

Quiz8

Thursday, November 10, 2016 5:57 PM

Name _____

1. What does it mean for a reaction to be spontaneous?

The reaction can happen without any energy input from the outside. In fact, it releases energy $\Delta G < 0$

2. Consider the following reaction. Determine if $\Delta G > 0$, $\Delta G < 0$, or $\Delta G = 0$ for each condition.



- a. Adding HI to a reaction at equilibrium.

products favored $\Delta G < 0$

- b. Adding I_2 to a reaction at equilibrium.

solid. no change $\Delta G = 0$

- c. Adding H_2 to a reaction at equilibrium.

reactants favored $\Delta G > 0$

- d. Increasing the temperature.

exothermic reaction so heat is a product
reactants will form $\Delta G > 0$

- e. Mixing together 1.00 g of I_2 , 1.00 M of HI and 1.00 M of H_2 .

$$Q = 1$$

$Q < K$ too many reactants, products form
 $\Delta G < 0$