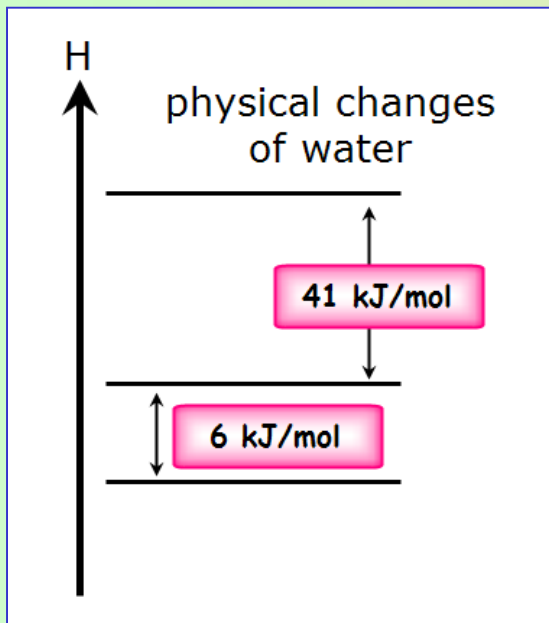
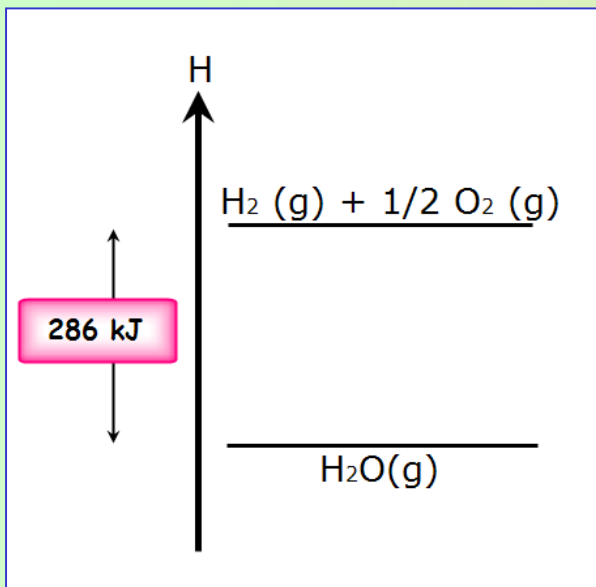


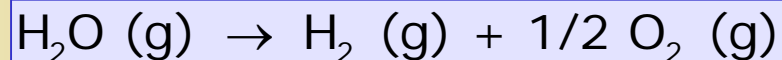
Thermochemistry: Conceptual Exercise



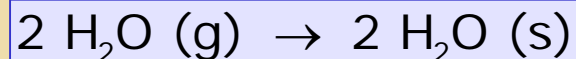
Exercise:

Given the data that appears in the graphic, determine the enthalpy changes in the following thermochemical equations

•1st equation



•2nd equation

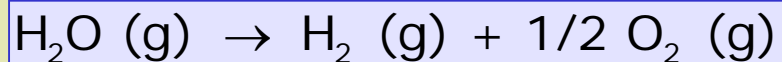


•3rd equation



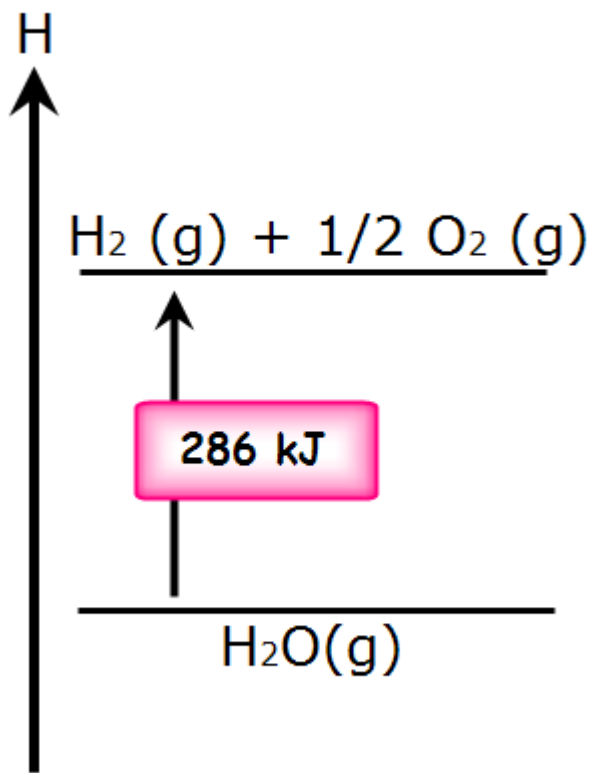
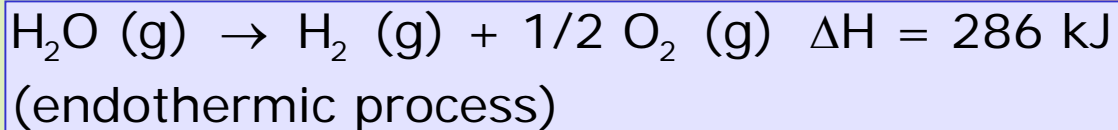
Thermochemistry: Conceptual Exercise

- 1st equation

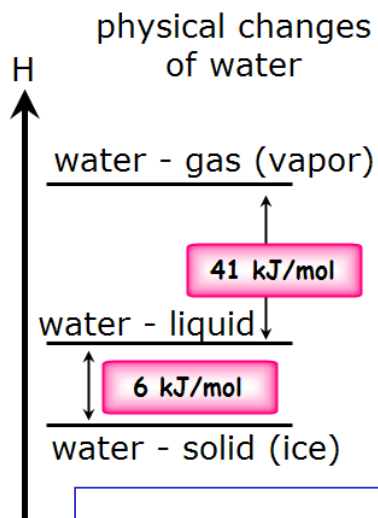


We have to assign a direction to the chemical change. The data provides the difference in enthalpy between both states.

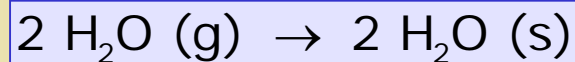
Therefore:



Thermochemistry: Conceptual Exercise

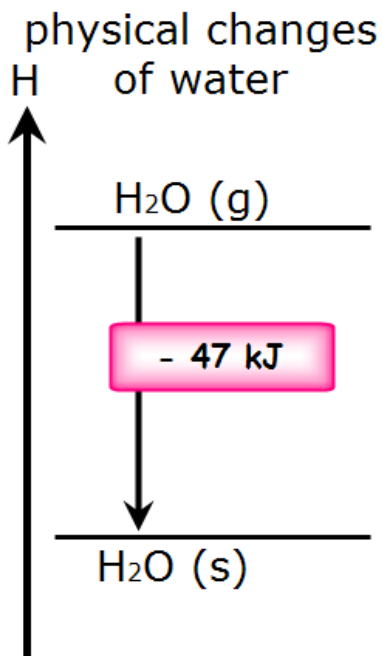
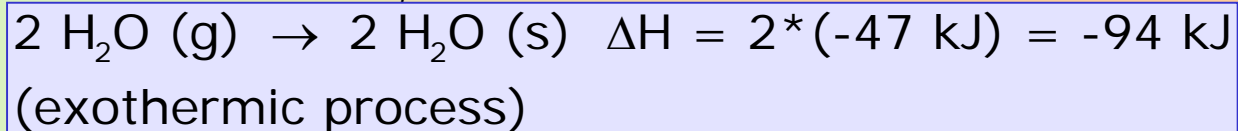


•2nd equation

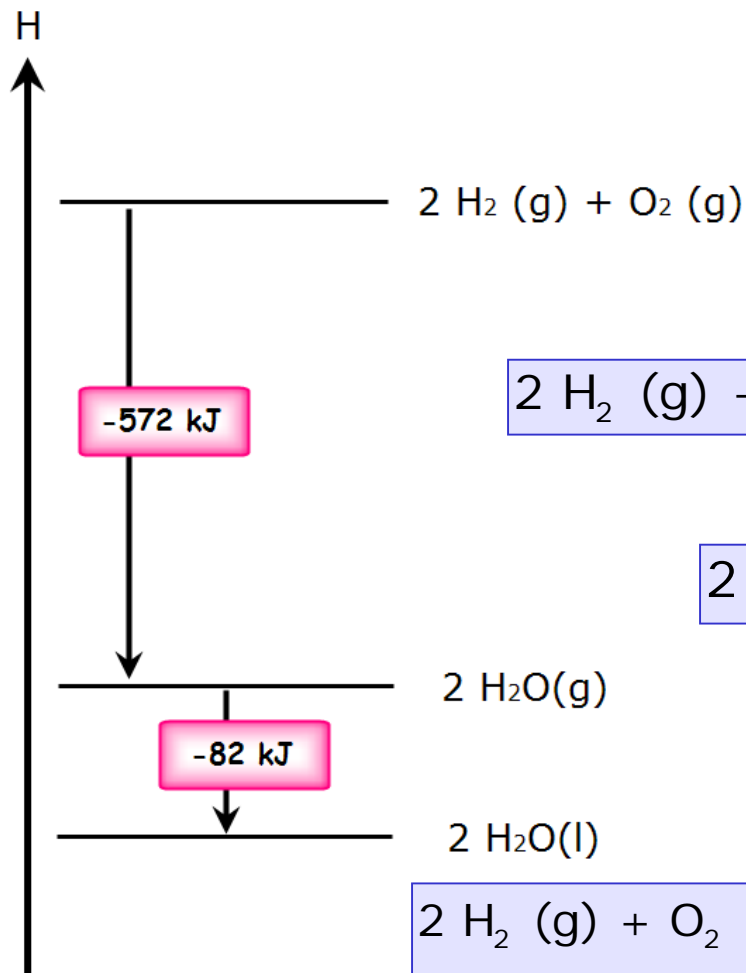


The process we have here is a physical change (change of state). Firstly, we have to assign the enthalpy levels to the different physical states.

From here, we can conclude that



Thermochemistry: Conceptual Exercise



•3rd equation



In order to calculate the enthalpy change for this equation we can combine two equations:



and



If we combine both equations, we get:

