sunglasses)</p>

	L6: Classification of animals: omnivores, carnivores, herbivores. Looking at nutrients gained from diet				
Vocabulary:	<p>healthy nutrients energy saturated fats unsaturated fats carbohydrates protein fibre vitamins minerals vertebrate invertebrate muscles tendons joints support protect movement ball joint socket joint hinge joint</p> <p>relevant question gather record drawings labelled diagrams oral and written presentations</p>	<p>Igneous sedimentary metamorphic magma lava sediment permeable impermeable density erosion fossils fossilisation erode erosion</p> <p>relevant question practical enquiry gather record classify present data systematic scientific language labelled diagram results table</p>	<p>forces friction surface push pull magnet magnetic magnetic field poles repel attract non-magnetic</p> <p>relevant question practical enquiry gather record classify systematic careful observation fair test comparative test predictions conclusion</p>	<p>roots stem leaves flowers nutrients evaporation water light air fertilisation petal stamen carpal sepal pollination pollinator germination seed dispersal</p> <p>relevant question practical enquiry gather record classify drawings systematic careful observation fair test comparative test predictions</p>	<p>light light sources dark reflect reflection reflector reflective ray pupil retina shadow opaque translucent transparent</p> <p>relevant question practical enquiry gather record careful observation fair test predictions conclusions labelled diagrams interpret bar charts</p>

	similarities differences	conclusion		conclusion labelled diagrams	
Additional reading Fiction and non-fiction		 			