

## Nomenclature Rules Summary:

### How do I know if it's an acid, ionic compound, or covalent compound?

- If it has a hydrogen on the front, it's probably an acid
- If it has no hydrogen on the front and both elements are to the right of the “staircase”: covalent
- If no hydrogen on front and elements are on opp. sides of staircase or there's a polyatomic group: ionic

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| <p style="text-align: center;"><b>Ionic Compounds</b><br/><b><u>Formula ! Name</u></b></p> <ol style="list-style-type: none"> <li>1. Write down names of elements (or polyatomic ions)</li> <li>2. If first element is d block, write down # (as roman numeral) from charge</li> <li>3. Change ending to -ide (unless second half is from polyatomic ion chart)</li> </ol>                                                                                                                                                         | <p style="text-align: center;"><b>Ionic Compounds</b><br/><b><u>Name ! Formula</u></b></p> <ol style="list-style-type: none"> <li>1. Write down symbol for each element (or polyatomic ion)</li> <li>2. Write down charges for each (if d block, use roman numeral for charge)</li> <li>3. Use subscripts to balance charges (if polyatomic ion needs subscript, put parentheses around it)</li> </ol>                                                                                                                         |
| <p style="text-align: center;"><b>Covalent Compounds</b><br/><b><u>Formula ! Name</u></b></p> <ol style="list-style-type: none"> <li>1. Write down names of elements</li> <li>2. Use subscripts to assign number prefixes (if first element is “mono-”, then drop the “mono-”</li> <li>3. Change the ending to -ide</li> </ol>                                                                                                                                                                                                     | <p style="text-align: center;"><b>Covalent Compounds</b><br/><b><u>Name ! Formula</u></b></p> <ol style="list-style-type: none"> <li>1. Write symbols for each element</li> <li>2. Use number prefixes to assign subscripts</li> </ol>                                                                                                                                                                                                                                                                                         |
| <p style="text-align: center;"><b>Acids</b><br/><b><u>Formula ! Name</u></b></p> <ol style="list-style-type: none"> <li>1. If binary acid (just H and one other element), then hydro ____ ic acid</li> <li>2. If oxyacid (group from polyatomic ion chart) and group is “hypo ____ ite”, then hypo ____ ous acid</li> <li>3. If oxyacid and group is “-ite”, then ____ ous acid</li> <li>4. If oxyacid and group is “-ate”, then ____ ic acid</li> <li>5. If oxyacid and group is “per ____ ate”, then per ____ ic acid</li> </ol> | <p style="text-align: center;"><b>Acids</b><br/><b><u>Name ! Formula</u></b></p> <ol style="list-style-type: none"> <li>1. If “hydro ____ ic acid”, then write “<b>H</b>” and symbol for element.</li> <li>2. If “ ____ ic acid”, then write “<b>H</b>” and symbol for “-ate” group from polyatomic ion chart</li> <li>3. If “ ____ ous acid”, then write “<b>H</b>” and symbol for “-ite” group from polyatomic ion chart</li> <li>4. Give <b>H</b> subscript to balance charge of element or polyatomic ion group</li> </ol> |