

Enthalpy changes in solution

Pre-lesson assignment – p352-357

Define/revise the following terms

- Standard enthalpy change of solution
- Enthalpy change of hydration

Make notes on enthalpy changes in solution

1. Explain how an ionic lattice like sodium chloride is able to dissolve in water.
2. Write an equation for the enthalpy change of solution for $\text{NaCl}_{(\text{s})}$
3. Explain how the two processes that make up dissolution can be used to construct a thermodynamic cycle such as figure 3
4. Demonstrate how this cycle can be used to calculate
 - a. A lattice enthalpy
 - b. An enthalpy change of hydration.