STOICHIOMETRY

Stoichiometry: is a study of the quantitative relationships that exist in a chemical reaction

Balancing Chemical Equations:

When balancing chemical equations the law of conservation of mass must be followed. A balanced chemical equation should be in lowest terms. (in SCH 3U - no fractional coefficients)

 $2H_2 + O_2 \rightarrow 2H_2O$ $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$ $2C_4H_{10} + 13O_2 \rightarrow 8CO_2 + 10H_2O$ $2KClO_3 \rightarrow 2KCl + 3O_2$ $2Na_3PO_4 + 3PbCl_2 \rightarrow Pb_3(PO_4)_2 + 6NaCl$

Inventory Table: (check balancing - do this in your head)

	reactants	products
Na	6	6
P	2	2
0	8	8
Pb	3	3
Cl	6	6
$\frac{\text{option}}{\text{PO}_4^{3-}}$	2	2