CLASSWORK ON STATIC ELECTRICITY

Name: _____ Time Test started:_____ Date:_____

Multiple Choice. Write the UPPER CASE LETTER that represents the correct answer of each question.

[ ] 1. What are all substances made from?
A. atoms B. electrons C. circles

[ ] 2. What happens to an atom if it gains an electron ?
A. it becomes positive B. it becomes negative C. it stays neutral

[ ] 3. What charges are electrons?
A. neutral B. positive C. negative

[ ] 4. Which is an example of the build-up of static electricity?
A. lightning B. electromagnets C. friction

[ ] 5. What will happen to two objects with the opposite static charge?
A. They will attract B. They will repel C. Nothing

[ ] 6. What will happen to two objects with the same static charge?
A. They will attract B. They will repel C. Nothing

[ ] 7. What happens to an atom if it loses an electron?
A. It becomes positive B. It becomes negative C. It stays neutral

[ ] 8. Which part of atoms cause electricity?
A. Neutrons B. Electrons C. Protons

[ ] 9. What machine is used by teachers to show static electricity?
A. Quadrat B. Bunsen burner C. Van de Graff generator

[ ] 10. Static electricity produces what type of force?
A. Non-contact B. Contact C. Non-touching

[ ] 11. During the process of charging by friction, which particle is transferred?
A. protons B. neutrons C. electrons

[ ] 12. A duster that has lost electrons is said to be…
A. positively charged B. uncharged C. negatively charged

[ ] 13. What will a positively charged object brought close to a negatively charged object do?
A. attract B. stay still C. repel

[ ] 14. A Van de Graaff generator makes you hair stand on end because…
A. each strand of hair picks up a different charge and repels each other
B. each strand of hair picks up the same charge and repels each other
C. each strand of hair picks up a different charge and attracts each other.

[ ] 15. The arrow on an electric field diagram shows..
A. which way a neutral particle would be pushed
B. which way a positive charge would be pushed
C. which way an electron would be pushed

For question 16 and 17, John takes a positively charged rubber rod and touches a metal sphere on an insulated stand.

16. The charge on the metal sphere will end up ____.
[ ] A. neutral B. negative C. positive

17. The sphere acquires this charge because _____.
[ ] A. electrons move from the rubber rod to the sphere D. protons move from the sphere to the rubber rod
B. electrons move from the sphere to the rubber rod E. the rubber rod creates a charge on the sphere
C. protons move from the rubber rod to the sphere

[ ] 18. If a positively charged plate is brought near the top of a positively-charged electroscope, then the deflected needle will _____.
A. not move at all B. be deflected more C. be deflected less

[ ] 19. If an electroscope, charged up with excess negative charge, is touched and grounded, then it will end up with _____ charge.
A. no B. a negative C. a positive

[ ] 20. If you comb your hair and the comb becomes positively charged, then your hair becomes___.
A. positively charged B. negatively charged C. uncharged

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