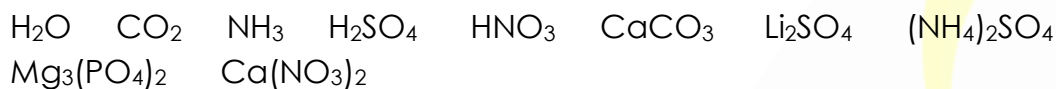


## Chemistry Calculations

### Formula mass

Determine the Mr of the following compounds:

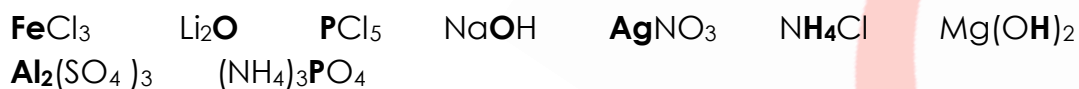


Possible Answers

17 20 44 18 132 38 100 262 164 303 110 98 227 63

### Percent composition

Find the percentage of the element in bold for each compound



Possible Answers

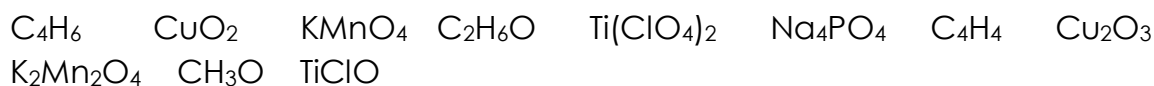
14.9% 34.4% 7.5% 53.5% 16.0% 58.2% 91.3% 18.6% 40.0% 25.2% 20.8% 63.5% 3.5%

### Empirical formula

Determine the empirical formula from the information given

- C – 88.8% H – 11.1%
- Cu – 66.5% O – 33.5%
- Mn – 34.8g K – 24.7g O – 40.5g
- Ti - 19.4% Cl – 28.7% O - 51.9%
- P – 16.6% Na – 49.2% O – 34.2%
- C – 52.1% H – 13.12% O - 34.7%

Possible Answers



Reacting masses

For the equations below calculate the mass of substance made or required

$4\text{Li} + \text{O}_2 \rightarrow 2\text{Li}_2\text{O}$  •How much  $\text{Li}_2\text{O}$  can be made from 30g of Li?

$2\text{C}_2\text{H}_6 + 7\text{O}_2 \rightarrow 4\text{CO}_2 + 6\text{H}_2\text{O}$  •How much  $\text{CO}_2$  can be made from 6g of  $\text{C}_2\text{H}_6$ ?

$\text{CaCO}_3 + 2\text{HNO}_3 \rightarrow \text{Ca}(\text{NO}_3)_2 + \text{CO}_2 + \text{H}_2\text{O}$  •How much  $\text{CaCO}_3$  is needed to make 18g of  $\text{Ca}(\text{NO}_3)_2$ ?

Possible Answers

78.6g    17.6g    9.8g    10.9g    64.2g    18.5g    4.3g