

10) 540 kcal need to transform 1.0 kg water at 100.0°C to steam at 100.0°C  
What is change in entropy of the water during the process?

$$\Delta S = \frac{Q}{T} = \frac{540 \text{ kcal}}{373 \text{ K}} = +1.4 \text{ kcal/K} \quad \textcircled{C}$$