**General Physical Science – Naming Compounds**

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

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| I can… |
| *Construct the name of binary ionic and covalent compounds using nomenclature rules.* |

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| Bellwork | |
| http://www1.whsd.net/courses/J0078/Periodic__Table/periodic_table.JPG | 1. What is the difference between an ionic bond and a covalent bond?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2. Give an example of an ionic bond. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  3. Give an example of a covalent bond. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| Notes |

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|  | 1. Chemists have a system for naming all types of compounds. Why would this be important?   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. Some compounds have common names that are used, like H2O is \_\_\_\_\_\_\_\_\_\_\_. 2. We will learn the steps for naming both ionic and covalent compounds. We will name only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ compounds, meaning they have only ***two*** parts. 3. **These are the steps for naming binary *ionic compounds*:**    * 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ first, then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   **CaCl2**  **A. Calcium**  **B. Chlorine**  **C. Chlor + ide**  **Calcium chloride**   * + 1. Write the metal name.     2. Write the **root** of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and add \_\_\_\_\_\_\_\_\_\_\_ to the end.   Examples (write the names of the following):   * + - 1. NaCl \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_       2. CaBr2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_       3. Na3P \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  1. **These are the steps naming binary *covalent compounds*:**    1. The nonmetal farthest on the \_\_\_\_\_\_\_\_\_\_ of the table is written first.    2. Add \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to indicate numbers of atoms.    3. Never write the prefix “mono-“ for the \_\_\_\_\_\_\_\_\_\_\_ element.  |  |  | | --- | --- | | ***Prefix*** | ***Number*** | |  | 1 | |  | 2 | |  | 3 | |  | 4 | |  | 5 | |  | 6 | |  | 7 | |  | 8 | |  | 9 | |  | 10 |  * 1. Change the ending to \_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the second element.   **NO3**  **A. Nitrogen + oxygen**  **B. Mononitrogen trioxygen**  **C.** *~~Mono~~***Nitrogen trioxygen**  **D. Nitrogen trioxide (notice for oxygen, you drop the “y” and change to “i”!)**       1. Try these covalent compounds on your own:   CCl4 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_N2O = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SF6 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |