

# What is electricity?

## LISTEN AND CHOOSE THE CORRECT OPTION

Electricity consists of a **set** **flow** of free electrons along a conductor. To produce this current flow, a generator is placed at the end of the conductor in order to move the **charge** **chart**.

### **CONDUCTORS**

Electricity needs a material which allows current to pass through easily, which offers little **resistant** **resistance** to the flow and is full of free electrons. This material is called a **conductor** and can be in the form of a bar, tube or sheet. The most commonly used **conduct** **conductors** are wires, available in many sizes and thicknesses. They are coated with insulating materials such as plastic.

### **SEMICONDUCTORS**

Semiconductors such as silicon and germanium are used in transistors and their conductivity is halfway in between the conductor and an **insulator** **insulate**. Small quantities of other substances, called impurities, are introduced in the material to **reuse** **reduce** the conductivity.

### **INSULATORS**

A material which contains very **flow** **few** electrons is called an insulator. Glass, rubber, dry wood and **plastic** **spastic** resist the flow of electric charge, and as such they are good insulating materials

## **Read the text again and decide if the sentences are TRUE OR FALSE**

- 1 A flow of electrons moving inside a conductor creates an electric current.
- 2 A generator is used to move the charges.
- 3 Electrons can easily pass through any material.
- 4 Any material is a good conductor.
- 5 Conductors are coated with insulators.
- 6 The presence of free electrons affects the conductivity of materials.
- 7 Impurities are introduced to increase conductivity.
- 8 Insulating materials resist the flow of electrons.

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## UNITS OF MEASUREMENT

*Move the units in the correct place*

VOLTS

AMPERES

COULOMB

WATTS

KILOWATT



Unit of measurement	What does it measure?
(1) _____	the number of electrons passing a given point in a conductor in one second
(2) _____	the quantity of electricity transferred by a steady current of one ampere
(3) _____	the amount of electric energy used
(4) _____	the difference of potential between two points on a conductor
(5) _____	rate at which work is done