Cwmfelin Primary School Medium Term Planning

Term: Autumn 2	Class: 6	AOLE Focus: Science & Technology
Inquiry: Bright ideas	**Question: How do circuits make things work?**	

Rationale

This inquiry explores the fascinating world of **electricity and magnetism**, encouraging learners to investigate how circuits work, how components interact, and how magnetic fields influence the world around us. Through **hands-on experimentation**, **critical thinking**, and **problem-solving**, pupils develop a deeper understanding of scientific principles and their real-world applications. The inquiry supports the **Science and Technology Area of Learning and Experience**, particularly the statements of what matters around **the world around us**, **forces and energy**, and **designing and engineering solutions**. It also promotes **digital competence**, **collaborative learning**, and **independent enquiry**, helping learners become confident, curious, and capable scientific thinkers.

Knowledge (Knowledge that)	Skills (Knowledge how)	Experiences (Knowledge of)
I know…	**I know how to…**	**I have …**
• The difference between series and parallel circuits • How different circuits are powered and the effect of altering the components within them. • What magnetic fields are and their effect on objects and the World.	• Plan, undertake and draw conclusions from practical scientific investigations. • Create and debug a range of electrical circuits. • Make predications and justify opinions based on previous learning.	• Created and experimented with practical circuits. • Disassembled unwanted electrical items to see how they work. • Drawn accurate conclusions from practical scientific experiments involving electricity and magnetism

Cross-curricular opportunities:

Literacy: Writing conclusions which include scientific vocabulary.
Numeracy: Graphing data from investigations to enable conclusions to be drawn.
DCF: Create group presentations with hyperlinks for younger pupils to explain the concepts of electricity and magnetism.

Vocabulary:
Electricity, circuit, resistance, series, parallel, magnetism, prediction, conductor, insulator

Immersion activity:
Circuit creation activity to explore circuits

Showcase:
Create a Christmas card / decoration / sign that uses an electrical circuit. Present to another class and explain how it works.