

Skidders' Kent Primary School  
 Lower Key Stage 2  
 Age group: 7 - 9  
 Science Long Term Plan



**Cycles A & B**

**Working scientifically (Key Stage 2)**

- asking relevant questions and using different types of scientific enquiries to answer them
- 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
- 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
- using straightforward scientific evidence to answer questions or to support their findings.

Forces and Magnets and electricity	States of matter and rocks	Animals, including humans	Light & sound	Living things and their habitats	Plants
<ul style="list-style-type: none"> <li>▪ compare how things move on different surfaces</li> <li>▪ notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>▪ observe how magnets attract or repel each other and attract some materials and not others</li> <li>▪ compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials</li> <li>▪ describe magnets as having two poles</li> <li>▪ predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul>	<ul style="list-style-type: none"> <li>▪ compare and group materials together, according to whether they are solids, liquids or gases</li> <li>▪ 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 (°C)</li> <li>▪ identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> <li>▪ compare and group together different kinds of rocks on the</li> </ul>	<ul style="list-style-type: none"> <li>▪ identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</li> <li>▪ identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> <li>▪ describe the simple functions of the basic parts of the digestive system in humans</li> <li>▪ identify the different types of teeth in humans and their simple functions</li> </ul>	<ul style="list-style-type: none"> <li>▪ recognise that they need light in order to see things and that dark is the absence of light</li> <li>▪ notice that light is reflected from surfaces</li> <li>▪ recognise that light from the sun can be dangerous and that there are ways to protect their eyes</li> <li>▪ recognise that shadows are formed when the light from a light source is blocked by an opaque object</li> <li>▪ find patterns in the way that the size of shadows change.</li> <li>▪ identify how sounds are made, associating</li> </ul>	<ul style="list-style-type: none"> <li>▪ recognise that living things can be grouped in a variety of ways</li> <li>▪ explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li> <li>▪ recognise that environments can change and that this can sometimes pose dangers to living things.</li> </ul>	<ul style="list-style-type: none"> <li>▪ identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li> <li>▪ explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant</li> <li>▪ investigate the way in which water is transported within plants</li> </ul>

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<ul style="list-style-type: none"> <li>▪ identify common appliances that run on electricity</li> <li>▪ construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>▪ 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</li> <li>▪ recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</li> <li>▪ recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul>	<p>basis of their appearance and simple physical properties</p> <ul style="list-style-type: none"> <li>▪ describe in simple terms how fossils are formed when things that have lived are trapped within rock</li> <li>▪ recognise that soils are made from rocks and organic matter.</li> </ul>	<ul style="list-style-type: none"> <li>▪ construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>	<p>some of them with something vibrating</p> <ul style="list-style-type: none"> <li>▪ recognise that vibrations from sounds travel through a medium to the ear</li> <li>▪ find patterns between the pitch of a sound and features of the object that produced it</li> <li>▪ find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>▪ recognise that sounds get fainter as the distance from the sound source increases.</li> </ul>		
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