Mole Conversion Practice (two steps)

Mass to Particles, Particles to Mass

Answer the following questions with the correct amount of significant figures. Make sure that all problems are set-up using the factor-label method and show all your work and units.

- 1. How many grams are in 6.022×10^{24} atoms of beryllium?
- 2. Calculate the number of grams that are in 3.01×10^{21} f.u.'s of NaCl.
- 3. How many grams are in 1.506×10^{24} molecules of phosphorus trichloride?
- 4. How many atoms are in 54.0 g of aluminum?
- 5. How many molecules are in 69.45 g of carbon monoxide?
- 6. Calculate the number of formula units in 169.7 g of lithium sulfate?
- 7. How many grams are in 1.20×10^{25} atoms of helium?