Place:________
Instructions: Read directions carefully. The point value of each question will be indicated at the end of each question. A correct answer will give you + however many points the question is worth. A question left blank will give you +0 points. There is a point penalty for incorrect answers or partially correct answers. Every incorrect answer will earn you -1 points, so guess carefully. For example:

3 correct answers (each question is worth 2 points) = 6 points
7 answers left blank = 0 points
1 incorrect answer = -1 points

TOTAL: 6 + 0 - 1 = 5

Also since this is a new event I have no idea how to write this test. Good Luck!!!

1. A substance in which the constituents are combined in fixed ratios would be considered:
   a. A solution
   b. A mixture
   c. A compound
   d. A homogeneous mixture
   e. A heterogeneous mixture
   f. Both D and E
   g. Both A and D
   h. A, E, and D

2. Salt water would be considered
   a. A solution
   b. A mixture
   c. A compound
   d. A homogeneous mixture
   e. A heterogeneous mixture
   f. Both D and E
   g. Both A and D
   h. A, E, and D
3. Lemonade would be considered
   a. A solution
   b. A mixture
   c. Compound
   d. A homogeneous mixture
   e. A heterogeneous mixture
   f. Both E and D
   g. A and D
   h. A, E, and D

4. Give an example of a heterogeneous mixture.

5. Give and example of a homogeneous mixture.

6. Select all that apply: \( \text{O}_2 \) is considered a(n)
   a. Atom
   b. Diatomic element
   c. Monatomic element
   d. Molecule
   e. Compound

7. What is the difference between a compound and a molecule?

8. Removing salt from salt water would be considered a
   a. Physical Change
   b. Chemical Change

9. Breaking a compound would be considered a
   a. Physical Change
   b. Chemical Change

10. Breaking a bond between carbon and hydrogen in \( \text{CH}_4 \) would be considered a
    a. Physical Change
    b. Chemical Change

11. Rotting wood would be considered a
    a. Physical Change
    b. Chemical Change
12. Dry ice subliming into carbon dioxide gas would be considered a
   a. Physical Change
   b. Chemical Change

13. Pancake cooking would be considered a
   a. Physical Change
   b. Chemical Change

14. Performing a distillation would be considered a
   a. Physical Change
   b. Chemical Change

15. CH₄ contains:
   a. Metallic
   b. Covalent
   c. Ionic
   d. Neither
   e. Both Covalent and Ionic

16. HNO₃ contains:
   a. Metallic
   b. Covalent
   c. Ionic
   d. Neither
   e. Both Covalent and Ionic

17. Cl₂ contains:
   a. Metallic
   b. Neither
   c. Ionic
   d. Sharing of electrons
   e. Both Covalent and Ionic

18. Balance the following chemical equation. Write the answer in your answer sheet as a list separated by semicolons.
   ___Cu + ___HNO₃ --> ___Cu(NO₃)₂ + ___H₂O + ___NO₂

19. Balance the following chemical equation. Write the answer in your answer sheet as a list separated by semicolons.
   _____FeS + ___O₂ --> _____Fe₂O₃ + ____SO₂
Match the following chemical names with their chemical formulas.

20. Ammonia a. $\text{H}_2\text{O}_2$
21. Isopropyl alcohol b. $\text{NaClO}$
22. Hydrogen Peroxide c. $\text{MgSO}_4$
23. Magnesium Sulfate d. $\text{NH}_3$
24. Sodium hypochlorite e. $\text{CaCO}_3$
25. Acetic Acid f. $\text{C}_3\text{H}_8\text{O}$
26. Calcium Carbonate g. $\text{CH}_3\text{COOH}$

List the scientific names for the following organisms:

27. Mayapple-
28. Ongaonga-
29. Jimson Weed-
30. Poison Oak-
31. Death-Cap Mushroom-
32. Poison Ivy-

33. Identify (BE SPECIFIC OR YOU WILL NOT RECEIVE POINTS!!!)

34. Identify (BE SPECIFIC OR YOU WILL NOT RECEIVE POINTS!!!)

35. Identify (BE SPECIFIC OR YOU WILL NOT RECEIVE POINTS!!!)
36. Which of the following is a Brown Recluse Spider?

a. 

b. 

c. 

d. 

37. The solution presented in the beaker has 12.5% concentration of salt. If one would desire a solution of 30.0% concentration of salt, What must be done to the existing solution?
38. In your own words, briefly describe what “LD50” means.

39. Repeated exposure to low levels of herbicides over a long period of time is _________ exposure?
   a. Chronic
   b. Acute
   c. AN LD50
   d. A synergistic

40. What is the “NOEL” level?

41. An owner had 6 cats. After feeding all 6 with a new cat dish with Xmg of iron, 3 died. Based on the study what can be concluded?
   a. The LC50 is Xmg
   b. No conclusion
   c. The LD50 is Xmg
   d. The half-life of iron for cats is Xmg