**GPS – Acids and Bases**

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

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| ***Bellwork*** | |
|  | 1. See the images of the seating on a bus. Using the vocabulary describing solutions, which is unsaturated, supersaturated, and which is saturated? |
| ***The Chemistry of Acids and Bases*** – Label the following an “acid” or a “base”   1. **What is an acid?**    1. An \_\_\_\_\_\_\_\_\_\_\_\_\_ is a solution that has an excess of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It comes from the Latin word *acidus* that means “sharp” or “sour”.    2. The more H+ ions, the more ­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the solution. 2. **Properties of an Acid**  a. Tastes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   b. Conduct \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ c. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. Some acids react strongly with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ e. Turns blue litmus paper \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. http://www.mhhe.com/physsci/chemistry/chang7/esp/folder_structure/cr/m3/s3/assets/images/crm3s3_1.jpg***Uses of acids***     1. Acetic acid = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ acid (lemons, limes, oranges)    3. Ascorbic Acid = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which your body needs.    4. Sulfuric acid is used in production of fertilizer, steel, paint, and plastics.    5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. ***What is a base?***    1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a solution that has excess \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. Another word for base is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. 3. ***Properties of a base***    1. Feel \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. Taste \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    4. Can conduct \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    5. \_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with metals.    6. Turn red litmus paper \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. 4. ***Uses of bases***    1. Bases give \_\_\_\_\_\_\_\_\_\_\_\_\_\_, ammonia, and many other \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ some of their useful properties.    2. The OH-­ions interact strongly with certain substances such as dirt and grease.    3. Acids_L107_PHScale_sx6687a3\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and over cleaner are examples of bases.    4. Your blood is a slightly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ solution. 5. ***pH Scale***    1. pH means “potential \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”    2. pH is a measure of how \_\_\_\_\_\_\_\_\_\_\_\_\_ or basic a solution is.    3. The pH scale ranges from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.    4. Acidic solutions have pH values \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.    5. A solution with a pH of 0 is very acidic.    6. A solution with a pH of 7 is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.    7. \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has a pH of 7.    8. Basic solutions have pH values of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | |