



Intro to Moles Worksheet

- Calculate the total number of atoms in each of the following compounds.
 - Aluminum iodate
 - Ammonium acetate
 - $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$
- Calculate the percent composition by *atom* of all atoms for each of the chemical formulas in question 1.
- Calculate the formula masses of each of the following chemical species.
 - Stannous chlorate
 - Dinitrogen pentoxide
 - Copper (II) hydroxide
- Calculate the percent composition by mass of all atoms for each of the chemical formulas in question 3.
- Calculate the mass of He atoms required to have the same number of He atoms as 34.49 g of Na.
- How many grams of CO_2 are required to have the same number of CO_2 molecules as 25,648 g of S_8 ?
- Calculate the number of moles in
 - 12.5 g of $\text{Al}(\text{ClO}_3)_3$
 - 2 formula units of lead (II) chloride
- Calculate the mass in grams of
 - 0.1 mol of sodium thiosulfate
 - 3.0×10^{26} molecules of octa-atomic sulfur
- Calculate
 - the number of atoms in 2.5 mol of Al atoms
 - the number of F atoms in 20.73 g of XeF_4 .