ENTHALPY OF SOLUTION - Example Question 1

1. Define the term Enthalpy of Solution?

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2. Write the equation that represents the Enthalpy of Solution of Magnesium Chloride.

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3. Calculate the Enthalpy of Solution for Magnesium Chloride, given that:

$\Delta H^{\ominus}_{Lattice}\ MgCl_2$ = 2493 kJ.mol^{-1}

$\Delta H^{\ominus}_{Hydration}\ Mg^{2+}$ = -1920 kJ.mol^{-1}

$\Delta H^{\ominus}_{Hydration}\ Cl^-$ = -364 kJ.mol^{-1}

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ENTHALPY OF SOLUTION - Example Question 2

1. Complete the Enthalpy changes and equations for Barium Sulfate.

Enthalpy Change	Equation	Value
$\Delta H^{\ominus}_{Lattice}\ BaSO_4$		+2383
$\Delta H^{\ominus}_{Hydration}\ Ba^{2+}$		*X*
$\Delta H^{\ominus}_{Hydration}\ SO_4^{2-}$		-1004
	$BaSO_{4(s)} \rightarrow Ba^{2+}_{(aq)} + SO_4^{2-}{}_{(aq)}$	+19

2. Calculate the missing value for the $\Delta H^{\ominus}_{Hydration}$ of Ba^{2+} *(X)*

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