

Foundations of Biology I – Fall 2013
Spontaneity Chart

$$\Delta G = \Delta H - T\Delta S$$

ΔG = Gibbs Free Energy

ΔH = Enthalpy

ΔS = Entropy

T = Temperature

Fill out the missing blanks inside the chart.

Effects of Temperature on the Spontaneity of Reactions

ΔH	ΔS	ΔG	Description
-			Spontaneous at all T
	-	+	
		+/-	Spontaneous at low T; nonspontaneous at high T
+		+/-	

Remember if...

1. $\Delta G < 0$ reaction can spontaneously proceed to the right:



2. $\Delta G > 0$ reaction can spontaneously proceed to the left:

