

Name: _____ Date: _____

CHEMISTRY MOLE CONCEPT

Answer the questions.

1 mole = 6.02×10^{23} particles such as atoms, ions, or molecules

1. One mole of lead (Pb) contains _____ atoms and its mass is _____.

2. How many atoms of carbon and chlorine are needed to make one molecule of carbon tetrachloride (CCl_4)?

C= _____

Cl= _____

3. How many atoms of carbon and sulfur are needed to make one molecule of carbon disulfide (CS_2)?

C= _____

S= _____

4. How many hydrogen ions (H^+) are in a mole? _____

5. What is the mass of one mole of H^+ ions, in grams? _____

Molar Mass

1. Na_3PO_4 _____

6. $(\text{NH}_4)_2\text{CO}_3$ _____

2. $\text{C}_6\text{H}_{12}\text{O}_6$ _____

7. $\text{Zn}(\text{C}_2\text{H}_3\text{O}_2)_2$ _____

3. silver fluoride _____

8. NaBr _____

4. iron (II) phosphate _____

9. ammonium sulfide _____

5. PbSO_4 _____

10. $\text{Ca}(\text{OH})_2$ _____