

**SCIENCE SECOND LEVEL**

**PLANET EARTH**

**FORCES ELECTRICITY AND WAVES**

**BIOLOGICAL SYSTEMS**

**MATERIALS**

P5	P6	P7
<p>I can identify and classify examples of living things, past and present, to help me appreciate their diversity. I can relate physical and behavioural characteristics to their survival or extinction. <b>SCN 2-01a</b></p> <p>I can use my knowledge of the interactions and energy flow between plants and animals in ecosystems, food chains and webs. I have contributed to the design or conservation of a wildlife area. <b>SCN 2-02a</b></p> <p>Through carrying out practical activities and investigations, I can show how plants have benefited society. <b>SCN 2-02b</b></p> <p>I have collaborated in the design of an investigation into the effects of fertilisers on the growth of plants. I can express an informed view of the risks and benefits of their use. <b>SCN 2-03a</b></p> <p>By investigating some body systems and potential problems which they may develop, I can make informed decisions to help me to maintain my health and wellbeing. <b>SCN 2-12a</b></p> <p>I have explored the structure and function of sensory organs to develop my understanding of body actions in response to outside conditions. <b>SCN 2-12b</b></p> <p>I have contributed to investigations into the role of microorganisms in producing and breaking down some materials. <b>SCN 2-13a</b></p> <p>By investigating the lifecycles of plants and animals, I can recognise the different stages of their development. <b>SCN 2-14a</b></p> <p>By exploring the characteristics offspring inherit when living things reproduce, I can distinguish between inherited and non-inherited characteristics. <b>SCN 2-14b</b></p>	<p>By considering examples where energy is conserved, I can identify the energy source, how it is transferred and ways of reducing wasted energy. <b>SCN 2-04a</b></p> <p>Through exploring non-renewable energy sources, I can describe how they are used in Scotland today and express an informed view on the implications for their future use. <b>SCN 2-04b</b></p> <p>By investigating how friction, including air resistance, affects motion, I can suggest ways to improve efficiency in moving objects. <b>SCN 2-07a</b></p> <p>I have investigated different water samples from the environment and explored methods that can be used to clean and conserve water and I am aware of the properties and uses of water. <b>SCN 2-18a</b></p> <p>I can apply my knowledge of how water changes state to help me understand the processes involved in the water cycle in nature over time. <b>SCN 2-05a</b></p> <p>By contributing to investigations into familiar changes in substances to produce other substances, I can describe how their characteristics have changed. <b>SCN 2-15a</b></p> <p>I have participated in practical activities to separate simple mixtures of substances and can relate my findings to my everyday experience. <b>SCN 2-16a</b></p> <p>By investigating common conditions that increase the amount of substance that will dissolve or the speed of dissolving, I can relate my findings to the world around me. <b>SCN 2-16b</b></p> <p>I have collaborated in activities which safely demonstrate simple chemical reactions using everyday chemicals. I can show an appreciation of a chemical reaction as being a change in which different materials are made. <b>SCN 2-19a</b></p>	<p>By observing and researching features of our solar system, I can use simple models to communicate my understanding of size, scale, time and relative motion within it. <b>SCN 2-06a</b></p> <p>I have used a range of electrical components to help to make a variety of circuits for differing purposes. I can represent my circuit using symbols and describe the transfer of energy around the circuit. <b>SCN 2-09a</b></p> <p>To begin to understand how batteries work, I can help to build simple chemical cells using readily-available materials which can be used to make an appliance work. <b>SCN 2-10a</b></p> <p>Having explored the substances that make up Earth's surface, I can compare some of their characteristics and uses. <b>SCN 2-17a</b></p> <p>I have collaborated in investigations to compare magnetic, electrostatic and gravitational forces and have explored their practical applications. <b>SCN 2-08a</b></p> <p>By investigating floating and sinking of objects in water, I can apply my understanding of buoyancy to solve a practical challenge. <b>SCN 2-08b</b></p> <p>Through research on how animals communicate, I can explain how sound vibrations are carried by waves through air, water and other media. <b>SCN 2-11a</b></p> <p>By exploring reflections, the formation of shadows and the mixing of coloured lights, I can use my knowledge of the properties of light to show how it can be used in a creative way. <b>SCN 2-11b</b></p>
<p><b>Topical Science - To be covered on a yearly basis as appropriate.</b> (<i>Topical Science – by considering current issues of science, learners increasingly develop their understanding of scientific concepts and their capacity to form informed social, moral and ethical views. They reflect upon and critically evaluate media portrayal of scientific findings.</i>)</p> <p>Through research and discussion I have an appreciation of the contribution that individuals are making to scientific discovery and invention and the impact this has made on society. <b>SCN 2-20a</b></p> <p>I can report and comment on current scientific news items to develop my knowledge and understanding of topical science. <b>SCN 2-20b</b></p>		
<p align="center"><b>SUGGESTED CROSS CURRICULAR LINKS AS PER CfE DOCUMENT</b></p>		
<p>I can investigate the use and development of renewable and sustainable energy to gain an awareness of their growing importance in Scotland or beyond. <b>TCH 2-02b</b></p>		

