

Altrincham C of E Aided Primary School
Year 6 White Rose Science Subject Overview

Autumn term Year 6	<u>Living things and their habitats</u> (7 weeks)	<u>Electricity</u> (5 weeks)	<u>Renewable energy</u> (1 week)
<u>Lessons</u>	Lesson 1 - Conditions for life (step 1) Lesson 2 - Group organisms (step 2) Lesson 3 - Classify animals (step 3) Lesson 4 - Classify plants (step 4) Lesson 5 - Microorganisms (step 5) Lesson 6 - Classify microorganisms (step 6) Lesson 7 - Carl Linnaeus (step 7)	Lesson 1 - Construct and draw series circuits using symbols (step 1) Lesson 2 - Complete and incomplete circuits (step 2) Lesson 3 - Variations within circuits (step 3) Lesson 4 - Plan- voltage experiment (step 4) Lesson 5 - Investigate and Evaluate- voltage experiment (step 5&6)	Lesson 1 - What is renewable energy and Using renewable energy (steps 1&2)
<u>End points</u>	-Explain how a living organism moves, reproduces, grows and excretes. -Understand why grouping organisms can help scientists to understand how they are related to each other. -Create a classification key to identify different animals based on their features. -Know that trees can be classified as deciduous, evergreen or coniferous. -Explain that bacteria are simple organisms invisible to the naked eye. -Know that bacteria, viruses and fungi have different shapes. -State who initially divided the Kingdom Animalia and the 6 classes.	-Explain how a series circuit is one in which all the components are connected in one continuous loop. -Describe why an incomplete circuit may have a break in the wires, a switch maybe open or the cell may be in the holder the wrong way. -Explain that the more components in a circuit the dimmer the bulbs and quieter the buzzers. -Create a series circuit including one cell, one buzzer and one switch. -Make predictions on the outcome using knowledge from previous lessons.	-Explain how solar and wind power are renewable energy sources which means they will not run out. -Know that emissions of green house gases lead to the greenhouse effect and global warming.
<u>Vocabulary</u>	Organism, excretion, reproduction, living, non-living, vertebrate, invertebrate, flowering plant, non-flowering plant, classification key, mollusc, arachnid, classification, deciduous tree, evergreen tree, coniferous tree, microorganism, bacteria, virus, fungi, microscope, characteristics, Carl Linnaeus.	Series circuit, cell, battery, bulb, current, voltage, complete circuit, incomplete circuit, switch, buzzer, independent variable, dependent variable, controlled variables, repeatability, accuracy, evaluate.	Solar power, wind power, renewable, non-renewable, solar panels, wind turbine, global warming, greenhouse gases,
<u>Relevant prior learning</u>	Animal groups, habitats, food chains, living things, classification keys, life cycle (animals and flowers), reproduction, parts of a flower.	Appliances, circuit parts, series circuits, complete loops, switches, conductors and insulations, material properties including electrical and thermal conductivity.	Greenhouse gases, global warming.
<u>Key questions and practical activities</u>	Y6 Autumn Block 1 Living things and their habitats SOL.pdf	Y6 Autumn Block 2 Electricity SOL.pdf	Y6 Autumn Block 3 Renewable energy SOL.pdf