

Name _____

Period _____

Simple Roadmap Problems #2

Solve the following roadmap problems. Make sure to use units and follow all the rules of significant figures.

1) How many moles of PH_3 are in 250.0 grams of PH_3 ?

2) How many grams of NCl_3 are in 4.00 moles of NCl_3 ?

3) If you have 37.75 g of S_8 how many moles does it correspond to?

4) If your sample of I_2 has a mass of exactly 10.0 grams how many moles are in it?

5) If a bottle contains 3.35 moles of $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ what is the mass of the sample in grams?

6) Consider a 5.00 mole sample of NaH. What is its mass in grams?

7) How many molecules are in 0.7500 moles of $\text{Ba}(\text{NO}_3)_2$?

8) How many moles are in 1.75×10^{24} molecules of $\text{Mg}_3(\text{PO}_4)_2$?

9) How many molecules are in a 35.00 gram sample of PCl_5 ?

10) What is the mass of 2.11×10^{24} molecules of $\text{Ca}(\text{NO}_3)_2$?