SCIENCE 9 - UNIT B – MATTER AND CHEMICAL CHANGE – REVIEW SHEET FOR EXAM #1

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This exam contains questions relating to:

1. WHMIS Symbols & SAFETY Symbols
    - How many are there? What are they? What does WHMIS stand for?
2. The Shapes for Safety symbols? Which is the most severe?
3. What are safe practices in the lab?
    - Long Loose clothing? Loose Hair? Aim things away from you or at you?
4. What symbols would appear on car battery? (Lead plates in Sulfuric Acid)
5. Safest methods of heating a liquid? (Place the test tube in water bath to heat evenly)
6. What is matter?
7. The 6 processes of change for matter (Evaporation, Melting, etc.)
8. How can the density of a substance be obtained? (D = M/V)
9. Clues for Chemical and Physical Changes
10. The difference between Pure Substances and Mixtures
11. The difference between elements and compounds
12. The difference between the 4 various types of mixtures
13. What is a “Aqueous” solution?
14. What properties does VINEGAR have?
15. Boiling point and Melting point (Be able to determine what state a substance will be based on the temperature of a substance)
16. Physical Properties of matter (Ductile, Malleable, Hardness, etc.)
17. Heterogenous mixtures vs. Homogeneous mixtures
18. What happens when you heat a teaspoon of sugar over a flame?
19. What is precipitate?
20. What is freeze-drying? What is the purpose of it?
21. How can water be changed into two gases?
22. How long ago was the STONE AGE?
23. How are Steel and Bronze produced?
24. Who were Alchemists and what did they believe?
25. The contributions of various Chemists - Rutherford, Dalton, Lavoisier, Boyle, Thomson, Nagaoka, Bohr, Chadwick, Democritus, Aristotle, etc.
26. Who discovered the nucleus?
27. Who performed the GOLD FOIL EXPERIMENT? Be able to explain it.
28. Properties of the SUBATOMIC PARTICLES
29. What model did we use to draw atoms? What is the most recent theory of what an atom looks like? Be able to draw an atom like we did in class.
30. How did Aristotle define matter?
31. What does “amu” stand for? How does this relate to Atomic Mass?
32. Why are elements grouped the way they are in the periodic table?
33. What where the symbols & metals for the Sun, Moon, and planets for early chemists?
34. What scientist created a system of classifying elements that used symbols?
35. Halogens, Non-metals, Noble Gases, Metals
    - Which are the most numerous? Where are they located on the periodic table?
36. What is a Metalloid?
37. Why do Bromine and Mercury have blue chemical symbols in the periodic table?
38. Are the horizontal and vertical rows groups or periods?
39. What does the atomic number represent?
40. What is the atomic mass of a substances and how do you find it?
41. What are the isotopes of carbon? What is Carbon-14 used for?