

Complete the following assignment in your class notebook with the heading:
Molar Mass and Mole Conversions

Show all work, including correct units and sig figs. A form of the question must be included in your answer. Box final answer. No work = No credit!

A. Calculate the molar mass for each of the following compounds:

1. zinc oxide, ZnO
2. magnesium chloride, MgCl₂
3. water, H₂O
4. carbon dioxide, CO₂
5. sodium hypochlorite, NaClO
6. nitric acid, HNO₃
7. magnesium chlorate, Mg(ClO₃)₂
8. silver oxide, Ag₂O

B. Perform the following conversions, using proper dimensional analysis:

9. Find the mass of 0.89 mol CaCl₂
10. Find the mass of 1.112 mol of HF.
11. Determine the number of moles of C₅H₁₂ that are in 362.8 grams.
12. Find the mass of 0.159 mol of SiO₂
13. How many moles of hydrogen are in 12.35 grams of C₂H₄?
14. Determine the number of total atoms in 0.98 grams of N₂.
15. How many moles of fluorine are in 2.24 grams of OF₂?
16. How many total atoms are in 0.78 moles of N₂O?