Skill Practice 39

Mole Conversion Practice

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_\_

1. Calculate the number of molecules in 210 grams of water.
2. If you have 6.25 x 1024 molecules of sulfur tetrafluoride, how many grams do you have?
3. Define what a mole is. Don’t give a number, give a definition in words.
4. What is the mass of 3.45 moles of aluminum sulfate?
5. Consider zinc acetate and find its “formula mass” and its “molar mass”. Include units for each.
6. If you have 245 grams of lithium carbonate, how many moles do you have?
7. How many gold atoms do you have if you have 400 grams of gold?
8. 68.5 grams of a certain compound contains 5.25 x 1023 molecules. What is the molar mass of the compound?
9. How many grams are there in a container of 2.26 x 1025 molecules of dinitrogen trisulfide?
10. How many molecules are in 325 g of N2O5?