**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_**

**USING MOLES!**

**BELLRINGER:**

1. How many eggs are there in a dozen eggs?

2. How many pencils are in two dozen pencils?

3. If you have 48 pairs of shoes, how many dozen shoes do you have?

**PART 1: THE MOLE**

1. What is a mole?

 This number is also called:

3. How many books are in one mole of books?

4. How many atoms of copper are in 1 mole of copper?

5. How many molecules of water are in 1 mole of water?

**PART 2: MOLAR MASS**

1. What does amu stand for? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1 amu = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Circle the atomic mass units for each of the elements shown below:

**Hydrogen**

**1**

**H**

**1.00794**

**Carbon**

**6**

**C**

**12.011**

**Sodium**

**11**

**Na**

**22.9**

3. How much does 1 mole of hydrogen weigh?

 ***CONGRATULATIONS!! You just calculated MOLAR MASS for hydrogen!!!***

4. How much does 1 mole of carbon weigh?

5. How much does 1 mole of sodium weigh?

6. Using what you have learned so far, fill the blanks in the boxes below.

|  |  |  |
| --- | --- | --- |
| Molar mass of Pb =  | Molar mass of Al =  | Molar mass of N =  |

7. How do you find molar mass for a compound?

8. Find the molar mass for each of the following:

a. NaBr

b. PbSO4

c. Ca(OH)2

d. Na3PO4