



Year Six: Welbeck Class				
Autumn		Spring		Summer
<b>Changing Circuits (PB)</b> <b>N.C. Y6 PoS</b>	<b>Classifying Living Things (Gr)</b> <b>N.C. Y6 PoS</b>	<b>Light &amp; Seeing (PB)</b> <b>N.C. Y6 PoS</b>	<b>The Heart &amp; Circulatory System (Gr)</b> <b>N.C. Y6 PoS</b>	<b>DAaRT</b> (Delivered by Life Education)
<b>Key Vocabulary</b> Static electricity, symbols, components, motor, bulb, buzzer, series, parallel, brightness, voltage, battery, brightness	<b>Key Vocabulary</b> Grouping, organisms, characteristics, similar, different, classification, Linnaeus, classify, sort, group, vascular, non-vascular	<b>Key Vocabulary</b> Shadows, formed, shape, length, eyes, reflect, absorb, retina, cornea, pupil, optic nerve, lens, reflection, mirrors, colour spectrum	<b>Key Vocabulary</b> Heart, circulation, exercise, oxygenated, oxygenated, blood, atrium, valve, capillary artery, left side, right side	<b>Key Vocabulary</b> Brain, Liver, Lungs, Heart. Nervous System, Addiction, Drug, medicine, alcohol, tobacco, nicotine, caffeine, solvent, short-term effects, long-term effects, tolerance, withdrawal, overdose, digestion, respiration, circulation, reaction time

Scientific Knowledge to be covered throughout the year				
Term	Disciplinary Knowledge	Biology	Chemistry	Physics
<b>Autumn 1:</b> Forces in Action	<u>Comparative and fair testing</u> <ul style="list-style-type: none"> <li>• <b>Y6:</b> Know that there are explanations behind needing to control variables.</li> <li>• <b>Y6:</b> Know that there are reasons for improving methods.</li> <li>• <b>Y6:</b> Know that the correct units must be used when measuring accurately and precisely.</li> </ul>			<ul style="list-style-type: none"> <li>• Know and associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</li> <li>• Know, compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</li> <li>• Know and use recognised symbols when representing a simple circuit in a diagram.</li> </ul>
<b>Autumn 2:</b> Evolution & Inheritance	<u>Identifying and classifying</u> <ul style="list-style-type: none"> <li>• <b>Y6:</b> Know that own classification methods</li> </ul>	<ul style="list-style-type: none"> <li>• Know and recognise that living things have changed over time and that fossils provide information about living</li> </ul>		



	<p>[branching &amp; dichotomous] can be chosen and developed in order to sort living and non- living things.</p> <p><b><u>Gathering and recording</u></b></p> <ul style="list-style-type: none"> <li>• <b>Y6:</b> Know that patterns can be found in the natural environment.</li> </ul>	<p>things that inhabited the Earth millions of years ago.</p> <ul style="list-style-type: none"> <li>• Know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</li> <li>• Know and identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</li> <li>• <i>Know and relate knowledge of plants to studies of evolution and inheritance.</i></li> </ul>		
<p><b>Spring 1:</b> Investigating Materials &amp; their properties</p>	<ul style="list-style-type: none"> <li>• <b>Y6:</b> Know that evidence can support / refute causal relationships.</li> </ul>		<ul style="list-style-type: none"> <li>• Know, compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets.</li> <li>• Know and understand how some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.</li> <li>• Know and use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</li> <li>• Know and demonstrate that dissolving, mixing and changes of state are reversible changes.</li> <li>• Know and 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, oxidisation and the action of acid on bicarbonate of soda.</li> </ul>	



ST. LUKE'S SCIENCE  
Year Six



<b>Spring 2:</b> The Heart & Circulatory System		<ul style="list-style-type: none"><li>• Know, identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</li></ul>		
<b>Summer 1 &amp; 2:</b> DAaRT		<ul style="list-style-type: none"><li>• Know and describe the simple functions of the basic parts of the digestive system in humans.</li><li>• Know the different types of teeth in humans and their simple functions.</li><li>• Know and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</li><li>• Know and recognise the impact of diet, exercise, drugs and lifestyle on the way their body's function.</li><li>• Know and recognise that environments can change and that this can sometimes pose dangers to living things.</li></ul>	<ul style="list-style-type: none"><li>• Know and compare and group together everyday materials on the basis of their properties.</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.</li><li>• Know and demonstrate that dissolving, mixing and changes of state are reversible changes.</li><li>• Know and explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible.</li></ul>	