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| *find the carge on the metal ion*  CλeMis+ry: http://genest.weebly.com  Stop in for help every day at lunch and Tues &Thurs after school! |  | Name\_\_\_\_\_\_\_\_\_\_\_\_\_  Period\_\_\_\_\_\_\_\_\_\_\_\_\_ |

1. Directions: cross out impossible compounds. Circle possible compounds. Use the rule: stable compounds must always be neutral; the total charge of a compound must be zero.

LiO

Li2O

LiO2

NaBr

NaBr2

Na2Br

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| http://www.green-planet-solar-energy.com/images/PT-blank-1.gif | 1. Color and label the part of the table where the elements *often* form a -1 ion. 2. Color and label the part of the table where the elements *often* form a -2 ion. 3. Color and label the part of the table where the elements *always* form a +1 ion. 4. Color and label the part of the table where the elements *always* form a +2 ion. 5. Write +1, +2, +3 on the ‘One-Two- Three zone near the middle of the table |

1. The big, big rule for forming compounds is

“the total charge of a compound is always ( +1 / zero / -1 ) “.

When a compound has this charge we say the compound is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

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| 1. For the compound **lithium oxide**, write the symbol for the lithium ion in the left box and the symbol for the oxide ion in the right box. |  | Cation Symbol: |  | Anion symbol: |  | Finally, write the formula of the neutral compound here: |

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| 1. For the compound **aluminum fluoride**, write the symbol for the cation in the left box and the symbol for the oxide ion in the right box. |  | Cation: |  | Anion: |  | Finally, write the formula of the neutral compound here: |

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| 1. What is the formula for sodium nitride? 2. What is the formula for calcium phosphide? | 1. What is the formula for beryllium fluoride? 2. What is the formula for magnesium fluoride? |

1. In each box,
   1. draw a cartoon of the compound that will form. Use the same rule you used in Problem #1 on the front.
   2. write the formula of what you formed (like K2O)
   3. write the name (like “potassium oxide”)

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|  | **Br-** | **P3-** | **O2-** |
| **Ca2+** |  |  |  |
| **Al3+** |  |  |  |
| **Fe2+** |  |  |  |
| **Fe3+** |  |  |  |