

	1	2	3	4	5	6
1	kJ mol^{-1}	calorimetry	Hess's Law	$Q = mc\Delta T$	Mean bond enthalpy	$\text{C}_2\text{H}_5\text{OH}(\text{l}) + 3\text{O}_2(\text{g}) \rightarrow 2\text{CO}_2(\text{g}) + 3\text{H}_2\text{O}(\text{l})$
2	Total enthalpy change for a reaction is independent of route taken	ΔH	ΔH_f		ΔH is negative	
3	standard conditions		$\Sigma H_{\text{total}} = \Sigma H_{\text{reactants}} - \Sigma H_{\text{products}}$		Heat energy transferred in a reaction at constant pressure	
4	bond enthalpy		$\Delta H = \text{breaking bonds} - \text{forming bonds}$	$2\text{C}(\text{s}) + 3\text{H}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow \text{C}_2\text{H}_5\text{OH}(\text{l})$	100 kPa and 298 K	Joules
5	ΔH_r		q/n	Pa	The enthalpy change when 1 mole of a substance is completely burned in oxygen, under standard conditions, with all reactants and products in their standard states	
6	Specific heat capacity	endothermic		Bomb calorimeter	ΔH_c	exothermic

DP Energetics