**GPS – Solubility**

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

|  |  |
| --- | --- |
| ***Bellwork*** | |
|  | 1. What do you remember about the difference between homogeneous mixtures and heterogeneous mixtures? |
| 1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a combination of two or more substances that are not \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ combined and can be separated. 2. A homogeneous mixture is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in appearance. Example: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. A heterogeneous mixture consists of visibly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ substances. Example:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. Solutions are a group of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are mixed up in a complete \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ distribution.    1. Examples below   **Chocolate**  **milk**  **Alloys**  **Carbonated**  **water**   1. There are two parts in a solution.    1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the substance that is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   Example: salt, sugar, Kool-aid powder   * 1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the substance that is DOING the dissolving. Example: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1. Solubility is the ­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the solvent to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the solute.      * 1. soda_canhttp://sub.allaboutcircuits.com/images/03400.pngBoilingWaterWhat factors affect solubility? | |
| imagesCAQO40N7   1. **Describing solubility and solutions**    1. Miscible 🡪 when 2 liquids \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. Immiscible 🡪 when 2 liquids DO NOT \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. **We can also classify solutions based on amount of solute.**    1. Unsaturated solutions🡪 have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than the maximum amount of solute \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in them. (This means more could be added, and the solute would continue to dissolve!)    2. Saturated solutions 🡪 have the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ amount of solute in them. No more can be made to dissolve.    3. Supersaturated solutions🡪 have \_\_\_\_\_\_\_\_\_\_\_\_ than the maximum amount of solute in them. This is not possible for all solutions! | |

Complete the following directed reading independently, using your notes and your book!