

## Science Long Term Grid Year 5

Autumn Term	Spring Term	Summer Term
<p><u>Earth and Space</u></p> <ul style="list-style-type: none"> <li>- Describe the movements of the Earth, and other planets, relative to the Sun in the solar system.</li> <li>- Describe the movement of the Moon relative to the Earth.</li> <li>- Describe the Sun, Earth and Moon as approximately spherical bodies.</li> <li>- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul> <p><u>Properties and changes of materials</u></p> <ul style="list-style-type: none"> <li>- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</li> <li>- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</li> <li>- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporation.</li> <li>- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals wood and plastic.</li> <li>- Demonstrate that dissolving, mixing and changes of state are reversible changes.</li> <li>- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid and bicarbonate of soda.</li> </ul>	<p><u>Forces</u></p> <ul style="list-style-type: none"> <li>- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</li> <li>- Identify the effects of air resistance and friction that act between moving surfaces.</li> <li>- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</li> </ul> <p><u>Changing sounds</u></p> <ul style="list-style-type: none"> <li>- That sounds are made when objects or materials vibrate.</li> <li>- To make careful observations and draw conclusions about sounds from their observations.</li> <li>- That vibration from sound sources travel through different materials to the ear.</li> <li>- To make careful observations to identify the types of material through which sound travels.</li> <li>- That some materials are effective in preventing vibrations from sound sources reaching the ear.</li> <li>- That the term 'pitch' describes how high or low a sound is.</li> <li>- That the pitch of a drum depends on its size and the tightness of its skin.</li> <li>- That high and low sounds can be loud or soft</li> <li>- To suggest how to change the pitch and loudness of drum sounds.</li> <li>- That the pitch of a stringed instrument depends on the length, thickness and tightness of the string.</li> <li>- To suggest how to change the pitch and loudness of the sounds of stringed instruments.</li> <li>- That sounds can be made by air vibrating.</li> </ul>	<p><u>Animals including humans</u></p> <ul style="list-style-type: none"> <li>- Describe the changes as humans develop to old age.</li> <li>- Draw timelines to indicate stages of growth and development of humans.</li> <li>- Learn about the changes experienced in puberty.</li> </ul> <p><u>Living things and their habitats.</u></p> <ul style="list-style-type: none"> <li>- Describe the differences in life cycles of mammals, an amphibian, an insect and a bird.</li> <li>- Describe the life process of reproduction in some plants and animals.</li> </ul>