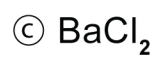
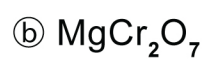


# Molar Mass & Percent Composition Worksheet



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## Answers

Ⓐ  $\text{CaCO}_3$

Molar mass of  $\text{CaCO}_3$  = Molar mass of Ca + Molar mass of C + (3 x Molar mass of O) = 40.078 + 12.011 + 72 = 124.089 g/mol

% of Ca =  $(40.078/124.089) \times 100\% = 32.3\%$

% of C =  $(12.011/124.089) \times 100\% = 9.7\%$

% of O =  $(72/124.089) \times 100\% = 58\%$

Ⓑ  $\text{MgCr}_2\text{O}_7$

Molar mass of  $\text{MgCr}_2\text{O}_7$  = Molar mass of Mg + (2 x Molar mass of Cr) + (7 x Molar mass of O) = 24.305 + 103.98 + 112 = 240.285 g/mol

% of Mg =  $(24.305/240.285) \times 100\% = 10.11\%$

% of Cr =  $(103.98/240.285) \times 100\% = 43.28\%$

% of O =  $(112/240.285) \times 100\% = 46.61\%$

Ⓒ  $\text{BaCl}_2$

Molar mass of  $\text{BaCl}_2$  = Molar mass of Ba + (2 x Molar mass of Cl) = 137.33 + 70.9 = 208.23 g/mol

% of Ba =  $(137.33/208.23) \times 100\% = 65.95\%$

% of Cl =  $(70.9/208.23) \times 100\% = 34.05\%$

Ⓓ  $\text{SO}_2$

Molar mass of  $\text{SO}_2$  = Molar mass of S + (2 x Molar mass of O) = 32.065 + 32 = 64.065 g/mol

% of S =  $(32.065/64.065) \times 100\% = 50\%$

% of O =  $(32/64.065) \times 100\% = 50\%$