**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_Date\_\_\_\_\_\_\_\_**

**Empirical and Molecular Formula Practice**

**Write the empirical formula for the following compounds:**

1. **C6H6 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **C8H18 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **C2H6O2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **X39Y13 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **C2H18** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Name at least 3 possible molecular formulas for the following compounds:**

1. **CH2**
2. **N2O**
3. **P2O5**
4. **CH3O**

**Calculate the empirical formula for the following compounds:**

1. **What is the empirical formula for a compound that is 43.4% Carbon, 1.2% Hydrogen, 38.6% oxygen, and 16.9% Nitrogen.**
2. **A certain compound contains 47% potassium, 14.5% carbon, and 38.5% oxygen. What is the empirical formula?**
3. **Rubbing alcohol contains 60% carbon, 13.4% hydrogen, and 26.6% oxygen. What is the empirical formula of rubbing alcohol?**

**Calculate the molecular formula for the following compounds:**

1. **A compound with an empirical formula of C2OH4 and a molar mass of 88 grams per mole.**
2. **A compound with an empirical formula of C4H4O and a molar mass of 136 grams per mole.**
3. **A compound with an empirical formula of CFBrO and a molar mass of 254.7 grams per mole.**
4. **A compound with an empirical formula of C2H8N and a molar mass of 46 grams per mole.**