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Unit 5A
Introduction to Electricity
Note-Taking Guide

Name:

Date:

Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

Objective(s):

- ***Develop both a conceptual and an applied understanding of electric charge and force.***
- ***Understand static and current electricity based on knowledge of atomic structure.***

Notes:

During the video segment, use words, phrases, or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned.
You may ask yourself: "If I was going to explain this to someone else, what would I say?"

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Questions to Consider

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Answer the following.

1. Draw a picture of an atom. Include protons, neutrons, and electrons.

2. All mass is positive because nothing weighs less than zero. Why do we believe that charge is different from mass – that there is only positive mass but there are both positive and negative charges?

3. Name two ways to decrease the electric force between two charged objects.

4. When objects exchange charge, why do we believe that the negative charge moves rather than the positive charge?

questions continued on next page

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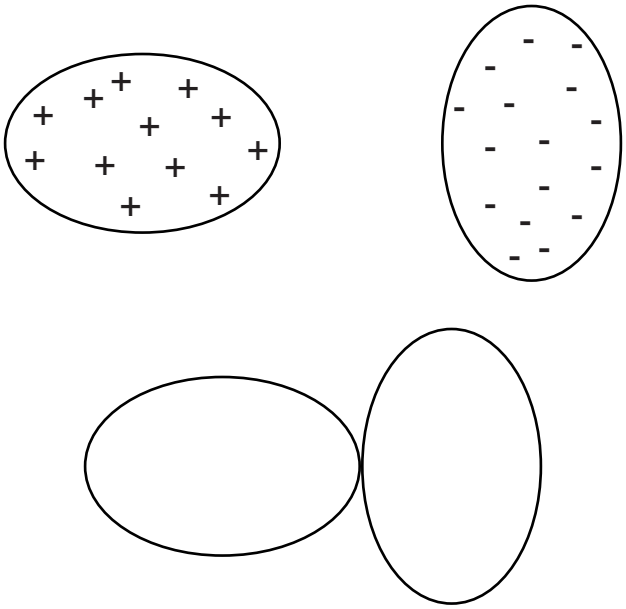
5. Imagine that the charged conductors below come in contact. Draw how the charges will spread out once the conductors are touching.



6. Name the four fundamental forces and rank them from strongest to weakest.

7. You are handed two mystery materials and told to determine which one accepts negative charges more easily. Using a positively charged, helium-filled balloon that is tied to a tabletop with a 1 m long string, describe a simple experiment that will help you identify the more attractive material.