

Pre-AP Chemistry I
Unit #11--Solutions

Unit #11 Homework, Part Two

Mass Percent

Calculate the mass percent of a solution containing 10.6 grams of Na_2SO_4 in 483 grams of water.

What is the mass percent of I_2 in a solution containing 0.045 mol of I_2 in 115 grams of CCl_4 ?

Volume Percent

A soft drink contains 0.035 mL of sodium in 315 mL of H_2O . What is the volume percent of this solution?

Wine has about 12 mL of alcohol (ethanol) per 100 mL of solution. What is the volume percent of the wine?

Molality

What is the molality of a solution containing 10.0 grams of chromium (III) phosphate dissolved in 1000.0 grams of water?

What is the molality of a solution containing 30.0 grams of naphthalene dissolved in 500.0 grams of toluene?

Mole Fraction

An aqueous solution contains 36 grams of HCl and 64 grams of water. What is the mole fraction for HCl and water in the solution?