**Science 10 –Science Review Questions for Exam – ANSWER ON YOUR OWN PAPER**

**CHEMISTRY June 3, 2019**

**Part 1**

1. What is matter?
2. Are weight and mass the same?
3. Name the three parts of an atom.

**Part 2**

1. Name any two physical properties of water.
2. What is invisible, state is a gas, and has no particular shape or volume?
3. Name two categories of substances and give an example of each.
4. When two pure substances are mixed together and they mix smoothly, the mixture is called a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** an example of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mixture.
5. If particles do not mix well together then the mixture is described as a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**mixture.

**Part 3 (\*\*Use Periodic Table)**

1. What element am I (name and/or symbol)?
2. My neutron number is 51. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. My atomic mass is 192. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. My symbol is Ba. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. My electron number is 19. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. My proton number is 87. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Complete the following table by filling in the blanks. Use the periodic table to assist you.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Symbol** | **Atomic Number** | **Atomic Mass** | **Number of Protons** | **Number of Electrons** | **Number of Neutrons** |
|  |  | 13 |  |  |  |  |
| Silver |  |  |  |  |  |  |
|  |  |  |  | 50 |  |  |
|  |  |  |  |  |  | 120 |
|  | Zn |  |  |  |  |  |

1. Construct a Bohr Diagram for the following elements:
2. F or Fluorine
3. K or Potassium

**Part 4**

1. Indicate how energy (temperature) affects the phases of matter of water
2. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** properties are the characteristics of a substance that you can observe with your senses. Give an example. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. What is the physical property of iron (with respects to shape and volume)?
4. How does a gas differ from a liquid?
5. How is a gas the same as a liquid?
6. How does a gas differ from a solid?
7. How is a gas the same as a solid?
8. Name a chemical property of rubbing alcohol.

**Part 5**

1. Identify the following symbols using the word list below:

WORD LIST:

Biohazardous Corrosive Flammable Compressed Gas

Oxidizing Poisonous Toxic Dangerously Reactive

    

1. What are (five examples each) of the “do’s” and “don’ts” with respects to lab safety?
2. What is wafting?
3. What does WHMIS stands for?

**Part 6**

1. Which of the following is an example of a pure substance and which are examples of a mixture?
2. Pizza - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Oreo cookie - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Distilled water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Brass - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Solid brass - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Identify the following as a homogenous mixture or a heterogenous mixture.
8. Tea - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Salt and pepper - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Mayonaise - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Milk - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Nails and screws - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Identify following as either a physical change or a chemical change.
14. Foaming or fizzing - \_\_\_\_\_\_\_\_\_\_\_\_\_
15. Color of a substance - \_\_\_\_\_\_\_\_\_\_\_\_
16. Odor of a substance - \_\_\_\_\_\_\_\_\_\_\_\_\_
17. Color and odor of a substance
18. Burning of a substance - \_\_\_\_\_\_\_\_\_\_
19. Soured milk - \_\_\_\_\_\_\_\_\_\_\_\_\_\_
20. Shape of an object - \_\_\_\_\_\_\_\_\_\_\_\_\_
21. Tearing apart a piece of wood - \_\_\_\_\_
22. Calculate the density of the following: (D = m/v)
23. Timothy found a solid metal block that has a mass of 125 grams and

 a volume of 25 cm3. What would be the density of the block?

1. Find the density of a substance with a mass of 27 g and a volume of 7 cm3.
2. A block of maple has a mass of 120 grams and a volume of 10 cm3. What is the density of the block?
3. Find the density of a substance with a volume of 5 cm3and a mass of 35 g.