

Name: _____

Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet

Electricity—The Charging Process

A. Choose the letter of the correct answer and write it in the blank provided before each number.

- _____ 1. What is the charge of an object with fewer electrons than protons?
- A. negatively charged
 - B. neutrally charged
 - C. positively charged
 - D. no charge
- _____ 2. What happens when two objects are rubbed against each other?
- A. They will both lose electrons.
 - B. They will both gain electrons.
 - C. One of them will lose an electron.
 - D. Their charges will remain the same.
- _____ 3. What is necessary for charging by friction to occur?
- A. The two objects need to both be charged.
 - B. The two objects need to rub or slide against each other.
 - C. The two objects need to be stacked on top of each other.
 - D. The two objects need to be plugged into an electric source.
- _____ 4. What is involved in the process of charging by conduction?
- A. It involves touching a neutral particle to a conductive material.
 - B. It involves touching a charged particle to an insulated material.
 - C. It involves touching a charged particle to a conductive material.
 - D. It involves the disengagement of a charged particle to a conductive material.
- _____ 5. What do you call an object that can remove the excess charge and make an object neutral?
- A. conductor
 - B. electron
 - C. ground
 - D. neutron
- _____ 6. Which of the following explains charging by induction?
- A. It is a process that does not involve a charging body.
 - B. It is the process that involves bringing the charging body close to the neutral body.
 - C. It is a process that involves direct contact between the neutral body and the charging body.
 - D. It is a process that requires the negative body and the charging body to be far away from each other.

- ____ 7. What will happen if you accidentally touch an improperly insulated wire of an electric appliance that is plugged in?
- A. The electric flow will stop.
 - B. You may get electrocuted.
 - C. The appliance will stop working.
 - D. Nothing will happen to you or the appliance.
- ____ 8. Which process involves rubbing of one particle on another resulting in the transfer of electrons from one surface to the other?
- A. charging by conduction
 - B. charging by friction
 - C. charging by induction
 - D. charging by radiation
- ____ 9. Which method of charging requires a charging body to be in direct contact with the body that is being charged?
- A. charging by conduction
 - B. charging by convection
 - C. charging by friction
 - D. charging by induction
- ____ 10. If the charging body is positively charged, what will be the charge of the neutral body after charging by conduction?
- A. discharged
 - B. negative
 - C. neutral
 - D. positive

B. Using the table below, explain the three processes of charging and determine the charge that is produced.

Charging by Friction	Charging by Conduction	Charging by Induction