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| **Science 10 – Chemistry**  **Bonding & Naming** | **Name: Date: Block:** |

**Bonding**

* Relationship between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Only \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interact

**Ionic Bonding**

* Electron \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (ie.
* Na 🡪 (to achieve \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) becomes \_\_\_\_\_\_\_.
* Cl 🡪 (to achieve \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ) becomes \_\_\_\_\_\_\_.

**Covalent Bonding**

* Electron \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
* Between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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| **What is a Compound?**   * A substance composed of two or more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that have been \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ united.   **What is a Chemical Formula?**   * **A way of express the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that make up a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** * **Always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** * **Example 1:** H2O 🡪 # of atoms: * **Example 2:** CH4 🡪 # of atoms * **Example 3:** NH4Cl 🡪 # of atoms: * **Example 4:** (NH4)3PO4 🡪 # of atoms: | **Screen shot 2011-09-26 at 11.53.38 AM.png** |

**Naming Simple Ionic Compounds:**

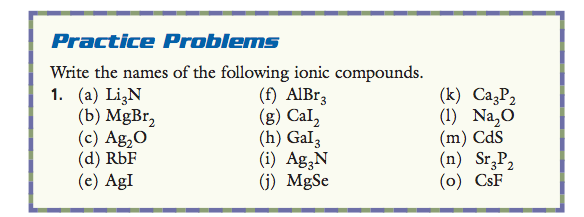
* **Example 1:** NaCl

1. Identify the positive and negative ion
2. What is the name of the positive ion?
3. What is the name of the negative ion? – change the ending to “ide”

* **Example 2:** MgBr2 (when naming, ignore the subscript “2”)

1. Identify the positive and negative ion
2. What is the name of the positive ion?
3. What is the name of the negative ion? – change the ending to “ide”

**Practice Problems: (answer these questions in your Class Starter Binder)**

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**Writing Formulas of Simple Ionic Compounds:**

* **Example 1:** Barium Chloride
* This is where we have to take note of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of each ion
* When we write our formula, we \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ include the charges

1. What is the charge of barium?
2. What is the charge of chlorine?
3. To write the formula, we must balance the charges.

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| --- | --- |
| **Positive** | **Negative** |
|  |  |
| Overall: | Overall: |
|  | |

* **Example 2:** Magnesium oxide

1. What is the charge of magnesium?
2. What is the charge of oxygen?
3. To write the formula, we must balance the charges.

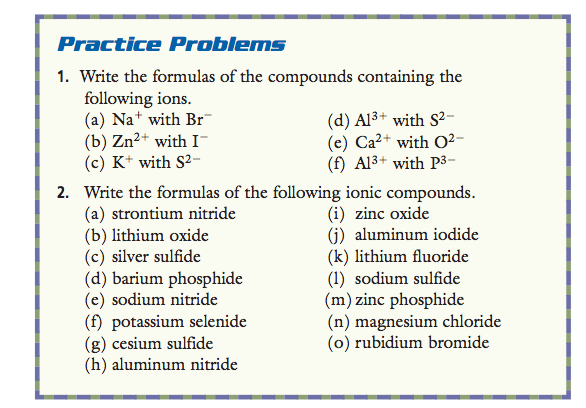
|  |  |
| --- | --- |
| **Positive** | **Negative** |
|  |  |
| Overall: | Overall: |
|  | |

* **Example 3:** Strontium Phosphide

1. What is the charge of strontium?
2. What is the charge of phosphorus?
3. To write the formula, we must balance the charges.

|  |  |
| --- | --- |
| **Positive** | **Negative** |
|  |  |
| Overall: | Overall: |
|  | |

**Practice Problems: (answer these questions in your Class Starter Binder)**

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