



Physics

Year 4

National Curriculum Objective

Identify common appliances that run on electricity.

Construct a simple series electrical circuit. Identifying and naming its basic parts including cells, wires, bulbs, switches and buzzers.

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

Recognise that a switch opens and closes a circuit and associate this with whether or not a lamplights in a simple series circuit

Recognise some common conductors and insulators, and associate metals with being good conductors.

Key Vocabulary

| circuit | cell | switch | wire | |
|-----------|-------------|------------|-----------|--|
| bulbs | buzzer | battery | loop | |
| series, | insulator | electrical | variables | |
| conductor | electricity | hazard | power | |

Substantive - Subject Knowledge Bigger Picture - Support words

| Glossary | | | | |
|-----------|--|--|--|--|
| conductor | | | | |
| | | | | |
| insulator | | | | |
| | | | | |

| Question driven outcomes for knowledgez | Pupil | Teacher |
|--|-------|---------|
| Can you name some common appliances that run on electricity? | | |
| How can we construct a simple series circuit and what are the basic parts? | | |
| Investigate whether a bulb will light in a circuit that is incomplete? | | |
| Which metals are good conductors? What are good insulators and why are | | |
| they needed? | | |
| What is the purpose of a switch in a circuit and how does it operate? | | |