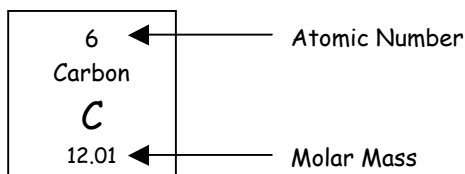


The Mass of a Mole

The Molar Mass of a substance is the mass of one mole of the substance. For instance, one mole of carbon (or 6.02×10^{23} atoms of carbon) has a mass of 12.01 grams. In other words, a pile of 602,000,000,000,000,000,000 carbon atoms has a mass of 12.01 grams.



- What's the molar mass of iron, Fe?
- What's the molar mass of oxygen? (*Hint: Remember that oxygen by itself is found as O₂*).

To Do:

On the center lab table are identical paper cups filled with moles of certain substances. First calculate the molar mass of each substance then check you work by finding the experimental molar mass of each sample using an electronic balance. Show all of your work in the space provided.

Aluminum Foil:

Chemical Formula: Al

Calculated Molar Mass: _____

Experimental Molar Mass: _____

Water:

Chemical Formula: H₂O

Calculated Molar Mass: _____

Experimental Molar Mass: _____

Salt:

Chemical Formula: NaCl

Calculated Molar Mass: _____

Experimental Molar Mass: _____

Sugar:

Chemical Formula: C₁₂H₂₂O₁₁

Calculated Molar Mass: _____

Experimental Molar Mass: _____