

CHEMISTRY 11 - MOLE UNIT PRE-TEST

Find the molar mass of calcium phosphate.

310.3 g/mol

How many moles are there in a 124 g sample of C_8H_{18} ?

1.09 mol

What is the mass of 5.99 mol of $C_6H_2Cl_4$?

1.20×10^3 g

What is the percentage composition of iron in $FeCl_3$?

Fe: 34.3%

Cl: 65.6%

What is the mass of 400.0 mL of fluorine gas at STP?

0.670 g

What is the volume of 3.66×10^{32} molecules of fluorine gas at STP?

1.38×10^{10} g

A gas has an empirical formula CH_2 . If 0.850 L of the gas at STP has a mass of 1.59 g, what is the molecular formula?

C_3H_6

What is the concentration of aqueous sodium chloride, when 5.00 g of NaCl is dissolved in 500.0 mL of water?

0.172 M

What is the volume used to make 0.0250 M of NaF using 2.00 g of NaF ?

1.90 L

What is the empirical formula of 26.6 % K, 35.4 % Cr, and 38.0 % O?

$\text{K}_2\text{Cr}_2\text{O}_7$

What is the new concentration when 125 mL of 0.82 M CaS is mixed with a 375 mL solution of 3.0 M CaS ?

2.5 M

What is the resulting concentration when 750 mL of water is added to 250 mL of a 0.10 M KCl solution?

2.5×10^{-2} M