

Moles Station Activity

- 1) How many atoms of cobalt (Co) are in 1.56 mol of cobalt?
- 2) A sample of methane (CH₄) contains 2.89×10^{24} molecules of CH₄. How many moles of methane are in the sample?
- 3) If a sample of calcium nitrate, Ca(NO₃)₂, contains 4.65×10^{24} molecules of Ca(NO₃)₂, how many atoms of oxygen are in the sample?
- 4) A student at home eats an Oreo cookie. Assuming that the “stuffing” in the cookie is all sucrose (C₁₂H₂₂O₁₁). If the student ate 2.68 mol of C₁₂H₂₂O₁₁, how many atoms of hydrogen were eaten?
****FEEL FREE TO EAT ONE COOKIE!****
- 5) During a lab, a beaker is filled with Al₂(SO₄)₃. If the beaker is found to contain 7.91×10^{25} atoms of oxygen, how many molecules of Al₂(SO₄)₃ were in the beaker?
- 6) A machine is used to analyze a sample of Mg(C₂H₃O₂)₂, and it is found to contain 8.15×10^{24} atoms of oxygen. How many moles of Mg(C₂H₃O₂)₂ are in the sample?