

Year 6: Keep an Open Mind

Science

What do we already know?

Identifying scientific evidence that has been used to support or refute ideas or arguments (Darwin's Theory of Evolution)

Prior Learning about Electricity

- To identify common appliances that run on electricity
- To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- To identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- To recognise some common conductors and insulators, and associate metals with being good conductors

Electricity and Circuits

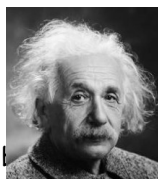
- To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- To compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- To use recognised symbols when representing a simple circuit in a diagram



Working Scientifically

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations

Key Scientists



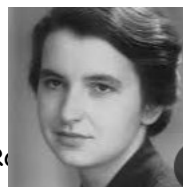
Al



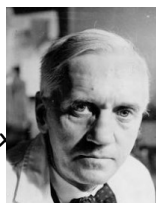
M



T Edison



R

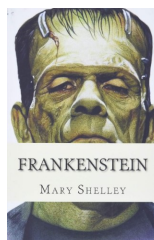
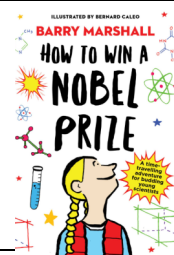


Alex Fleming



G Marconi

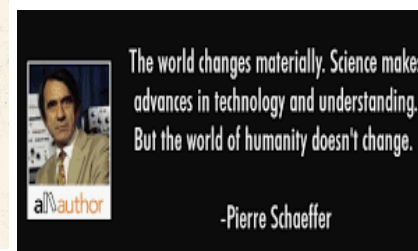
Key Texts



Key information

Scientific Findings which have changed the world

Scientists who have changed the world



Year 6 : Keep an Open Mind

Science

Vocabulary

Electricity vocabulary

Electricity



Conductor



Mains



Insulator



Battery



Power



Circuit



Source



Bulb



Wire



Switch



Complete

Motor



Closed

Cell



Pylons



Scientific Skills



How to plan and investigate and use variables and controls to determine the effect of variations in the circuit.



How to record scientific findings effectively and accurately (including the use of



How to use the results to draw a relevant conclusion.

As a Scientist, here's what I will know by the end...

To consolidate and extend previous learning from year 4 by constructing simple series circuits and drawing them using scientific symbols.

How to conduct investigations to determine how the voltage in a circuit affects the brightness of a bulb.

How to use 'working scientifically' skills to plan an experiment to investigate variations in how components function

How to use the evidence from results to write a clear and concise conclusion.



Links to

The fascinating stories of the women and men who won the Nobel Prize.

RHE—Having great aspirations for ourselves and our future achievements

RHE- How the world has changed due to the efforts of a few people.

RHE—Transition and change in our own lives

switch



battery symbol



electrical insulator



bulb



buzzer symbol



electrical conductor



device



motor symbol



crocodile clips



motor



switch symbol



appliance

