Objective

By the end of this lesson, you will be able to understand the basics of electrical circuits and how they work.

Materials and Prep

- Battery
- Light bulb
- Wires
- Scissors
- Tape
- Parental supervision

No prior knowledge needed, just bring your curiosity and enthusiasm!

Activities

- Create a simple circuit using a battery, light bulb, and wires. Observe how the light bulb lights up when the circuit is complete.
- Experiment with different materials to see if they conduct electricity. Try using various objects like paper clips, coins, and aluminum foil.
- Design your own circuit game where you challenge yourself to light up the bulb using different configurations.
- Draw a diagram of a circuit and label the different components such as the battery, wires, and light bulb.

Talking Points

- Electricity is a form of energy that powers many things we use every day. When we create a circuit, we allow the flow of electricity to move through it.
- Imagine the circuit as a loop that starts at the battery, travels through the wires, lights up the bulb, and then returns to the battery. It's like a circle of energy!
- When the circuit is broken or incomplete, the electricity cannot flow, and the bulb won't light up. It's important to have a closed loop for the circuit to work.
- Experimenting with different materials helps us understand which ones allow electricity to pass through them. Conductors like metals are good at letting electricity flow.