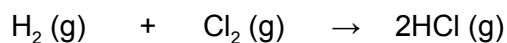# Determining ΔH° from Bond Energies

A chemical reaction can be viewed as a series of bonds breaking and reforming. Energy is absorbed when bonds are broken and released when bonds are formed:

$$\Delta H = \Sigma H_{bonds\ broken} - \Sigma H_{bonds\ formed}$$

e.g. 1 Calculate the heat of reaction for the following:

$$H_2\ (g) \quad + \quad Cl_2\ (g) \quad \rightarrow \quad 2HCl\ (g)$$

e.g. 2 What is the heat of combustion for the complete combustion of ethane (C_2H_6)?

**Practice Questions are found on the Calorimetry and Bond Energies Worksheet.