**Enthalpy Definitions**

Match these terms to their definitions.

**The standard enthalpy change of formation (ΔHfӨ)**

**Standard conditions**

**The standard enthalpy change of combustion (ΔHcӨ)**

**The standard enthalpy change of reaction (ΔHrӨ)**

**Standard state**

1. Standard conditions are a pressure of 100kPa (1 atmosphere), a stated temperature, usually 298 K (25oC) and a concentration of 1.0 mol dm-3 (for reactions with aqueous solutions).
2. Standard state is the physical state of a substance under the standard conditions of 100 kPa (1 atmosphere) and 298 K (25 oC)
3. Standard enthalpy of reaction (ΔHrӨ) is the enthalpy change that accompanies a reaction in the molar quantities expressed in a chemical equation under standard conditions, all reactants and products being in their standard states.
4. The standard enthalpy change of combustion (ΔHcӨ) is the enthalpy change that takes place when one mole of a substance reacts completely with oxygen under standard conditions, all reactants and products being in their standard states.
5. The standard enthalpy change of formation (ΔHfӨ) of a compound is the enthalpy change that takes place when one mole of a compound is formed from its constituent elements in their standard states.  
   For an element it is defined as 0 kJ mol-1.