

Kit's Electronic Invention Log

Learning objective: To design and plan a simple circuit-based product using switches and bulbs.

Help Kit the fox design a new gadget! Use this log to plan your electronic invention. Think about what your invention does, which components you need, and how you will make it safe and sturdy. Remember to label your circuit parts carefully.

Word bank: circuit · battery · bulb · switch · wire · conductor · insulator · component · power · bright

1. Invention Name and Purpose: What is your electronic gadget called, and what job does it do? (2 marks)

2. Circuit Components: List the parts you need to make your circuit work (e.g., battery, wire, bulb). (3 marks)

3. Switch Design: Describe how your user will turn the gadget on and off. Where will the switch be placed? (2 marks)

4. Materials List: What materials will you use to make the outer casing of your invention? Why did you choose these? (3 marks)

5. Safety Check: How will you ensure your circuit is safe to use and that the wires are properly connected? (2 marks)

Extension challenge: Imagine your invention costs £5.50 to build. If you sell it for £8.25, how much profit would you make? Show your working out below.