

$$\text{If } H_{\text{rxn}} = +486.0 \text{ kJ}$$

$$S_{\text{rxn}} = -75.0 \text{ J/K}$$

When will this reaction work?

$$G = H - TS$$

$$0 > H - TS$$

$$0 > 486.0 - T(-0.075)$$

$$-486.0 > +.075T$$

$$\boxed{6480 > T}$$

Whoah! That's not possible! It's below absolute zero. Wait, we knew that anyway since H was positive and S_{rxn} negative \rightarrow a combo that never works!