Quiz 2A

1. Describe the proper procedure if you spill a small amount of chemical on your hand (2 points).

You should rinse your hand for at least 15 minutes in the sink, inform your instructor of the accident, and get checked by a medical professional if necessary.

1. Glycerol has a density of 1.20 g/mL. How many mL are in 36 g of glycerol (4 points)?

$$42 g glycerol×\frac{1 mL glycerol}{1.20 g glycerol}=35 mL glycerol $$

1. Change 7.0 kilograms to grams (4 points).

$$7.0 kg×\frac{1000 g }{1 kg}=7000 g or 7.0 ×10^{3} g$$

1. Enter the name and number of atoms of each element in acetic acid, HC2H3O2, a major component of vinegar (6 points):

|  |  |  |
| --- | --- | --- |
| Element Symbol | Name | Number of Atoms |
| H | Hydrogen | 4 |
| C | Carbon | 2 |
| O | Oxygen | 2 |

1. Identify the following statements as true or false (4 points):
	1. Sodium, Na, is an alkali metal. \_\_\_true\_\_\_\_\_\_\_\_\_\_
	2. Silicon, Si, is a metal. \_\_\_false\_\_\_\_\_\_\_\_\_
	3. Mercury, Hg, is a solid at room temperature. \_\_\_false\_\_\_\_\_\_\_\_\_
	4. Nitrogen exists as N­2 in nature. \_\_\_true\_\_\_\_\_\_\_\_\_\_

Quiz 2B

1. Enter the name and number of atoms of each element in formic acid, HCO2H, which was first isolated from ants and named for the Latin *formica*,which means ant (6 points):

|  |  |  |
| --- | --- | --- |
| Element Symbol | Name | Number of Atoms |
| H | Hydrogen | 2 |
| C | Carbon | 1 |
| O | Oxygen | 2 |

1. Glycerol has a density of 1.20 g/mL. How many mL are in 9.0 g of glycerol (4 points)?

$$9.0 g glycerol×\frac{1 mL glycerol}{1.20 g glycerol}= 7.5 mL glycerol $$

1. Identify the following statements as true or false (4 points):
	1. Fluorine in its elemental state is F2. \_\_\_true\_\_\_\_\_\_\_\_\_\_
	2. Magnesium, Mg, is an alkaline earth metal. \_\_\_true\_\_\_\_\_\_\_\_\_\_
	3. Iron, Fe, is a nonmetal. \_\_\_false\_\_\_\_\_\_\_\_\_
	4. Mercury, Hg, is a gas at room temperature. \_\_\_false\_\_\_\_\_\_\_\_\_
2. Change 15 grams to milligrams (4 points).
	* 1. $g×\frac{1000 mg }{1 g}=15000 mg or 1.5 ×10^{4} mg$
3. Describe the proper procedure if a chemical splashes in your eyes (2 points).

You should rinse your eyes for at least 15 minutes in the eye wash (remove contact lenses if possible), inform your instructor of the accident, and get check by a medical professional.