

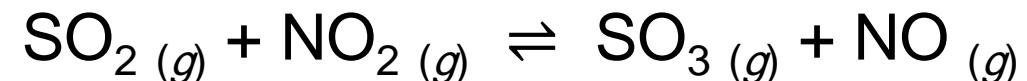
Assessment

Chemistry: Lesson 17



Question 1

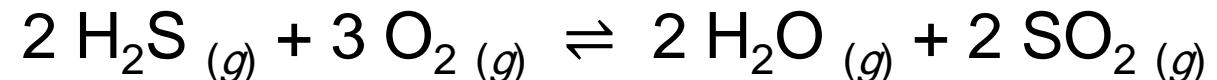
Consider the following reaction at equilibrium. What effect will adding more SO_3 have on the system?



- A) The reaction will shift in the direction of products.
- B) The reaction will shift to decrease the pressure.
- C) No change will occur since SO_3 is not included in the equilibrium expression.
- D) The reaction will shift in the direction of reactants.

Question 2

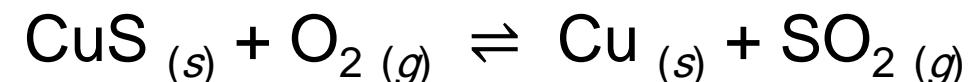
Consider the following reaction at equilibrium. What effect will adding more H_2S have on the system?



- A) The reaction will shift to the left.
- B) No change will be observed.
- C) The equilibrium constant will increase.
- D) The reaction will shift in the direction of products.

Question 3

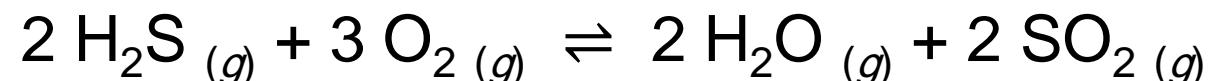
Consider the following reaction at equilibrium. What effect will reducing the volume of the reaction mixture have on the system?



- A) The equilibrium constant will decrease.
- B) No effect will be observed.
- C) The reaction will shift to the right in the direction of products.
- D) The equilibrium constant will increase.

Question 4

Consider the following reaction at equilibrium. What effect will increasing the volume of the reaction mixture have on the system?



- A) The reaction will shift to the right in the direction of products.
- B) No effect will be observed.
- C) The reaction will shift to the left in the direction of reactants.
- D) The equilibrium constant will decrease.

Question 5

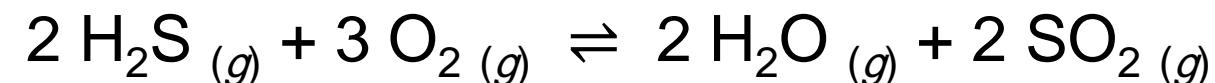
What will happen to the following endothermic reaction in equilibrium if the temperature is raised?



- A) More NO_2 will be produced.
- B) Less NO_2 will be produced.
- C) More N_2O_4 will be produced.
- D) There will be no change in concentrations.

Question 6

Consider the following reaction at equilibrium. What effect will increasing the pressure of the reaction mixture have on the system?



- A) The reaction will shift to the right in the direction of products.
- B) No effect will be observed.
- C) The reaction will shift to the left in the direction of reactants.
- D) The equilibrium constant will decrease.

Question 7

Which species is the weakest acid?

- A) HBr
- B) HCl
- C) HF
- D) HI

Question 8

According to Arrhenius definition, an acid is a substance that produces _____.

- A) NaCl
- B) H_2O^+
- C) H^+ or H_3O^+
- D) OH^-

Question 9

One of the following acids is a diprotic acid

