Chemistry #2 Test Review

1. Review your safety in the Laboratory handout. There are 29 points on this handout, you need to know at least 10 of these.
2. What does WHMIS stand for?
3. Be able to match each of the 8 symbols with their description and their class. Ex. The symbol that is a flaming O is an oxidizing material, Class C.
4. Which class contains contents under pressure? What is the name of this class? What is a danger? What is one safety procedure to keep you safe?
5. Which class contains materials that burn and react with oxygen? What is the danger? Name a safety procedure.
6. Which class contains oxygen? What is the danger? Name a safety procedure.
7. Which class can cause acute lethal effects? What is the danger? Name a safety procedure.
8. Which class causes toxic effects that are not immediate? What is the danger? What is a safety procedure?
9. Which class has toxin containing organisms? What is the danger? What is a safety procedure?
10. What are corrosive materials? What is the danger? What is a safety procedure?
11. Which materials can undergo strong chemical reactions? Give the class and the class name. What is the danger? Name a safety procedure.
12. What are the two types of WHMIS labels?
13. Which label is attached to a chemical manufactured and sold in Canada?
14. When is a workplace label applied to a container?
15. Do you know what MSDS stands for?
16. Why is a MSDS useful?
17. How many categories are in a MSDS?
18. I need you to define the following:
    a. State
    b. Hardness
    c. Malleability
    d. Ductility
    e. Melting point
    f. Boiling point
    g. Viscosity
    h. Density
    i. Solubility
19. I really need you to calculate the density of Tungsten. You have 77.2g of tungsten which has a volume of $4cm^3$. So what is the density?
20. I know that you know that Osmium is the most dense element known with a density of $22.61g/cm^3$. But if you have 187.7g of Osmium, what is its volume?

21. How many times do I have to tell you that hydrogen gas has a density of 0.08988g/L? Can you tell me how many grams of hydrogen you have if the volume of hydrogen gas is 225L?
22. What is more viscous, apple juice or honey?
23. Does melting point or boiling point occur at a higher temperature?
24. Is silver malleable or brittle? How about glass?
25. If I put chocolate syrup and a peanut in a cup of milk, what is the solvent? Which substance is soluble? Which substance is insoluble?
26. Define chemical properties.
27. Please define a physical change and a chemical change.
28. Even Justin Bieber knows that ice melting is a change in state. Is it a physical change or a chemical change?
29. What is a precipitate?
30. List the six main characteristics of a chemical change.
31. What does a chemical equation describe?
32. In the chemical equation $Cu_{(s)} + 4HNO_{3(aq)} \rightarrow Cu(NO_3)_{2(aq)} + 2NO_{2(g)} + 2H_2O_{(l)}$:
    a. How many products are there? What are the products?
    b. How many reactants are there? What are the reactants?
33. Is a physical or a chemical change more often reversible?
34. When given a list of occurrences, be able to state whether they are physical or chemical changes.
35. Please let me know if you enjoyed this review or if you would prefer a review that contains less details and less questions. Thank you.