

Teacher's Tools[®] Chemistry
Prerequisites: Moles, Mass and Formulas: Worksheet 2

- 1) What is the mass of 5.33×10^{25} atoms of sodium?
- 2) How many moles are there in 43.0 grams of aluminum?
- 3) What is the mass of 4.39×10^{-3} moles of hydrogen sulfide?
- 4) How many oxygen atoms are there in 2.55 moles of sodium sulfate?
- 5) What is the mass fraction of carbon in carbon dioxide?
- 6) Elemental analysis is performed on a sample of nicotine. Tests show the sample to be 74.0% carbon, 8.65% hydrogen, and 17.4 % nitrogen. What is the empirical formula of nicotine?