Quizlet Magnetism & Electricity

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- 1. Ammeter: A meter that measures the flow of electrical current in amperes (AMPS)
- 2. Aurora: an atmospheric phenomenon consisting of bands of light caused by charged solar particles following the earth's magnetic lines of force
- 3. **Battery:** A device used to convert chemical energy into electric energy. A group of voltaic cells connected together in a series or parallel connection.
- 4. Chemical Energy: Energy available in molecules for release in a chemical reaction; a form of potential energy.
- 5. Chemical Reaction: Chemical transformation or change; the interaction of chemical entities.
- 6. Compass: ...
- 7. Conduction: Energy is passed from atom to atom through direct contact
- 8. Conductor: A device designed to transmit electricity, heat, etc.
- 9. Conservation of Charge: The law that states that charges are neither created nor destroyed but only transferred from one material to another
- 10. Dry Cell: A cell that uses dry chemicals in a reaction to produce electricity
- 11. Electric Circuit: A complete, unbroken path through which electric charges can flow
- 12. Electric Current: Movement of electrons from one place to another
- 13. Electric field: The field around charged particles that exerts a force on other charged particles.
- 14. Electric force: The attraction or repulsion between electric charges
- 15. Electricity: A form of energy caused by the movement of electrons.
- 16. Electrochemical Cell: a device that transforms chemical energy into electrical energy
- 17. Electrode: A metal strip that conducts electricity
- 18. Electrolyte: Chemical substances (Na, K, Ca, Cl) that develop an electric charge and are able to conduct an electric current when placed in water; ions
- 19. Electron: A subatomic particle that has a negative charge
- 20. Ferromagnetic: Substances that can become magnetized; iron, nickel & cobalt. Their atoms will form magnetic domains.
- 21. Friction: A force that opposes motion between two surfaces that are in contact
- 22. **Induction:** A method of charging an object by means of the electric field of another object
- 23. Insulator: A material that does not allow heat or electrons to move through it easily.
- 24. Magnet: a technique that uses magnetic fields and radio waves to produce computer-generated images that distinguish among different types of soft tissue; allows us to see structures within the brain. (MRI)

- 25. Magnetic Domain: A region in which the magnetic fields of all atoms are lined up in the same direction
- 26. Magnetic Field Lines: Invisible lines that map out the magnetic field around a magnet
- 27. Magnetic Force: The attraction or repulsion between magnetic poles
- 28. Magnetic Pole: A magnet has 2 ends, called this. A magnet's pull is strongest at these.
- 29. Magnetosphere: The area surrounding Earth that is influenced by Earth's magnetic field
- 30. **Ohm:** Electric current is equal to the potential difference across the conductor divided by resistance (I=v/R)
- 31. Ohm's Law: According to this law the voltage in a circuit equals the product of the current and the resistance.
- 32. Parallel Circuit: A closed electrical circuit in which the current is divided into two or more paths and then returns via a common path to complete the circuit.
- 33. Permanent Magnets: objects that keep their magnetic properties for a long time
- 34. Power: Energy moved per second is:
- 35. Resistance: A material's opposition to the flow of electric current.
- 36. Series Circuit: A circuit in which all parts are connected end to end to provide a single path of current.
- 37. Solar Wind: A tenuous flow of gas and energetic charged particles, mostly protons and electrons -- plasma -- which stream from the Sun; typical solar wind velocities are near 350 kilometers per second.
- 38. Static Discharge: The loss of static electricity as electric charges transfer from one object to another
- 39. Static electricity: The accumulation of excess electric charge on an object
- 40. Temporary Magnets: Magnets that quickly become magnetized but don't retain it for long periods of time.
- 41. Terminal: Is the max speed an object can go used to slow electric current.
- 42. Van Allen Belts: The rings where most of the protons and electrons from the sun's solar wind end up trapped in the earth's magnetic field; very dangerous radiation that is named after its discoverer.
- 43. Voltage: The potential difference measured in volts. The amount of work to be done to move a charge from one point to another along an electric circuit.
- 44. Voltmeter: A device used to measure voltage, or electrical potential energy difference
- 45. Wet Cell: a cell that uses at least on liquid to produce a chemical reaction to produce electricity