Name: _____

Unit 05 - THE MOLE	The Mole Unit Review

1. What is the numerical value of Avogadro's number?
2. How is a mole similar to a dozen?
3. What is molar mass? What are the units?
4. Which contains more atoms, a mole of silver atoms or a mole of gold atoms? Explain your answer.
5. Which has a greater mass, a mole of silver atoms or a mole of gold atoms? Explain your answer.
6. Determine the number of representative particles in 0.250 mol silver.
7. Determine the number of moles in $3.25 \times 10^{20} atoms\ lead.$
8. Calculate the mass of 5.22 mol He.
9. Calculate the number of atoms in 25.8 g Hg.
10. Determine the molar mass of nitric acid (HNO_3).
11. What is the mass of $4.50 \times 10^{-2}\ moles\ of\ copper(II) chloride$?
12. Determine the number of moles in $1.25 \times 10^{2} grams\ of\ sodium\ sulfide$.
13. How many moles of oxygen are in 114.5g of Al_2O_3?
14. How many moles of $Na(PO_4)_3$ are there if there are 5.8 moles of oxygen?
15. How many grams of $MgCl_2$ would you have if there are 4.50 moles of chlorine atoms?