

LEARNING JOURNEY

GCSE Physics P5 – Electricity in the Home Trilogy and Separates

Year 9 Summer Term

Electrical power fills the modern world with artificial light and sound, information and entertainment, remote sensing and control. The fundamentals of electromagnetism were worked out by scientists of the 19th century. However, with energy consumption continuing to increase, how do we reduce the energy we waste? How is electricity distributed throughout the country, how do we know what we consume and how can we ensure we stay safe with electricals at home?

AC/ DC and Power

Alternating current

What current are appliances operating at in our home?

Wires and plugs

What are the safety features of a Great British plug and how can I connect it?

Calculating Charge and Current

How can we put charge to use and how do we calculate current?

Fuses and the heating effect

How does a fuse work to keep us safe and how do I know which fuse to use?

Power

How do I use the power equation to identify wasted energy

Appliances and efficiency

As a consumer, how do we purchase appliances to reduce our waste and reduce our energy consumption?

TUDOR HABITS AND VALUES: You will continue to work on building your toolbox of problem solving skills to support your metacognition and self-regulation

VOCABULARY:

Alternating current
Current
Earth
Insulation
Shock
Potential difference
power