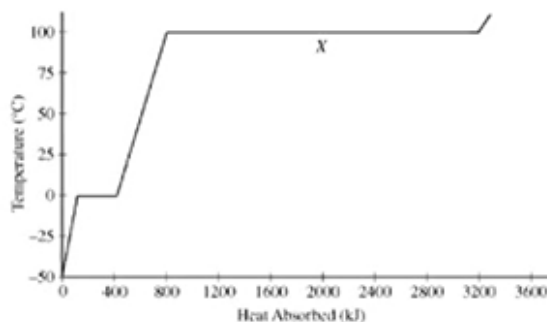


AP Chemistry Daily Videos

9.1 Introduction to Entropy

Video #1

1. What is the definition of entropy?
2. What are the situations where entropy increases?
3. Pause the video @ 2:26 and try the problem on your own. Then evaluate your work and identify any errors you may have made.



At 1.0 atm, a sample of ice is heated to liquid water and then to water vapor. The heating curve is shown in the graph above. Predict the signs for the changes in enthalpy and entropy for the process corresponding to segment X, going from left to right. Justify your answer.

4. Pause the video @ 3:25 and try the problem on your own. Then evaluate your work and identify any errors you may have made.



A student investigates the reaction between $\text{Ag}(s)$ and $\text{HNO}_3(aq)$ represented by the equation above.

- (a) Predict the sign of the entropy change, ΔS° , for the reaction. Justify your answer.

5. What are the key takeaways?