Quizlet

Physical Science - Unit 7 - Electricity and Magnetism

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Alternating Current	A flow of electric charge that regularly reverses its direction.
2. Battery	A device that converts chemical energy to electrical energy
3. Capacitor	An electrical device used to store electrical charge
4. Circuit Breaker	A switch that opens when current in a circuit is too high.
5. Closed Circuit	A complete circuit through which electricity flows; all switches are closed.
6. Commutator	A device that controls the direction of the flow of current through an electric motor
7. Direct Current	An electric current that flows in one direction steadily
8. Electrical Conductor	A material in which charges can move freely
9. Electrical Current	A flow of electric charge.
10. Electrical Insulator	A material in which charges cannot move freely
n. Electric Charge	A property that causes subatomic particles such as protons and electrons to attract or repel each other.
12. Electric Circuit	A complete, unbroken path through which electric charges can flow
13. Electric Field	The effect an electric charge has on other charges in the space around it
14. Electric Force	The force of attraction or repulsion between electrically charged objects
15. Electric Motor	A device that uses an electromagnet to turn an axle
16. Electric Power	The rate at which electrical energy is converted to another form of energy
17. Electromagnet	A solenoid with a ferromagnetic core
18. Electromagnetic Force	The force that acts between positive and negative charges. It holds atoms together into molecules.
19. Electromagnetic Induction	The process of generating a current by moving an electrical conductor relative to a magnetic field.
20. Faraday's Law	A voltage is induced in a conductor by a changing magnetic field.
21. Ferromagnetic Material	A material that can be magnetized because it contains magnetic domains
22. Fuse	A device that prevents current overload in a circuit

23.	Galvonometer	A device that uses an electromagnet to detect small amounts of current
24.	Generator	A device that converts mechanical energy into electrical energy by rotating a coil of wire in a magnetic field.
25.	Grounding	The transfer of excess charge through a conductor to Earth
26.	Induction	The transfer of charge without contact between materials
	Law of Conservation of Charge	The total charge in an isolated system is constant.
28.	Load	A device that uses electrical energy to do work
	Magnetic Domain	A region that has a very large number of atoms with aligned magnetic fields
30.	Magnetic Field	The region around a magnet where the magnetic force is exerted
31.	Magnetic Force	The force a magnet exerts on another magnet, on iron or a similar metal, or on moving charges
32.	Magnetic Pole	The ends of a magnetic object, where the magnetic force is strongest.
33.	Magnetosphere	The area surrounding Earth that is
		influenced by Earth's magnetic field
34.	Ohm's Law	influenced by Earth's magnetic field The voltage in a circuit equals the product of the current and the resistance. V=IR
	Ohm's Law Open Circuit	The voltage in a circuit equals the product
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35. (36. 37.	Open Circuit	The voltage in a circuit equals the product of the current and the resistance. V=IR An incomplete electrical circuit in which no current flows An electric circuit with two or more paths
35. 36. 37.	Open Circuit Parallel Circuit Potential	The voltage in a circuit equals the product of the current and the resistance. V=IR An incomplete electrical circuit in which no current flows An electric circuit with two or more paths through which charge can flow a.k.a. Voltage. The difference in electrical potential energy between two places in an
35. (36. 37. 38.	Open Circuit Parallel Circuit Potential Difference	The voltage in a circuit equals the product of the current and the resistance. V=IR An incomplete electrical circuit in which no current flows An electric circuit with two or more paths through which charge can flow a.k.a. Voltage. The difference in electrical potential energy between two places in an electrical field. A material's opposition to the flow of
35. (36. 37. 38. 39.	Open Circuit Parallel Circuit Potential Difference Resistance	The voltage in a circuit equals the product of the current and the resistance. V=IR An incomplete electrical circuit in which no current flows An electric circuit with two or more paths through which charge can flow a.k.a. Voltage. The difference in electrical potential energy between two places in an electrical field. A material's opposition to the flow of electric current. An electrical device that resists the flow of
35. (36. 37. 38. 39. 40. ;	Open Circuit Parallel Circuit Potential Difference Resistance Resistor	The voltage in a circuit equals the product of the current and the resistance. V=IR An incomplete electrical circuit in which no current flows An electric circuit with two or more paths through which charge can flow a.k.a. Voltage. The difference in electrical potential energy between two places in an electrical field. A material's opposition to the flow of electric current. An electrical device that resists the flow of electrical current An electric circuit with only one path
35. (36. 37. 1 38. 39. 40. \$	Open Circuit Parallel Circuit Potential Difference Resistance Resistor Series Circuit	The voltage in a circuit equals the product of the current and the resistance. V=IR An incomplete electrical circuit in which no current flows An electric circuit with two or more paths through which charge can flow a.k.a. Voltage. The difference in electrical potential energy between two places in an electrical field. A material's opposition to the flow of electric current. An electrical device that resists the flow of electrical current An electric circuit with only one path through which charge can flow A connection that allows current to take an

44. Superconductor	A material that has almost zero resistance when it is cooled to low temperatures
45. Switch	A device for making, breaking, or changing the connections in an electrical circuit
46. Transformer	A device that increases or decreases the voltage and current of two linked AC circuits.
47. Turbine	A device with fanlike blades that turn when pushed.