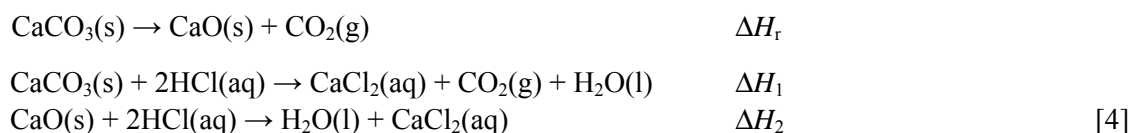


Worksheet 6.1

Constructing enthalpy cycles (Hess cycles)

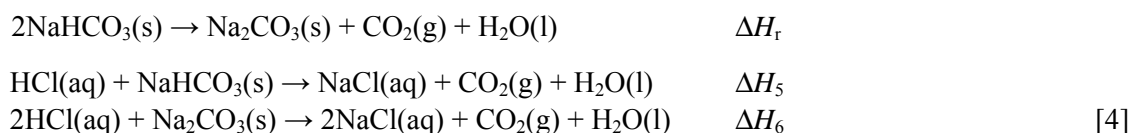
- 1 Given the enthalpy changes ΔH_1 and ΔH_2 below, construct an enthalpy cycle that will enable you to find the enthalpy change for the following reaction:



- 2 Given the enthalpy changes ΔH_3 and ΔH_4 below, construct an enthalpy cycle that will enable you to find the enthalpy change for the following reaction:



- 3 Given the enthalpy changes ΔH_5 and ΔH_6 below, construct an enthalpy cycle that will enable you to find the enthalpy change for the following reaction:



- 4 Suggest a reaction for which the enthalpy change of reaction would be difficult to determine directly. Write the equations for the reactions that could be used to determine the enthalpy change indirectly, using an enthalpy cycle. [10]