**Analyzing compounds,**

**With Molar Mass.**

**Compounds can be compared, analyzed and identified by using the formulas and the molar masses.**

**Example 1.) Which will have a larger molar mass FeO2 or MgO2?**

**FeO2 because Fe has a larger molar mass.**

**Example 2.) If a compound had a molar mass of 56.1 g is it CaO or CaF?**

**CaO molar mass = 56.1 g.**

**Example 3.) If you look at the table below, assuming you have 1.0 g of each of them, which compound has the most oxygen in it?**

|  |  |
| --- | --- |
| **Compound** | **Molar Mass** |
| **Na2O** | **62.0** |
| **MgO** | **40.3** |
| **K2O** | **94.2** |
| **CaO** | **56.1** |

**MgO: Because it’s molar mass is the smallest and in order to make this conversion you need to divide by each molar mass.**

**1g MgO x 15.99 g O**

1. **40.3 g MgO**

**\*\*If the question assumed you had 1.0 mole, you would have to multiply by the molar mass to convert to grams of oxygen which would make the largest compound the answer. Which is??**

**K2O.**