**PERCENTAGE COMPOSITION**

**Station# 2**

Example: Calculate the percentage composition of KMnO4.

1. Calculate the molar mass of the compound.

1 mol K x 39 g/1 mol K = 39 g

1 mol Mn x 55g/1 mol Mn = 55 g

4 mol O x 16g/1 mol O = 64 g

Molar mass = 39 + 55 + 64 = 158 g/mol

2. Divide the calculated mass of each element by the molar mass. Then multiply by 100.

K = (39 g/158 g) x 100 =

**24.68%**

Mn = (55 g/158g) x 100 = **34.81%**

O = (64 g/158 g) x 100 =

**40.5%**

The percentage composition of each element is in bold.

1. Calculate the percentage composition of H3PO4
2. Calculate the percentage composition of CoCl2.
3. Calculate the percentage composition of K3P.
4. Calculate the molar mass of Ca3(PO4)2