

Name _____

Date _____

Use with textbook pages 248-254.

Static charge

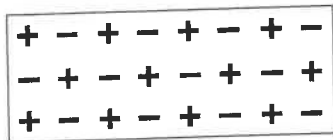
Match each Term on the left with the corresponding Diagram label on the right. Each label may be used more than once.

Term	Diagram
1. _____ proton	
2. _____ neutron	
3. _____ electron	
4. _____ has no charge	
5. _____ has a positive charge	
6. _____ has a negative charge	
7. _____ can move from one atom to another	
8. _____ and _____ make up the nucleus (name 2 parts of the atom)	

Circle the letter of the best answer.

9. A neutral object has exactly the same number of
- A. protons and neutrons
 - B. protons and electrons
 - C. neutrons and electrons
 - D. protons, neutrons, and electrons

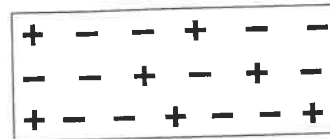
Use the following diagram to answer question 10.



10. What is the electric charge on the object shown above?
- A. neutral
 - B. positive

- C. negative
- D. It is impossible to tell.

Use the following diagram to answer questions 11 and 12.


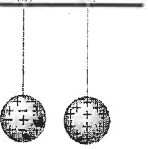
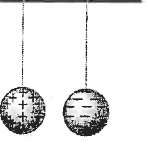



11. What is the electric charge on the object shown above?
- A. neutral
 - B. positive
 - C. negative
 - D. It is impossible to tell.
12. Which of the following describes the object shown above?
- A. It lost protons.
 - B. It lost electrons.
 - C. It gained protons.
 - D. It gained electrons.
13. A vinyl rod is rubbed with a cotton cloth. The vinyl rod becomes negatively charged and the cotton cloth becomes positively charged. Which of the following describes the cotton cloth?
- A. It has gained electrons.
 - B. It has more electrons than protons.
 - C. It has more protons than electrons.
 - D. It has the same number of protons as electrons.
14. Which of the following is a good conductor?
- A. glass
 - B. wood
 - C. copper
 - D. fur

Use with textbook pages 258–262.

Electric force

Match each Diagram on the left with the best Descriptor on the right. Each Descriptor may be used more than once.

Diagram	Descriptor
1. _____ 	A. suspended spheres will move away from each other B. suspended spheres will move toward each other C. suspended spheres will not move
2. _____ 	
3. _____ 	
4. _____ 	

Circle the letter of the best answer.

5. Which of the following applies to a neutral object?

I.	It is attracted to a positive surface.
II.	It is attracted to a negative surface.
III.	It has the same number of protons as electrons.

- A.** I and II only
B. I and III only
C. II and III only
D. I, II, and III

6. A negatively charged ruler is brought near a suspended ball. The ball is repelled by the ruler. What can you conclude from this observation?

- A.** The ball is neutral.
B. The ball is positively charged.
C. The ball is negatively charged.
D. The ball is either neutral or positively charged.

7. Two suspended balloons repel each other when brought close together. What can you conclude about the balloons?

- A.** They have opposite charges.
B. They both have the same charge.
C. One balloon is neutral and the other balloon is positively charged.
D. One balloon is neutral and the other balloon is negatively charged.

8. How does the electric force change as the amount of charge is increased?

- A.** It increases.
B. It decreases.
C. It stays the same.
D. It increases and then decreases.

9. Which of the following statements is true about the relationship between distance and electric force?

- A.** If the distance between charged objects decreases, the electric force decreases.
B. If the distance between charged objects decreases, the electric force stays the same.
C. If the distance between charged objects increases, the electric force increases.
D. If the distance between charged objects increases, the electric force decreases.