Longstone Primary School
Medium Term Planning
Year: 2023 Term: SU2 Cycle: B
CURRICULUM FOCUS: Science

National Curriculum Links:	Threshold Concepts:
Content i. describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird ii. describe the life process of reproduction in some plants and animals iii. 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 iv. give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic v. describe the changes as humans develop to old age vi. identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood vii. recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function viii. describe the ways in which nutrients and water are transported within animals, including humans ix. associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit x. 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 xi. use recognised symbols when representing a simple circuit in a diagram xii. use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye xiii. explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes xiv. use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them **Working scientifically** i. planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary ii. taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate iii. recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs iv. using test results to make predictions to set up further comparative and fair tests v. reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations vi. identifying scientific evidence that has been used to support or refute ideas or arguments	Working scientifically Understanding animals and humans Investigating materials Understanding light and seeing Understanding electrical circuits

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6

Question: Can I explore how understanding the life cycle of insects can help science treat, cure and even eradicate disease?	**Question**: Can I choose which materials would be best for the job and explore the medical applications of some very modern materials?	**Question**: Can I take on the role of editor-in-chief and create an informative and guiding leaflet or webpage/site that will help people understand how they grow and change as well as how to stay healthy?	**Question**: Can I explain how the circulatory system works and how to ensure it stays healthy and works like a well-oiled machine?	**Question**: Can I use my knowledge of shadows to create storage systems for surgical equipment?	**Question**: Can I explore the key features of the circuits and why they are important, then design my own piece of medical equipment or machinery?
Threshold Concepts: Understanding animals and humans	**Threshold Concepts:** Investigating materials	**Threshold Concepts:** Understanding animals and humans	**Threshold Concepts:** Understanding animals and humans	**Threshold Concepts** Understanding light and seeing	**Threshold Concepts:** Understanding electrical circuits