**Counting Atoms Practice**

**3 Ca(HCO3)2**

**Subscript**: represents the number of polyatomic ions present – \_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_\_\_\_**: part of the polyatomic ion – goes only with the oxygen

**Coefficient**: represents the number of \_\_\_\_\_\_\_\_\_\_ present – distribute to ***\_\_\_\_\_\_\_*** element

How many Ca atoms are present? \_\_\_\_\_\_

How many H atoms are present? \_\_\_\_\_\_

How many C atoms are present? \_\_\_\_\_\_

How many O atoms are present? \_\_\_\_\_\_

How many total atoms are present? \_\_\_\_\_\_

How many molecules are present? \_\_\_\_\_\_

What is the polyatomic ion present? \_\_\_\_\_\_

How many elements are present?\_\_\_\_\_\_\_\_

**Directions:** Use the formulas given to answer the questions that follow.

1. **5 Al2(CO3)3**

How many Al atoms? \_\_\_\_\_ How many molecules? \_\_\_\_\_

How many C atoms? \_\_\_\_\_ What is the polyatomic ion present? \_\_\_\_\_

How many O atoms? \_\_\_\_\_ How many total atoms? \_\_\_\_\_

2. **2 C11H22O11**

How many C atoms? \_\_\_\_\_ How many molecules? \_\_\_\_\_

How many H atoms? \_\_\_\_\_ What is the polyatomic ion present? \_\_\_\_\_

How many O atoms? \_\_\_\_\_ How many total atoms? \_\_\_\_\_

3. **Ca(CO3)**

How many Ca atoms? \_\_\_\_\_ How many molecules? \_\_\_\_\_

How many C atoms? \_\_\_\_\_ What is the polyatomic ion present? \_\_\_\_\_

How many O atoms? \_\_\_\_\_ How many total atoms? \_\_\_\_\_

4. **4 Na3(PO4)**

How many Na atoms? \_\_\_\_\_ How many molecules? \_\_\_\_\_

How many P atoms? \_\_\_\_\_ What is the polyatomic ion present? \_\_\_\_\_

How many O atoms? \_\_\_\_\_ How many total atoms? \_\_\_\_\_

5. **3 Al2(SO4)3**

How many Al atoms? \_\_\_\_\_ How many molecules? \_\_\_\_\_

How many S atoms? \_\_\_\_\_ What is the polyatomic ion present? \_\_\_\_\_

How many O atoms? \_\_\_\_\_ How many total atoms? \_\_\_\_\_

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| 6. **3 Ca(HCO3)2**Ca = H = C = O = Total atoms =  | 7. **4 H2SO4**H = S = O = Total atoms = Polyatomic ion =  | 8. **5 H3PO4**H = P = 0 = # of molecules = Total atoms =  | 9. **8 C6H12O6**C = H = O = Polyatomic ion = # of molecules =  |
| 10. **4 KI**K = I = Total atoms =  | 11. **2 HgBr2**Hg = Br = # of molecules =  | 12. **7 CuBr2**Cu = Br = Polyatomic ion =  | 13. **4 LiBr**Li = Br = Total atoms =  |
| 14. **20 K2SO4**Total atoms = Polyatomic ion =  | 15. **NH4OH**Polyatomic ion = # of molecules =  | 16. **3 Fe(OH)2**# of molecules = Total atoms =  | 17. **6 CO2**# of molecules = Total atoms =  |
| 18. **3 Cu2 (CO3)** Polyatomic ion =  | 19. **2 Ni3(PO4)2**Total atoms =  | 20. **6 (NH4)3PO4**Polyatomic ion =  | 21. **2 Na(NO2)**# of molecules =  |