School to Home

Electric Charge and Electric Forces

Directions: Use your textbook to respond to each statement.

1. The electric charges of protons, neutrons, and electrons affect your everyday life.

Identify the two particles that have the property of electric charge and state the type of charge each particle has.

2. An electric field is an invisible region that surrounds every charged object. The electric field applies a force on other charged objects.

Describe the two types of electric force that can occur between two charged objects.

3. Electrons can move within objects and between objects. In some materials, electrons move easily; in other materials, electrons cannot move easily.

Name the type of material through which electrons move easily and give one example of this type of material. Then, name the type of material through which electrons cannot move easily and give one example of this type of material.

4. Electrons can move between objects. This process is also called transferring charge. There are three different processes by which electrons are transferred between objects.

List the three ways that electrons are transferred between objects.

5. An electric discharge is the loss of an unbalanced charge on an object. Lightning is an example of a huge, rapidly occurring electric discharge.

State four lightning safety tips in your own words.