

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