



# LEAS PARK JUNIOR SCHOOL - Curriculum Progression Map

**Year Group: 6**

**Subject: Science**

Unit Curriculum Strand	Autumn Living things and their habitats (1) Animals including humans (2)	Spring Evolution and Inheritance (3)	Summer Light (4) Electricity (5)
<b>Biology</b>  Living things and their habitats (1)  Animals including humans (2)  Evolution and inheritance (3)	<p>Children can...</p> <ul style="list-style-type: none"> <li>• (1) give examples of animals in the five vertebrate groups and some of the invertebrate groups, including micro-organisms, plants and animals</li> <li>• (1) compare the characteristics of animals in different groups</li> <li>• (1) create classification keys for plants and animals</li> <li>• (1) use classification materials to identify unknown plants and animals</li> <li>• (2) draw a diagram of the circulatory system and label the parts (heart, blood vessels, blood) and annotate it to show what the parts do</li> <li>• (2) recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</li> <li>• (2) can use their prior learning in Year 3 (Animals, including humans) to explain that humans need the right type of nutrition</li> <li>• (3) explain the process of evolution</li> <li>• (3) recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</li> <li>• (3) give examples of fossil evidence that can be used to support the theory of evolution</li> <li>• (3) identify characteristics that will make a plant or animal suited or not suited to a particular habitat</li> </ul> <p>Children know...</p> <ul style="list-style-type: none"> <li>• (1) the key characteristics of the five vertebrate groups and some invertebrate groups</li> <li>• (1) a number of characteristics that explain why an animal belongs to a particular group</li> <li>• (1) a number of flowering and non-flowering plants</li> <li>• (2) the different parts of the human circulatory system</li> <li>• (2) how nutrients and water are transported within humans</li> <li>• (3) how plants and animals are adapted to suit their environment in different ways and that adaptation may lead to evolution</li> <li>• (3) how an animal or plant has evolved over time</li> </ul>		
<b>Chemistry</b>	No chemistry taught in Year 6		
<b>Physics</b>  Light (4)	<p>Children can...</p> <ul style="list-style-type: none"> <li>• (4) describe with diagrams how light travels in straight lines past translucent or opaque objects to form a shadow of the same shape</li> <li>• (4) use their prior learning in Year 3 (Light) to explain how shadows are formed</li> <li>• (5) make electric circuits and demonstrate how variation in the working of particular components</li> </ul>		

<p>Electricity (5)</p>	<ul style="list-style-type: none"> <li>• (5) can use their prior learning in Year 4 (Electricity) to construct a simple series circuit and know the basic parts, including how a switch works</li> <li>• (5) investigate changing cells and components in a circuit to achieve a specific effect and give reasons for these variations</li> <li>• (5) incorporate a switch into a circuit to turn it on and off</li> <li>• (5) devise ways to measure brightness of bulbs, speed of motors, volume of a buzzer during a fair test</li> </ul> <p>Children know...</p> <ul style="list-style-type: none"> <li>• (4) that light travels in straight lines either from sources or reflected from other objects into our eyes and this is how we see objects</li> <li>• (4) why shadows have the same shape as the objects that cast them</li> <li>• (4) how the path of light rays can be directed by reflection to be seen</li> <li>• (4) how the shape and size of shadows can be varied</li> <li>• (5) the brightness of bulbs or the volume of a buzzer can be changed by increasing or decreasing the number of cells or using cells of different voltages</li> <li>• (5) how to build a simple switch</li> <li>• (5) the recognised symbols for drawing accurate and scientific circuit diagrams</li> </ul>
<p><b>Working Scientifically</b></p>	<ul style="list-style-type: none"> <li>• (3) identify scientific evidence that has been used to support or refute ideas or arguments.</li> <li>• (2) take measurements, using a range of scientific equipment (timers), with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>• (1,4,5) record data and results of increasing complexity using classification keys (1), scientific diagrams and labels (2,4,5), tables (2), bar and line graphs (2)</li> <li>• (2,5) report and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral (2) and written forms (5).</li> <li>• (1,2,5) plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Observing changes over time (2), noticing patterns (pulse rate investigation), grouping and classifying (2), comparative and fair tests (5) or using secondary sources of information (1))</li> <li>• (4,5) using test results to make predictions to set up further comparative and fair tests</li> </ul>