Study Guide: Chemistry, Molar Mass II

1.00 mol CH_4 = 16 g = 6×10^{23} CH_4

2.00 mol CH_4 = 32 g = 12×10^{23} CH_4

3.00 mol CH_4 = 48 g = 18×10^{23} CH_4

0.500 mol CH_4 = 8 g = 3×10^{23} CH_4

1.50 mol CH_4 = 24 g = 9×10^{23} CH_4

1.25 mol CH_4 = 20 g = 7.5×10^{23} CH_4

1.00 mol O_2 = 32 g = 6×10^{23} O_2

0.50 mol O_2 = 16 g = 3×10^{23} O_2

1.50 mol O_2 = 48 g = 9×10^{23} O_2

10.0 mol O_2 = 320 g = 60×10^{23} O_2

1.00 mol NaOH = 40 g = 6×10^{23} NaOH

3.00 mol NaOH = 120 g = 18×10^{23} NaOH

0.50 mol NaOH = 20 g = 3×10^{23} NaOH

6×10^{23} N_2 = 1 mol = 28 g N_2

3×10^{23} N_2 = 0.5 mol N_2 = 14 g N_2

14.0 g N_2 = 0.5 mol N_2 = 3×10^{23} N_2

280 g N_2 = 10 mol N_2 = 60×10^{23} N_2

1.0 mol CO_2 = 44 g = 6×10^{23} CO_2

88.0 g CO_2 = 2 mol CO_2 = 12×10^{23} CO_2

4.4 g CO_2 = 0.1 mol CO_2 = $0.6 \times 10^{23} = 6 \times 10^{22}$ CO2

22.0 g CO_2 = 0.5 mol CO_2 = 3×10^{23} CO_2

1.00 mol H_2O_2 = 34 g H_2O_2

3×10^{23} H2O2 = 17 g H_2O_2

68 g H_2O_2 = 12×10^{23} H_2O_2

340 g H_2O_2 = 60×10^{23} H_2O_2

12×10^{23} H2O2 = 68 g H_2O_2