

## Unit Provision: KS4B Science Curriculum Learning Journey 2021 – 2022

<b>Term 1</b>	Cultivating Herbs	<ul style="list-style-type: none"> <li>- What plants need to live</li> <li>- Plant life cycles</li> <li>- Planting seeds</li> <li>- Caring for developing plants</li> </ul>
<b>Term 2</b>	Acids and Alkalis	<ul style="list-style-type: none"> <li>- pH scales</li> <li>- Planning experiments</li> <li>- Carrying out experiments</li> <li>- Fair testing</li> <li>- Recording results</li> <li>- Predicting outcomes</li> <li>- Forming conclusions</li> </ul>
<b>Term 3</b>	Light	<ul style="list-style-type: none"> <li>- Know how light travels</li> <li>- Reflection and refraction</li> <li>- White light and the colour Spectrum</li> <li>- Making rainbows</li> <li>- Opaque, translucent and transparent materials</li> <li>- Shadows</li> <li>- Shadow puppetry</li> </ul>
<b>Term 4</b>	Energy sources	<ul style="list-style-type: none"> <li>- Fossil fuels</li> <li>- Renewable energy</li> <li>- Pros and cons of different energy types</li> <li>- Environmental impact</li> <li>- Living more sustainably</li> <li>- Creating models of renewable energy concepts – water wheel, windmills</li> </ul>
<b>Term 5</b>	Dinosaurs and fossils	<ul style="list-style-type: none"> <li>- Identify dinosaurs</li> <li>- Know dinosaurs lived in air, oceans and on land</li> <li>- Match images of dinosaur skeletons to their full body shape</li> <li>- Dinosaur teeth and diet</li> <li>- Understand the term 'Extinct'</li> <li>- Make mould cast fossils</li> </ul>
<b>Term 6</b>	Separating Materials	<ul style="list-style-type: none"> <li>- Using magnets to separate materials</li> <li>- Using filtering to separate materials</li> <li>- Using sieves to separate materials.</li> <li>- Using evaporation to separate a solvent</li> <li>- Know which separation process is appropriate for different mixtures.</li> <li>- Use Chromatography to identify colours within inks</li> </ul>

### Big Ideas:

To develop understanding of the world around them.

To have a sense of awe and wonder and to question how and why things happen.

### Individual Need:

Students will access varying amounts of the big ideas content dependent on individual need.