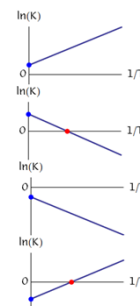


## Effect of temperature on equilibrium

General Chemistry, CH102 Spring 2011

1. For **exothermic** reactions in which **entropy increases**, which figure (1, 2, 3 or 4, top to bottom) corresponds to  $\ln(K)$  versus  $1/T$ ?

- 96% 1. Figure 1  
3% 2. Figure 2  
0% 3. Figure 3  
1% 4. Figure 4

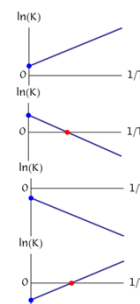


2. For **exothermic** reactions in which **entropy increases**, what temperature range will result in the **greatest amount of products**?

- 63% 1. Very low  $T$   
23% 2. Very high  $T$   
14% 3. The amount will be the same at all  $T$   
0% 4. More information needed

3. For **endothermic** reactions in which **entropy increases**, which figure (1, 2, 3 or 4, top to bottom) correspond to  $\ln(K)$  versus  $1/T$ ?

- 0% 1. Figure 1  
0% 2. Figure 2  
0% 3. Figure 3  
0% 4. Figure 4



0 of 5

10

Countdown  
Timer  
On Slide

4. For **endothermic** reactions in which **entropy increases**, what temperature range will result in the **greatest amount of products**?

- 0% 1. Very low  $T$   
0% 2. Very high  $T$   
0% 3. The amount will be the same at all  $T$   
0% 4. More information needed

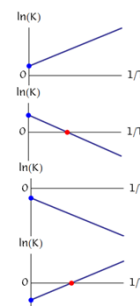
0 of 5

10

Countdown  
Timer  
On Slide

5. For **exothermic** reactions in which **entropy decreases**, which figure (1, 2, 3 or 4, top to bottom) correspond to  $\ln(K)$  versus  $1/T$ ?

- 0% 1. Figure 1  
0% 2. Figure 2  
0% 3. Figure 3  
0% 4. Figure 4



0 of 5

10

Countdown  
Timer  
On Slide

6. For **exothermic** reactions in which **entropy decreases**, what temperature range will result in the **greatest amount of products**?

- 0% 1. Very low  $T$
- 0% 2. Very high  $T$
- 0% 3. The amount will be the same at all  $T$
- 0% 4. More information needed

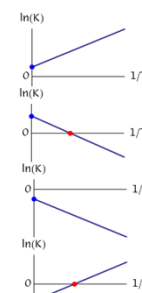
0 of 5

10

Countdown  
Timer  
On Slide

7. For **endothermic** reactions in which **entropy decreases**, which figure (1, 2, 3 or 4, top to bottom) correspond to  $\ln(K)$  versus  $1/T$ ?

- 0% 1. Figure 1
- 0% 2. Figure 2
- 0% 3. Figure 3
- 0% 4. Figure 4



0 of 5

10

Countdown  
Timer  
On Slide

8. For **endothermic** reactions in which **entropy decreases**, what temperature range will result in the **greatest amount of products**?

- 0% 1. Very low  $T$
- 0% 2. Very high  $T$
- 0% 3. The amount will be the same at all  $T$
- 0% 4. More information needed

0 of 5

10

Countdown  
Timer  
On Slide

9. For the reaction  $2 \text{H}_2\text{O}(g) \rightarrow 2 \text{H}_2(g) + \text{O}_2(g)$ , what temperature range will result in the **greatest amount of products**?

- 0% 1. Very low  $T$
- 0% 2. Very high  $T$
- 0% 3. The amount will be the same at all  $T$
- 0% 4. More information needed

0 of 5

10

Countdown  
Timer  
On Slide

10. The reaction  $\text{N}_2(g) + 2 \text{H}_2(g) \rightarrow 2 \text{N}_2\text{H}_4(l)$  is endothermic. What temperature range will result in the **greatest amount of products**?

- 0% 1. Very low  $T$
- 0% 2. Very high  $T$
- 0% 3. The amount will be the same at all  $T$
- 0% 4. More information needed

0 of 5

10

Countdown  
Timer  
On Slide

11. The reaction  $\text{N}_2\text{O}_4(g) \rightarrow 2 \text{NO}_2(g)$  is exothermic. What temperature range will result in the **greatest amount of products**?

- 0% 1. Very low  $T$
- 0% 2. Very high  $T$
- 0% 3. The amount will be the same at all  $T$
- 0% 4. More information needed

0 of 5

10

Countdown  
Timer  
On Slide