Year 6 Science Curriculum at Upton Heath

	Autum	Autumn Term Spring Term		Summer Term	
	Autumn 1	Autumn 2	Spring 1 Spring 2	Summer 1	Summer 2
Overview	Light	Animals, including humans	Living things and their habitats	Electricity	Evolution and Inheritance
Suggested Content	Examine brightness over the day in different locations (2) Explore the reflectiveness of materials (4) Understand that light travels in straight lines Predict light direction using mirrors (6) Investigate shadow length and understand how shadow size can be altered Explore the shapes of shadows of different objects Experiment with light refraction (4)	Describe the respiratory system (6) Understand the impact of smoking on the lungs Describe the circulatory system (4) Describe how the heart pumps blood around the body (1) Examine the effects of exercise on the pulse (5) Explain the impact of a poor diet on the circulatory system		Understand how static electricity is created Investigate the creation of static electricity Understand how the understanding of electricity developed (3) Investigate resistance in bulbs (5a) (6) Measure amplitude from different energy sources (5b)	Understand how animals are adapted to their environment (4b) Explain the discoveries of Charles Darwin (3) (4a) Describe how variations become adaptations (2) Describe types of fossils Understand the evidence for evolution Detail the process of fossilization Explain how selective breeding in animals is utilised
Observing over time		How does my heart rate change over the day? (1)	What happens to a piece of bread if you leave it on the windowsill for two weeks? (1)		
Pattern seeking	Is there a pattern to how bright it is in school over the day? Is it the same in every classroom? (2)				Is there a pattern between the size and shape of a bird's beak and the food it will eat? (2)
Research			Who was carl Linnaeus?	How has our understanding of electricity changed over time? (3)	What happened when Charles Darwin visited the Galapagos islands?(3)
Identifying & classifying	Can you identify all the colours of light that make white light when mixed together? What colours do you get if you mix different colours of light together? (4)	Which organs of the body make up the circulatory system and where are they found? (4)			Compare the skeletons of apes, humans and Neanderthals(4a) How are certain animals adapted to their environments? (4b)
Comparative tests	Which material is most reflective? (5)	Which types of exercise has the greatest effect on our heart rate? (5)		Which make of battery lasts the longest? (5a)	
Fair Tests	change shape?	How does the length of time we exercise effect our heart rate?		How does the voltage of the batteries in a circuit affect the brightness of the lamp? (6)	