

alternating current  
(AC)

an electric current  
that reverses  
direction periodically

ammeter

a meter used to  
measure electric  
current

ampere (A)

the unit of the fundamental  
quantity of electric current;  
1 ampere = 1 coulomb per  
second

circuit breaker

a device used to stop  
electric current when  
there is a fault in an  
electric circuit

conductor

a material that allows  
electric charge to  
flow easily through it

conventional current

electric charge that flows from positive to negative

coulomb

the unit of electric charge equal to one ampere second

dipole

two small equal but opposite charges separated by a distance

direct current (DC)

current that flows in one direction only

drift velocity

the average speed of movement in one direction of charge carriers in a conductor

earth connection

the connection to the earth of an appliance to protect a user from electrocution

electric charge

the property of matter which allows it to attract opposite charges and repel similar charges; can be positive or negative

electric circuit

consists of a source of electric energy, a conduction pathway and a device that uses electric energy

electric current

the rate of flow of electric charge past any point in a circuit

electric field

the region in which a charge experiences an electric force

electric field direction	the direction in which a positive charge would experience a force if placed in the field
electric field strength	the force per unit positive charge acting on a charge in an electric field
electric generator	a device used to convert mechanical energy into electrical energy
electric potential difference (V)	the difference in electric potential energy per unit charge
electric potential energy	the energy stored in a charge placed in an electric field

electric shock

where current flows through a person

electromagnet

a number of coils of wire wrapped around a soft metal core which affects a compass and attracts iron objects when connected to a source of current

electromotive force (emf)

the energy per unit charge supplied by a source of electric current; it is equal to the open circuit potential difference across a cell or battery

electron

a negatively charged subatomic particle found in all neutral atoms

field

a region in which a physical force is operating; a region of influence

---

fuse

a device consisting of a wire that melts when a predetermined current flows through it

---

induction

the process of charging one object by bringing it near another charged object

---

insulator

a material that electric charge finds very difficult to move through

---