

Name _____

Period _____

Simple Roadmap Problems

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

1) How many moles of NH_3 are in 50.0 grams of NH_3 ?

2) How many grams of H_2O are in 2.00 moles of H_2O ?

3) If you have 23.25 g of H_2O_2 how many moles does it correspond to?

4) If your sample of CaSO_4 has a mass of exactly 100.0 grams how many moles are in it?

5) If a bottle contains 1.75 moles of $\text{C}_6\text{H}_{12}\text{O}_6$ what is the mass of the sample in grams?

6) Consider a 15.75 mole sample of UF_6 . What is its mass in grams?

7) How many molecules are in 2.50 moles of AlCl_3 ?

8) How many moles are in 3.0×10^{24} molecules of H_2O_2 ?

9) How many molecules are in a 25.00 gram sample of PCl_3 ?

10) What is the mass of 1.204×10^{24} molecules of PbCl_2 ?