Stoichiometry 4 Reactants, Products, and the Mole Ratio – Perfect Together

INFORMATION

Consider the following balanced chemical equation representing an acid-base neutralization reaction:

$$\rm H_2SO_{4\,(aq)} + 2\;NaOH_{\,(aq)} \rightarrow Na_2SO_{4\,(aq)} + 2\;H_2O_{\,(l)}$$

The coefficients in the reaction denote the integer molar quantities required for this reaction to go to **completion** (all reactants are consumed and converted to products). In this reaction, for each mole of acid put into the reaction, 2 moles of base are required consume it all. The resulting products will be 1 mole of salt and 2 moles of water.

The ratio afternamed of one substance in a reaction is required to produce or consume another