

Electrical Art Construction

Prior Knowledge :

Building on their work in year 4, pupils should construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors. They should learn how to represent a simple circuit in a diagram using recognised symbols.



My Component Knowledge:

Lesson 1: I can identify if statements are true or false in relation to a given circuit.

Lesson 2: I can set up a series of enquiries that explore electrical circuits and various effect.

Lesson 3: To identify from circuit diagrams those circuits that will or won't work

Lesson 4: To investigate, design and make a dimmer switch

Lesson 5: To build a working circuit

Lesson 6: To evaluate my electrical circuit and suggest improvements.

My Composite Knowledge:

I can create a circuit with multiple bulbs as well as other components

My Powerful Knowledge:

I can correct faulty circuits and explain what happens to the brightness of bulbs when you add more to a circuit.

Key Vocabulary

Tier 1:

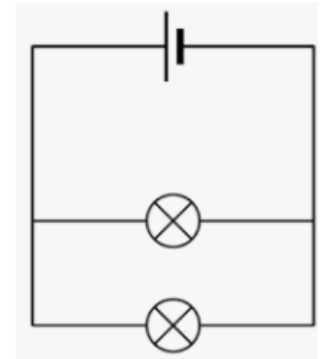
Battery
Cell
buzzer
wire

Tier 2:

Complete circuit
Conductor
Insulator

Tier 3:

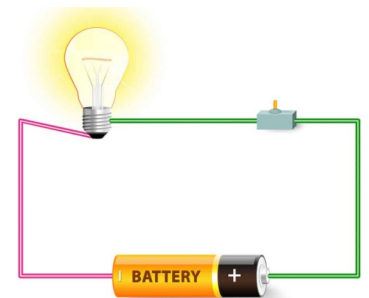
Electron
Voltage
Current
conductivity
electron
electrical component



What is a material called if it allows an electric current to pass through it?

Besides cells or batteries, what is another source of electrical power?

Why are electrical plugs constructed with plastic?



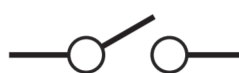
bulb



battery



open switch



closed switch

