

Name: _____

Hr: _____ Due: _____

Moles I

1. RELATIONSHIPS!! How many units are in the following?

- Dozen = _____ eggs
- Ream = _____ paper
- Mile = _____ feet
- Mile = _____ yards
- 1 Hour = _____ minutes
- 1 Minute = _____ seconds
- 1 Mole = _____ particles
- 1 Mole = _____ atoms



2. How many grams are in a mole of each of the following elements? (***Think Molar Mass***)

- 1 Mole O _____ grams
- 1 Mole Br _____ grams
- 1 Mole Mg _____ grams
- 1 Mole H _____ grams
- 1 Mole N _____ grams
- 1 Mole Ne _____ grams



3. How many atoms are in the following amounts of elements? (***Think about the values above!!***)

- 16 g O _____ atoms
- 79.9 g Br _____ atoms
- 24.3 g Mg _____ atoms
- 1.01 g H _____ atoms
- 14.01 g N _____ atoms
- 20.18 g Ne _____ atoms



Use T-Charts!!!!

4. How many grams are in 2.5 mol of carbon?

5. How many moles are in 25 grams of carbon?

6. How many atoms are in 3.1 mol of ANYTHING?

7. How many moles are in 6.022×10^{23} atoms of ANYTHING?

8. How many grams are in 4.7 mol argon?



9. How many moles are in 268.5 grams of Iron?

10. How many atoms are in 9.4 moles of oxygen?

11. How many grams are in 9.7×10^{25} atoms of copper?

12. How many grams are in 390 mol of SnCl_4 ?

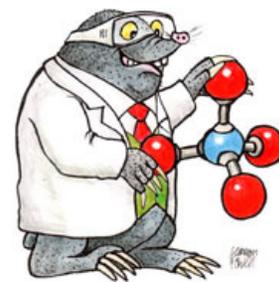
13. How many moles are in 1,890 grams of Ni_3P_2 ?

14. How many moles are in 23 grams of $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$?

15. How many particles are in 65 g of CO_2 ?

16. How many grams are in 56.7 moles of Cl_2 ?

17. How many grams of $\text{Mg}_3(\text{PO}_4)_2$ are present in 3.56×10^{24} molecules?



**Conversions using MOLES will be worked on ALL YEAR!
If you have ANY questions, please ask!**