Static Electricity Quiz

Name: _____
Date: _____
Class: _____

1. What is the major difference between static electricity and current electricity?

a. Current electricity involves a continuous flow of neutrons; static electricity is a sudden transfer of protons.
b. Current electricity can be deadly; static electricity is almost always safe.
c. In current electricity, there's a single transfer of electrons; in static electricity, there's a steady flow of electrons.
d. Current electricity involves a flow of electrons; static electricity involves a single transfer of electrons.

2. What is static electricity caused by?

a. A balance of power.
b. A balance of positive and negative charges.
c. An imbalance of positive and negative charges.
d. An imbalance of protons and neutrons.

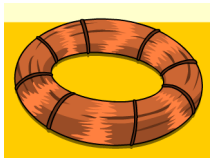
3. If a substance has an excess number of electrons on its surface, what type of charge does it have?

a. A positive charge
b. A negative charge
c. A neutral charge
d. A nuclear charge

4. Which of the following atoms is considered neutral?

a. An atom with five protons, six neutrons, and five electrons
b. An atom with five protons, five neutrons, and six electrons
c. An atom with six protons, five neutrons, and five electrons
d. An atom with six protons, six neutrons, and five electrons

5. Which of these materials is an insulator?

a. 
b. 

c. 
d. 

6. How are electrons different from protons and neutrons?

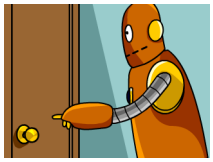
a. Protons and neutrons are negatively charged; electrons are positively charged.
b. Protons and neutrons exist inside atomic nuclei; electrons orbit atomic nuclei.
c. Electrons exist inside atomic nuclei; protons and neutrons orbit atomic nuclei.
d. Protons and neutrons are positively charged; electrons have no charge.

7. What role does adhesion play in static electricity?

a. It causes atomic nuclei to become unstable.
b. It makes sure that atoms stay neutrally charged.
c. It prevents certain materials from giving away electrons.
d. It pulls electrons from one surface toward another.

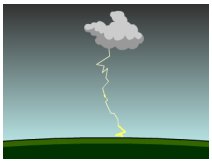
8. What can you infer about any object that gives you a static shock when you touch it?

a. It's a conductor.
b. It's an insulator.
c. It's negatively charged.
d. It's positively charged.

9. 

What happens when you touch a metal doorknob after rubbing your shoes on the carpet?

a. The doorknob sends a burst of electric current into your body.
b. Millions of electrons go from your finger into the doorknob.
c. The doorknob sends millions of electrons into your finger.
d. Your finger becomes negatively charged.

10. 

Lightning is a form of static electricity. What can you infer about what happens when lightning strikes the ground?

a. Protons and neutrons are transferred from the clouds to the ground.
b. The ground becomes negatively charged.
c. Electrons are transferred from the clouds to the ground.
d. An electric current is established between the clouds and the ground.