

Name:
Stoichiometry



a) When 620. g of Potassium chlorate decomposes, how many **moles** of KCl will be formed?

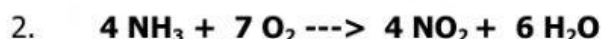
$$\frac{\hspace{1cm}}{\hspace{1cm}} = \hspace{1cm} \text{mol KCl}$$

b) How many **grams** of O₂ are produced from the decomposition of 2.85 **moles** of KClO₃?

$$\frac{\hspace{1cm}}{\hspace{1cm}} = \hspace{1cm} \text{g O}_2$$

c) If 3.54 g of oxygen was produced. What **mass** of potassium chlorate was used?

$$\frac{\hspace{1cm}}{\hspace{1cm}} = \hspace{1cm} \text{g KClO}_3$$



a) What **mass** of NO₂ can be produced from 8.46×10^{22} **molecules** of oxygen?

$$\frac{\hspace{1cm}}{\hspace{1cm}} = \hspace{1cm} \text{g NO}_2$$

b) 23.7 g of NH₃ could produce how many **molecules** of H₂O?

$$\frac{\hspace{1cm}}{\hspace{1cm}} = \hspace{1cm} \text{H}_2\text{O molecules}$$

c) How many **moles** of NH₃ are needed to react with 95 g of oxygen?

$$\frac{\hspace{1cm}}{\hspace{1cm}} = \hspace{1cm} \text{mol NH}_3$$

$$\frac{2 \text{ KClO}_3}{2 \text{ KCl}}$$

$$620. \text{ g KClO}_3$$

$$3.54 \text{ g O}_2$$

$$\frac{2 \text{ KCl}}{2 \text{ KClO}_3}$$

$$2.85 \text{ mol KClO}_3$$

$$\frac{2 \text{ KCl}}{3 \text{ O}_2}$$

$$122.55 \text{ g}$$

$$1 \text{ mole}$$

$$\frac{3 \text{ O}_2}{2 \text{ KCl}}$$

$$1 \text{ mole}$$

$$122.55 \text{ g}$$

$$\frac{3 \text{ O}_2}{2 \text{ KClO}_3}$$

$$32.00 \text{ g}$$

$$1 \text{ mole}$$

$$\frac{2 \text{ KClO}_3}{3 \text{ O}_2}$$

$$1 \text{ mole}$$

$$32.00 \text{ g}$$

$$74.55 \text{ g}$$

$$1 \text{ mole}$$

$$1 \text{ mole}$$

$$74.55 \text{ g}$$

$$8.46 \times 10^{22} \text{ molecules}$$

$$4 \text{ NH}_3$$

$$7 \text{ O}_2$$

$$6.022 \times 10^{23} \text{ molecules}$$

$$7 \text{ O}_2$$

$$4 \text{ NH}_3$$

$$1 \text{ mole}$$

$$4 \text{ NO}_2$$

$$7 \text{ O}_2$$

$$95 \text{ g O}_2$$

$$6 \text{ H}_2\text{O}$$

$$4 \text{ NH}_3$$

$$23.7 \text{ g NH}_3$$

$$46.01 \text{ g}$$

$$4 \text{ NH}_3$$

$$6 \text{ H}_2\text{O}$$

$$1 \text{ mole}$$

$$17.04 \text{ g}$$

$$1 \text{ mole}$$

$$32.00 \text{ g}$$

$$1 \text{ mole}$$

$$17.04 \text{ g}$$

$$1 \text{ mole}$$

$$18.02 \text{ g}$$

$$1 \text{ mole}$$

$$1 \text{ mole}$$