**Bonus Quiz – General Chem**

Quarter 3

1. Name the following **ionic** compounds (1 pt each)
2. Cu(NO3)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. MgBr2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. CaO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Write the formulas of the following **covalent** compounds (1 pt each)
6. phosphorus tribromide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. ammonia \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. dinitrogen monoxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Why do covalent compounds generally have lower melting and boiling points than ionic compounds? (5 pt)
10. Why do I keep saying that covalent compounds are like piles of Tylenol capsules? (3 pt)
11. Define the following terms (2 pt each)
12. Lewis structure
13. Polarity
14. Polyatomic ion
15. Draw the Lewis structures for each of the following compounds and include all of the following for each:

* Lewis structure (4 pt)
* Is it polar? (1 pt)
* What is the shape of this molecule? (1 pt)
* What are the bond angles in this molecule? (1 pt)

1. nitrogen trichloride
2. boron trichloride
3. CH4O
4. Why do you believe the melting point of water is much higher than that of boron trichloride? (4 pt)