**Topics: Quarter Three Bonus Quiz Review**

If you score higher on this quiz than on another quiz you took this quarter, you can replace that grade with this one. There is no way you can reduce your grade with this quiz – it can only help!

1. How does the basic structure of ionic compounds differ from that of covalent compounds?
2. Name three properties of ionic compounds and three properties of covalent compounds.
3. Why do ionic compounds conduct electricity when dissolved but not as solids?
4. What is polarity and what effect does it have on the properties of chemical compounds?
5. Explain why lithium chloride has a higher melting point than NH3.
6. In each space in the table below, circle the answer that best describes the properties of that kind of compound:

|  |  |  |
| --- | --- | --- |
| **Property** | **What it is in ionic compounds** | **What it is in covalent compounds** |
| boiling point | **Low** or **high** (circle one) | **Low** or **high** (circle one) |
| stretchiness | **Hard** or **squishy** (circle one) | **Hard** or **squishy** (circle one) |
| electrical conductivity when melted | **Low** or **high** (circle one) | **Low** or **high** (circle one) |
| flammability | **Low** or **high** (circle one) | **Low** or **high** (circle one) |

1. How many grams are there in 25 moles of LiBr?
2. How many moles are there in 25 grams of NaNO3?
3. Balance the following equations:

\_\_\_\_\_ S8 + \_\_\_\_\_ I2 → \_\_\_\_\_ SI6

\_\_\_\_\_ NaF + \_\_\_\_ CaO → \_\_\_\_ Na2O + \_\_\_\_ CaF2

\_\_\_\_\_ C3H6O + \_\_\_\_ O2 → \_\_\_\_ H2O + \_\_\_\_ CO2

\_\_\_\_\_ Li2SO4 + \_\_\_\_ Mg3(PO4)2 → \_\_\_\_ MgSO4 + \_\_\_\_ Li3PO4