**FPS – Solutions Chapter 8 - Unit 12 Review**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

1. ***Definitions***
2. Give the definition for the following terms:
   1. Heterogeneous mixture
   2. Suspension
   3. Colloid
   4. Homogeneous mixture
   5. Solution
   6. Immiscible
   7. Miscible
   8. Solute
   9. Solvent
   10. Solubility
   11. Dilute
   12. Concentrated
   13. Unsaturated
   14. Saturated
   15. Supersaturated
   16. Acid
   17. Base
   18. pH scale

1. Describe the differences between suspensions, colloids, and solutions.

1. What does the phrase “like dissolves like” mean?
2. What are 5 factors that affect solubility?
3. Give several properties of acids.
4. What ions and range of pH are associated with acids?
5. What are some examples of common acids?
6. Give several properties of bases.
7. What ions and range of pH is associated with bases?
8. What are some examples of common bases?
9. In terms of pH, what is the difference between weak acids/bases and strong acids/bases?
10. What occurs when an acid and base react?
11. In the lab, describe 3 different indicators that can be used to test acids and bases.
12. For red/blue litmus testing, which colors indicated acids and which colors indicate bases?
13. What are some issues with litmus and pH paper testing?
14. ***Application***
15. Hydrochloric acid has a pH of 1 and citric acid has a pH of 2. Which is a stronger acid? WHY??
16. Referring to #16—which acid has a higher concentration of H+ ions?
17. Sodium hydroxide has a pH of 13 and baking soda has a pH of 9. Which is a stronger base? WHY??
18. Referring to #18—which acid has a higher concentration of H+ ions?
19. You use the red/blue litmus paper test on an unknown substance, but you only have blue paper left. The substance turns the paper blue, so you tell your partner it is a base. Are you correct or incorrect? WHY?

***Use the graph to answer the questions.***

