

# Questacon at HOME

## Year 6 Activity Sheet

# Electricity

We use electricity every day. It powers our lights, our TVs and even our fridge. It can come in many forms like static electricity but there are also very specific rules to follow in order for electricity to flow. This section is going to test what you know about electricity as well as electrical circuits and their components!

### ACTIVITY TIME — Circuits

Take a remote and flip the batteries around. Does the remote still work?

#### Q1. What is an electrical circuit?

- A collection of electrical equipment
- A lightbulb and a battery
- A series of conductors and insulators
- The path in which electrical current flows

#### Q3. Static electricity occurs when?

- The weather is humid
- Two batteries are rubbed together
- Different insulators are rubbed together
- Two metals are connected to a battery

#### Q2. Why might an electrical circuit fail to work? (check all correct answers)

- Both ends of the wire are connected to the positive pole of a battery
- There is a break in the circuit
- The battery is dead
- There is an open switch

#### Q4. What is a material that allows electricity to pass through called?

- Insulator
- Conductor
- Cell
- Connector



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# Electricity – Answers

## ACTIVITY TIME — Circuits

**The remote should no longer work.** This is because the electricity is no longer flowing from a positive pole to negative pole, breaking the circuit.

### Q1. What is an electrical circuit?

**It is the path in which electrical current flows!** It flows from a negative pole of a battery around a complete circuit to a positive pole of a battery.

### Q2. Why might an electrical circuit fail to work?

Trick question, ALL answers are correct! There are many factors that could interrupt a circuit.

### Q3. Static electricity occurs when?

**Different insulators are rubbed together!** Have you ever shocked yourself after jumping on a trampoline? That is actually caused by static electricity!

### Q4. What is a material that allows electricity to pass through called?

**Conductor!** The most common material used as a conductor is metal.

