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| 1. | **kilowatt-hour** | the energy used by a 1 kilowatt appliance operating for 1 hour |
| 2. | **Kirchoff's first (current) law** | the sum of the currents into any point in a circuit is equal to the sum of the currents out of that point |
| 3. | **Kirchoff's second (voltage) law** | the sum of the potential drops around a circuit is equal to the sum of the emfs |
| 4. | **line of force** | a line drawn tangential to the direction of the force on a charge (or mass or magnet) at each point |
| 5. | **magnetic field** | a region around a magnet where a magnetic force would be felt |
| 6. | **magnetic poles** | where the magnetism is concentrated in a magnet; always come in pairs |
| 7. | **magnetism** | the property of certain materials that allows them to attract iron objects |
| 8. | **motor** | a device that changes electrical energy into mechanical (kinetic) energy |
| 9. | **negative charge** | charge that will repel an electron |
| 10. | **neutral** | the state of no overall electric charge |
| 11. | **Oersted's experiment** | an experiment that showed that a current carrying conductor produces a magnetic field around it |
| 12. | **Ohm** | the SI unit of electrical resistance; equal to that resistance which will allow a current of one ampere to flow when there is a potential difference of one volt |
| 13. | **Ohm's law** | the ratio of the applied voltage across a conductor to the current through it is a constant; R=V/I |
| 14. | **parallel circuit** | a circuit containing more than one pathway for the current |
| 15. | **positive charge** | charge that will attract a negative charge; the type of charge found on protons |
| 16. | **potential difference (V)** | a measure of the work done per unit charge as a charge is moved between two points in an electric field |
| 17. | **potential energy** | energy due to position or configuration; stored energy |
| 18. | **power (P)** | the time ratio of doing work; P=VI |
| 19. | **resistance** | the property of a material that makes it difficult for electric charge to flow; R=V/I |
| 20. | **right-hand grip rule** | when the thumb of the right hand points in the direction of conventional current, the fingers curl in the direction of the magnetic field |
| 21. | **safety devices** | fuses, circuit breakers, earth-leakage devices that protect users from electrocution |
| 22. | **series circuit** | an electric circuit which has only one pathway |
| 23. | **solenoid** | a coil of wire that acts like a bar magnet when current flows through it |
| 24. | **static electricity** | electric charges at rest |
| 25. | **voltage (V)** | another name for potential difference |
| 26. | **voltmeter** | a meter used to measure the potential difference between two points |
| 27. | **volt (V)** | the SI unit of potential difference; the potential difference between two points is one volt if one joule of work is done to move one coulomb of charge between the two points |
| 28. | **watt (W)** | one watt is the power developed when 1 joule of energy is transformed in 1 second |