Answer on Question #59516, Chemistry / General Chemistry

Sodium chloride can be produced from reacting sodium metal with chlorine gas. If 2.6 mol of sodium are reacted with 5.0 mol of chlorine gas, how many mol of the excess reagent remain?

$$\substack{2Na + Cl_2 \rightarrow 2NaCl \\ 2mol & 1mol}$$

$$\frac{2.6}{2} < \frac{5}{1}$$

$$\frac{\mathbf{2.6}}{\mathbf{2}} = \frac{X}{1}$$

$$X = 1.3 \text{ mol} - Cl_2$$

$$5 - 1.3 = 3.7 mol Cl_2$$