

KEY STAGE 2

Knowledge, Skills and Understanding breakdown for Life Processes and Living Things		
Year 6		
Evolution & Inheritance	All Living Things	Animals (including humans)
<p>Can they give reasons for why living things produce offspring of the same kind?</p> <p>Can they give reasons for why offspring are not identical with each other or with their parents?</p> <p>Can they explain the process of evolution and describe the evidence for this?</p> <p>Can they begin to appreciate that variation in offspring over time can make animals more or less able to survive in particular environments?</p> <p>Can they talk about the life of Charles Darwin?</p>	<p>Can they explain the classification of living things into broad groups based on common observable characteristics?</p> <p>(five kingdoms of all living things, vertebrates, mammals, marsupials)Can they sub divide their original groupings and explain their divisions?</p> <p>Can they group animals into vertebrates and invertebrates?</p>	<p>Can they identify and explain the function of the organs of the human circulatory system? (heart, blood vessels, blood, blood pressure, clotting)</p> <p>Can they identify and explain the function of the organs of the human gaseous exchange system? (lungs, nose, throat, bronchi, bronchial tubes, diaphragm, ribs, breathing)</p> <p>Can they name the major organs in the human body?</p> <p>Can they locate the major human organs?</p> <p>Can they make a diagram that outlines the main parts of a body?</p>
Year 6 (Challenging)		
Evolution & Inheritance	All Living Things	Animals (including humans)
<p>Can they explain how some living things adapt to survive in extreme conditions?</p> <p>Can they analyse the advantages and disadvantages of specific adaptations, such as being on two rather than four feet?</p> <p>Can they begin to understand what is meant by DNA?</p>	<p>Can they explain why classification is important?</p> <p>Can they readily group animals into reptiles, fish, amphibians, birds and mammals?</p>	<p>Can they explain the work of medical pioneers, for example, William Harvey and Galen and recognise how much we have learnt about our bodies?</p> <p>Can they compare the organ systems of humans to other animals?</p> <p>Can they make a diagram of the human body and explain how different parts work and depend on one another?</p>

Knowledge, Skills and Understanding breakdown for Physical Processes

Year 6

Electricity	Light
<p>Can they identify and name the basic parts of a simple electric series circuit? (cells, wires, bulbs, switches, buzzers)</p> <p>Can they compare and give reasons for variation in how components function, including bulb brightness, buzzer volume and on/off position of switches?</p> <p>Can they explain how to make changes in a circuit?</p> <p>Can they explain the impact of changes in a circuit?</p> <p>Can they explain the effect of changing the voltage of a battery?</p>	<p>Can they explain how light travels?</p> <p>Can they explain how the human eye sees objects?</p> <p>Can they explain how different colours of light can be created?</p> <p>Can they use and explain how simple optical instruments work? (periscope, telescope, binoculars, mirror, magnifying glass, Newton's first reflecting telescope)</p> <p>Can they explain changes linked to light (and sound)?</p>

Year 6 (Challenging)

Electricity	Light
<p>Can they make their own traffic light system or something similar?</p> <p>Can they explain the danger of short circuits?</p> <p>Can they explain what a fuse is?</p>	<p>Can they use the ray model to explain the size of shadows?</p>