

28 Multiple choice questions



A+
100%

1. a material that allows electric charge to flow easily through it
 - a. coulomb
 - b. insulator
 - c. induction
 - d. **CORRECT: conductor**

2. 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
 - a. electric field
 - b. electric shock
 - c. electron
 - d. **CORRECT: electromagnet**

3. the unit of the fundamental quantity of electric current; 1 ampere = 1 coulomb per second
 - a. **CORRECT: ampere (A)**
 - b. field
 - c. ammeter
 - d. dipole

4. a region in which a physical force is operating; a region of influence
 - a. **CORRECT: field**
 - b. ammeter
 - c. dipole
 - d. fuse

5. a material that electric charge finds very difficult to move through
 - a. coulomb
 - b. conductor
 - c. **CORRECT: insulator**
 - d. induction

6. electric charge that flows from positive to negative
 - a. electric current
 - b. electric circuit
 - c. **CORRECT: conventional current**
 - d. conductor

7. where current flows through a person
 - a. **CORRECT: electric shock**
 - b. electric field
 - c. electric charge
 - d. electric circuit

8. a meter used to measure electric current
 - a. **CORRECT: ammeter**
 - b. field
 - c. ampere (A)
 - d. dipole

9. the force per unit positive charge acting on a charge in an electric field
 - a. electric field
 - b. electric current
 - c. **CORRECT: electric field strength**
 - d. electric field direction

10. the process of charging one object by bringing it near another charged object
 - a. electron
 - b. **CORRECT: induction**
 - c. conductor
 - d. insulator

11. the difference in electric potential energy per unit charge
 - a. electric potential energy
 - b. electromotive force (emf)
 - c. **CORRECT: electric potential difference (V)**
 - d. electric field direction

12. the energy stored in a charge placed in an electric field
- electric charge
 - electric generator
 - electric potential difference (V)
 - CORRECT:** electric potential energy
13. a device used to convert mechanical energy into electrical energy
- CORRECT:** electric generator
 - electric field
 - electric circuit
 - electromagnet
14. the region in which a charge experiences an electric force
- CORRECT:** electric field
 - electric charge
 - electric circuit
 - electric shock
15. current that flows in one direction only
- alternating current (AC)
 - ampere (A)
 - electric current
 - CORRECT:** direct current (DC)
16. an electric current that reverses direction periodically
- electric current
 - direct current (DC)
 - CORRECT:** alternating current (AC)
 - conventional current
17. a negatively charged subatomic particle found in all neutral atoms
- CORRECT:** electron
 - electromagnet
 - field
 - induction

18. a device used to stop electric current when there is a fault in an electric circuit
- CORRECT: circuit breaker**
 - conductor
 - ammeter
 - insulator
19. the connection to the earth of an appliance to protect a user from electrocution
- conductor
 - electron
 - induction
 - CORRECT: earth connection**
20. the property of matter which allows it to attract opposite charges and repel similar charges; can be positive or negative
- electric field
 - CORRECT: electric charge**
 - electric current
 - electric shock
21. 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
- electric field
 - CORRECT: electromotive force (emf)**
 - electric current
 - electric circuit
22. consists of a source of electric energy, a conduction pathway and a device that uses electric energy
- electric shock
 - CORRECT: electric circuit**
 - electric current
 - electric charge

23. the rate of flow of electric charge past any point in a circuit
- electric charge
 - electric field
 - CORRECT: electric current**
 - electric circuit
24. the unit of electric charge equal to one ampere second
- dipole
 - field
 - fuse
 - CORRECT: coulomb**
25. the average speed of movement in one direction of charge carriers in a conductor
- electron
 - field
 - dipole
 - CORRECT: drift velocity**
26. the direction in which a positive charge would experience a force if placed in the field
- electric circuit
 - electric field strength
 - electric field
 - CORRECT: electric field direction**
27. two small equal but opposite charges separated by a distance
- field
 - CORRECT: dipole**
 - coulomb
 - fuse
28. a device consisting of a wire that melts when a predetermined current flows through it
- CORRECT: fuse**
 - field
 - coulomb
 - dipole

