

Wire

St Bernadette's Catholic Primary School - Eucalyptus Class Electricity

Gospel Value – Joy-Awe and Wonder

What I should know-Explore how things work. (Nursery - Electricity)

An electrical conductor lets electricity pass through. They are often metals but it also includes water. An electrical insulator does not let electricity pass through.

Key Knowledge

- Many household devices and appliances run on electricity. Some plug in to the mains and others run on batteries.
- An electrical circuit consists of a cell or battery connected to a component using wires. If there is a break in the circuit, a loose connection or a short circuit, the component will not work.
- A switch can be added to the circuit to turn the component on and off
- Metals are good conductors so they can be used as wires in a circuit.
- Non-metallic solids are insulators except for graphite (pencil lead). Water, if not completely pure, also conducts electricity.

This circuit will not work because the switch is open. A circuit must be complete to work. It must also always have a battery/cell.



Key Vocabulary

Electrical Circuit - A closed loop made up of objects know as electrical components that are joined together by wires.

Switch— this component enables a circuit to be completed or broken, changing it to on or off.

Buzzer—this component makes a buzzing sound when electricity passes through it. **Cell**— this component contains two different chemicals that react together to generate electricity to power a circuit.

Battery— this component is made up of several cells connected together and lined up the same way to generate more electricity.

Wires— these join components together in a circuit and allow electricity to flow through them.

Bell – A component that makes a ringing sound when electricity passes through it.

Bulb— this component contains a tiny wire called a filament that glows when electricity passes through it casing light.

Conductor—Materials that allow electricity to flow through them.

Insulator— Materials that don't allow electricity to flow through them.