

Nova's Electricity Investigation Log

Learning objective: To identify common appliances that run on electricity and understand how to construct a simple series circuit.

Help Nova the owl investigate how electricity powers our world. Use this log to record your findings about electrical appliances and draw your own circuit diagram to show how a bulb lights up.

Word bank: Battery · Circuit · Switch · Conductor · Insulator · Appliance · Component · Voltage

1. Appliance Audit: List three household items that use electricity and describe how they make our lives easier. (3 marks)

2. Safety First: Why is it important to never touch electrical sockets or wires with wet hands? (2 marks)

3. Building a Circuit: List the three main components you need to make a bulb light up in a simple circuit. (3 marks)

4. The Role of a Switch: Explain what happens to the flow of electricity when a switch is turned to the 'off' position. (2 marks)

5. Predicting Outcomes: If you replaced a piece of metal wire in a circuit with a piece of plastic string, what do you think would happen to the bulb? Why? (3 marks)

Extension challenge: Design your own electrical invention! Draw a diagram of an appliance that could help Nova the owl study the stars at night, and label the parts that would need a battery to work.