

Name _____ Date _____ Period _____

Mole Unit Ws #5 Molar Conversions

Solve these problems using Dimensional Analysis. Give your answer in correct scientific notation and significant figures! Show all work!

1. How many moles are there in .028g of Fe?
2. How many atoms are there in .028g of Fe?
3. How many grams are represented by .500 moles of AgCl?
4. How many molecules are there in .500 moles of AgCl?
5. How many moles are represented by 1.00×10^{11} atoms of Uranium?
6. What is the mass of 1.00×10^{11} atoms of Uranium?
7. How many molecules are there in .022 moles of Br₂?
8. How many atoms are there in 5.03g of mercury?
9. How many molecules are there in .0175g of NaNO₃?
10. What is the mass in grams of 1.20×10^8 atoms of copper?
11. How many atoms of Sulfur are in 4.00 g of sulfur?
12. What mass of gold contains the same number of atoms as 9.0 g of aluminum?
13. Which has more atoms, 6 moles of Carbon or 6 moles of lead?
14. Which has more mass, 6 moles of Carbon or 6 moles of lead?
15. Which is more fun, doing mole conversions or having all of your hair pulled out one strand at a time?

