

Name: _____

Date: _____

Unit 1.1

Moles & Molar Mass

1. How many moles of acetic acid, CH_3COOH , are contained within 24.71 g of acetic acid?
2. How many moles of sodium carbonate, Na_2CO_3 , are contained by 57.3 g of sodium carbonate?
3. How many moles of sulfuric acid, H_2SO_4 , are contained by 157 g of sulfuric acid?
4. How many grams of NaOH are contained within 0.785 g of NaOH ?
5. How many grams of C_6H_6 are present in 12.7 moles of C_6H_6 ?
6. How many carbon atoms are contained in 84.3 g of ethyne (C_2H_2)?
7. How many ethylene molecules are contained in 84.3 g of ethyne (C_2H_2)?
8. How many carbon atoms are contained in a 734 g sample of $\text{C}_6\text{H}_{12}\text{O}_6$?
9. How many grams of H_2O are there in 2.5 mole of H_2O ?
10. How many oxygen atoms are contained in 12.7 g of zinc sulfate, ZnSO_4 ?