

Electricity

Construction

Prior Knowledge

Year 3: Light - We know that all light comes from a light source, some of these are natural and some come from electricity (a torch, light bulb).

Year 1 and 2: Everyday materials - We know that all materials have different properties.

Future knowledge

Year 5: Properties and changes of materials - Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.

Year 6: Electricity - associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.



Key Vocabulary

Tier 1: battery, bulb, metal, plastic, electricity, energy

Tier 2: buzzer, motor, break, appliances, device, generate

Tier 3: electrical insulator, electrical conductor, component, current, source, circuit

My Component Knowledge:

Lesson 1: I can identify which machines need electricity to work.

Lesson 2: I can identify electrical components and their symbols. I can create a simple electrical circuit.

Lesson 3: I can identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.

Lesson 4: I can recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.

Lesson 5: I can investigate which objects are conductors and which are insulators.

Lesson 6: I can identify situations when electricity can be dangerous.

My Composite Knowledge:

I understand the uses of electricity and can identify the dangers of it.

My Powerful Knowledge:

I understand that electricity is a form of energy. I know that some materials are electrical insulators and some are electrical conductors and that these materials have different uses. I understand the dangers of using electricity and know how to keep myself safe.

Working scientifically

I can gather, record, classify and present data in a variety of ways to help in answering questions.

I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.

I can make systematic and careful observations.

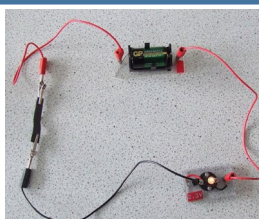
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What would the circuit diagram look like for this circuit?



Battery	Cell	Switch	Bell	Bulb	Buzzer