

More Conversions Examples

$$1 \text{ a) . } 25.0 \text{ g O}_2 \times \frac{1 \text{ mol O}_2}{32.00 \text{ g O}_2} = 0.781 \text{ mol O}_2$$

$$2 \text{ a) . } 1.25 \text{ mol H}_2\text{O} \times \frac{18.02 \text{ g H}_2\text{O}}{1 \text{ mol H}_2\text{O}} = 22.5 \text{ g H}_2\text{O}$$

$$3 \text{ a) . } 2.50 \text{ mol UF}_6 \times \frac{6.022 \times 10^{23} \text{ molec UF}_6}{1 \text{ mol UF}_6} = 1.51 \times 10^{24} \text{ molec UF}_6$$

$$4 \text{ a) . } 2.50 \text{ mol UF}_6 \times \frac{6.022 \times 10^{23} \text{ molec UF}_6}{1 \text{ mol UF}_6} \times \frac{7 \text{ atoms}}{1 \text{ molec UF}_6} = 1.05 \times 10^{25} \text{ atoms}$$

$$5 \text{ a) . } 3.56 \text{ g Li}_2\text{O} \times \frac{1 \text{ mol Li}_2\text{O}}{29.88 \text{ g Li}_2\text{O}} \times \frac{6.022 \times 10^{23} \text{ molec Li}_2\text{O}}{1 \text{ mol Li}_2\text{O}} = 7.17 \times 10^{22} \text{ molec}$$

$$6 \text{ a) . } 3.50 \times 10^{22} \text{ molec KNO}_3 \times \frac{1 \text{ mol KNO}_3}{6.022 \times 10^{23} \text{ molec KNO}_3} \times \frac{101.11 \text{ g KNO}_3}{1 \text{ mol KNO}_3} = 5.88 \text{ g KNO}_3$$