

Chapter 5 Review

Name _____

Answer the following questions on page 177

1. _____

6. _____

8. _____

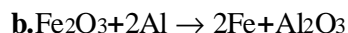
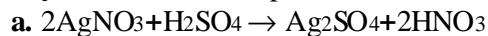
10. _____

2. _____

7. _____

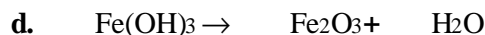
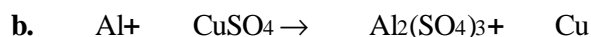
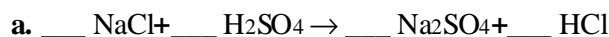
9. _____

11. Identify the reactants and products in each of the following chemical reactions.



12. Contrast endothermic and exothermic reactions.

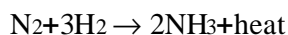
13. Balance the following equations:



14. State Le Chatelier's principle.

15. Describe two ways you could make table salt dissolve faster in water.

16. Predict the shift of equilibrium for each of the following conditions in the following reaction involving gaseous reactants and products:



- a. NH_3 is added to the reaction.
- b. NH_3 is removed from the reaction.
- c. The pressure is increased.
- d. The temperature is decreased.

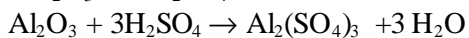
Predict how each of the following changes will affect the following reaction involving gaseous reactants and products:



- a. raising the temperature
- b. increasing the pressure
- c. removing N_2O_4 from the equilibrium mixture
- d. adding NO_2 to the equilibrium mixture

17. Foods kept in a refrigerator stay fresh longer than foods left out on the counter. Explain why this is true.

18. Aluminum sulfate, $\text{Al}_2(\text{SO}_4)_3$, is used to fireproof fabrics and to make antiperspirants. It can be formed from the reaction between Al_2O_3 and H_2SO_4



a. How many moles of $\text{Al}_2(\text{SO}_4)_3$ would be produced if 6 mol of H_2SO_4 reacted with Al_2O_3 ?

b. How many mole of Al_2O_3 are required to make 9 mol of H_2O ?

c. If 588 mol of Al_2O_3 reacts with H_2SO_4 how many moles of each product will be made?

19. **Concept Mapping** Complete the concept map below by writing the correct word or phrase in the lettered boxes.

