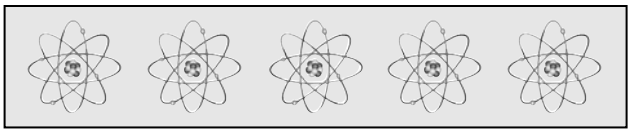
Name: _____

Date: _____ Grade: _____

SECTION QUIZ 5-1



Remember:
Score an average of 85% or higher on all three quizzes and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 2 points.

Fill in the blank or circle True or False.

1. A charged body will _____ an uncharged cork ball.
   (a) attract (b) repel (c) have no effect on (d) distract

2. An uncharged cork ball will take on the _____ charge as the charged body it touches.

3. Protons are free to move around.
   (a) True or (b) False

4. An electron and a proton both have a positive charge.
   (a) True or (b) False

5. A body with a positive charge has fewer _____ than protons.

6. The fact that electric charge can neither be created nor destroyed is known as the Law of _____ of Electric Charge.
   (a) Process (b) Radiation (c) Conservation (d) Equalization

7. If two objects repel one another, they have _____ electric charge.
   (a) no (b) unlike (c) like (d) particle

8. A ground will freely accept or donate electrons.
   (a) True or (b) False

9. If a body charged by friction is given a positive charge, the body that did the rubbing gains a charge that is: _____.
   (a) negative (b) static (c) positive (d) neutral

10. If a body charged by contact is given a positive charge, the body that touched it must have a _____ charge.
    (a) negative (b) neutral (c) positive (d) static

11. If a body charged by induction is given a positive charge, the body that it was placed near must have a _____ charge.
    (a) static (b) neutral (c) positive (d) negative

12. Static charge is evenly distributed over the surface of a _____ object.

13. An object that loses electrons will have a _____ charge.

14. A capacitor: _____.
    (a) amplifies an electric current (c) resists the flow of electricity
    (b) generates electricity (d) stores an electrical charge

15. Benjamin Franklin's experiment to capture lightning was really quite safe.
    (a) True or (b) False

16. Benjamin Franklin proved that static electricity is the same as: _____.
    (a) comets (b) gunpowder (c) lightning (d) meteorites

17. Benjamin Franklin knew that a _____ would carry away static electricity.

18. The primary purpose of lightning rods was to drain away static electricity before lightning formed.
    (a) True or (b) False

19. A tall building under a cloud becomes charged with electricity by: _____.
    (a) direct contact (b) friction (c) induction (d) infraction

20. Lightning rods _____ the charge between ground and clouds.

21. Coulomb's Law of Electrostatic Force states: _____.
    (a) the force between two charged bodies is directly proportional to the product of their charge and inversely proportional to the square of the distance separating them
    (b) electric potential is the difference in electric potential energy between two points around a charged body
    (c) the current is directly proportional to the voltage and inversely proportional to the resistance
    (d) an uncharged body will take on the same charge as the charged body it touches

22. Which of the following correctly represents Coulomb's Law of Electrostatic Force, with *Q* the charge and *r* the distance? _____

    (a) $F = k\frac{Q_1 * Q_2}{r^2}$ (b) $F = k\frac{2r}{Q_1 * Q_2}$ (c) $F = k\frac{Q}{2r}$ (d) $k = F\frac{Q}{2r}$

23. A coulomb of charge placed one meter from a like charge will produce a force of one _____.

24. The force between two charged bodies is _____ proportional to the product of their charge.

25. The force between two charged bodies is inversely proportional to the _____ of the distance between them.

26. In the equation V = E/Q, the letter V stands for: _____.
    (a) charge (b) electric potential (c) force (d) work

27. The volt is a measure of: _____.
    (a) charge (b) electrical potential (c) force (d) resistance

28. The three main parts of a battery are the anode, the cathode, and the electrolyte.
    (a) True or (b) False

29. The positive electrode in a battery is the _____.

30. Ions are groups of atoms that have lost or gained protons.
    (a) True or (b) False

31. Electricity is turned off when a circuit is opened.
    (a) True or (b) False

32. _____ puts electrons in motion.

33. The ampere is a metric unit for: _____.
    (a) charge (b) current (c) electric potential (d) resistance

34. I = Q/t is the equation for: _____.
    (a) charge (b) current (c) electric potential (d) resistance

35. An ampere is: _____.
    (a) a device that stores static electricity
    (b) the flow of one coulomb of change in one second
    (c) an object charged negatively by induction
    (d) the electric force that puts electrons in motion

36. Benjamin Franklin tells how to find lost time.
    (a) True or (b) False

37. *"We all have ability. The difference is how we _____ it."*

38. *"If you would not be forgotten, as soon as you are gone, either write things worth reading, or _____ things worth writing."*

39. *"The things of highest _____ sometimes come hard. The gold that has the greatest value lies deepest in the earth, as do the diamonds."*

40. *"It is not enough to be _____. The question is: what are we busy about?"*