

Kit's Clever Circuit Design

Learning objective: To identify and represent components in a simple electrical circuit using standard symbols.

Kit the fox is building a new reading lamp for the BookFlik library. Use your ruler to draw a clear circuit diagram and label the components to show how the electricity flows to make the bulb light up.

Draw: Draw a circuit diagram using standard scientific symbols. Include one cell, one closed switch, and one bulb connected by straight lines representing wires. Use a sharp pencil and a ruler to ensure the lines are straight and the corners are square. Ensure your diagram forms a complete, unbroken loop.



Label words: Cell · Switch · Bulb · Wire · Circuit · Component

Steps:

1. Draw the standard scientific symbol for a cell and a bulb in the space provided.
2. Explain why the bulb would not light up if there was a gap in the wires.
3. If one cell costs £1.50, how much would it cost to buy four cells for Kit's project?
4. Label your drawing to show the direction of the electrical current.
5. What is the function of the switch in Kit's circuit?