**Unit 5 Notes**

**Mole 🡨🡪 Mass Conversions**

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the conversion unit that is used to convert between moles and grams.

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ will change for each problem because compounds are made up of different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 **Conversion factors:**

Because **1 mole= X grams** the following two conversion units can be used when converting between moles and grams:

When you are given a number of moles When you are given a number of grams and you want to find grams use: and you want to find moles use:

This is the same as\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ This is the same as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the molar massby the molar mass

**Examples**:

How many grams of CO2 is 3.47 moles of CO2?

How many moles of MgF2 is 89.4 grams of MgF2?

How many grams of B(ClO2)3 is 0.23 moles of B(ClO2)3 ?

How many moles of Na3AsO4 is 539 grams of Na3AsO4?