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| ***IMPORTANT CONCEPTS YOUR STUDENT SHOULD KNOW AND ACTIVITIES TO DO AT HOME*** | | | |
| **Electricity and Magnetism Unit** | | | |
| **Important Concepts Addressed in this Unit** | | | |
| **S5P2. Obtain, evaluate, and communicate information to investigate electricity.**  a. Obtain and combine information from multiple sources to explain the difference between naturally occurring electricity (static) and human-harnessed electricity.  b. Design a complete, simple electric circuit, and explain all necessary components.  c. Plan and carry out investigations on common materials to determine if they are insulators or conductors of electricity.  **S5P3. Obtain, evaluate, and communicate information about magnetism and its relationship to electricity.**  a. Construct an argument based on experimental evidence to communicate the differences in function and purpose of an electromagnet and a magnet. (Clarification statement: Function is limited to understanding temporary and permanent magnetism.)  b. Plan and carry out an investigation to observe the interaction between a magnetic field and a magnetic object. (Clarification statement: The interaction should include placing materials of various types (wood, paper, glass, metal, and rocks) and thickness between the magnet and the magnetic object.) | | | I can explain the difference between naturally occurring electricity (static) and human-harnessed electricity.  I can design a complete, simple electric circuit, and explain all necessary components.  I can determine if common materials are insulators or conductors of electricity.  I can communicate the differences in function and purpose of an electromagnet and a magnet.  I can plan and observe the interaction between a magnetic field and a magnetic object. |
| **Key Words To Know** | | | **How You Can Help Your Student** |
| 1. **Electric Charge:** A basic property of the tiny particles that make up matter. Electric charges can be positive or negative. 2. **Static Electricity:** The buildup of electric charges in one place. 3. **Electric Discharge:** the jump of electrons from one object to another. 4. **Electric Field**: The area around electric charges, where electric forces can act. 5. **Electric Current:** A flow of electric charges. 6. **Electric Circuit:** A continuous pathway that can carry an electric current. 7. **Load:** Any device that uses current 8. **Power Source:** place where energy is produced 9. **Series Circuit:** An electric circuit with only one path for current. 10. **Parallel Circuit:** An electric circuit with two or more paths for current. 11. **Resistance:** How much a material opposes, or resists, the flow of electric current. 12. **Short Circuit:** A flaw in a circuit that allows a large current to flow through where it is not wanted. 13. **Conductor:** A material through which heat and electricity flow easily. 14. **Insulator:** A material that slows the flow of heat and electricity. 15. **Electromagnet:** A magnet that has coils of current-carrying wire around an iron bar. | | | **Interactive Learning Games:** Playing games is a wonderful way to practice skills at home in a fun environment**.**  **Study Vocabulary-**Study vocabulary nightly with your child from this parent guide.  Websites:  \*\*All vocabulary words and articles/activities read and completed during class can be on the google classroom, which can be accessed at home anytime.  <http://www.ducksters.com/>  <https://www.brainpop.com/>  <https://jr.brainpop.com/> |