Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_

**Quiz #1 The Mole**

1. (6) Find the molar mass of the following elements. Round to the nearest tenths place and include units!
   1. B \_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Pb \_\_\_\_\_\_\_\_\_\_\_\_\_\_ c) He \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. (2) What is the mass (in grams) of one mole of Xenon?
3. (2) How many atoms are in one mole of Xenon?
4. (4) Acetaminophen (C8H9NO2) is a chemical compound found in pain relievers, like Tylenol. Calculate the molar mass rounded to the nearest tenths place. 

1. (4) The recommended dose of Acetaminophen is 1.5 g C8H9NO2. Determine how many molecules are present.

1. (4)How many moles of carbon contain 1.65 x 1024 carbon atoms?

1. (4) When converting from grams to particles, why is it necessary to go through moles?
2. (4) A sample of zinc contains 6.4 x1024 atoms. What is the mass in grams of zinc?

1. One swallow of water is about 20 mL of water.
   * + 1. (2) What is the **molar mass** of water?
       2. How many **moles** of water are in one swallow? (Hint: 1g=1mL)

* + - 1. (4) How many **molecules** of water are in one swallow?

10. (6) Beaker A contains 3.5 moles of copper and beaker B contains 220 grams of silver. Which beaker contains the larger mass? Which beaker has the larger number of atoms? Support your answers with evidence.