Quiz 3A

1. Write the name for each of the following ions (include the Roman numeral when necessary) (5 points):
   1. Zn2+ zinc
   2. N3- nitride
   3. Na+ sodium
   4. Cl- chloride
   5. Cu2+ copper(II) or cupric

1. Explain the octet rule (2 points).

Atoms lose, gain or share valence electrons to have 8 valance electrons.

1. Identify the following as an ionic compound, a covalent compound or an acid (5 points).
   1. NO2 (g) covalent compound
   2. Iron(II) bromide ionic compound
   3. HF (aq) acid
   4. Potassium sulfide ionic compound
   5. Dinitrogen monoxide covalent compound
2. Identify the following statements as true or false (8 points):

\_\_\_T\_\_\_\_ Learning to be safe in chemistry laboratories is best accomplished by thinking about the hazards and risks associated with experiments.

\_\_\_F\_\_\_\_ When taking chemicals from a stoppered bottle **always** lay the stopper on a clean and covered counter top before pouring.

\_\_\_T\_\_\_\_ You should never look directly down into a container being heated because some of the material may splatter onto your face and clothing.

\_\_\_F\_\_\_\_ If a chemical smells good, it must taste good and therefore it can be eaten.

\_\_\_F\_\_\_\_ Broken glass may be placed in the trash can, only after it has been washed of all chemicals.

\_\_\_T\_\_\_\_ When using an emergency shower it is important to almost always remove clothing.

\_\_\_T\_\_\_\_ Most accidents in labs occur when safety rules and safe practices are not followed.

\_\_\_T\_\_\_\_ If you inadvertently dispose of a chemical into the incorrect waste container, you should notify your instructor immediately.

Quiz 3B

1. Identify the following statements as true or false (8 points):

\_\_\_F\_\_\_\_ Eye protection is not needed while you are reading or writing in the lab even if other students are still performing their experiments.

\_\_\_T\_\_\_\_ When the fire alarm goes off you should stop your experiment, if safe, and exit building.

\_\_\_F\_\_\_\_ Once you are finished experimenting you may remove your safety equipment.

\_\_\_T\_\_\_\_ Most spills in academic lab settings are fairly small, but still need to be dealt with immediately and properly.

\_\_\_T\_\_\_\_ In the lab you should be covered from the shoulders to the knees at a minimum, but shoulders to the feet is better.

\_\_\_T\_\_\_\_ The very last thing you should always do before leaving lab is to wash your hands.

\_\_\_F\_\_\_\_ Although food is not allowed in the lab, covered drinks are.

\_\_\_F\_\_\_\_ If a chemical gets on your hand you should rinse it for a few seconds.

1. Write the name for each of the following ions (include the Roman numeral when necessary) (5 points):
   1. Br- bromide
   2. Sn4+ tin(IV) or stannic
   3. O2- oxide
   4. Al3+ aluminum
   5. Ag+ silver
2. Identify the following as an ionic compound, a covalent compound or an acid (5 points).
3. NO2 (g) covalent compound
4. Iron(II) bromide ionic compound
5. WF6 (s) ionic compound
6. Carbon tetrachloride covalent compound
7. HI (aq) acid
8. Explain the octet rule (2 points).

Atoms lose, gain or share valence electrons to have 8 valance electrons.