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| 1. Cation or Anion?  Larger than normal atom of that element | 2. Cation or Anion?  Smaller than normal atom of that element |
| 3. Cation or Anion?  Positive charge | 4. Cation or Anion?  Negative Charge |
| 5. Cation or Anion?  Atom GIVES UP one or more electrons | 6. Cation or Anion?  Atoms TAKES one or more electrons |
| 7. Ionic or Covalent?  Bond that is very hard to break (very strong) | 8. Ionic or Covalent?  Electrons are SHARED |
| 9. Ionic or Covalent?  Electrons are TRANSFERRED | 10. Ionic or Covalent?  Occurs between metals and nonmetals |
| 11. Ionic or Covalent?  Forms a crystal structure | 12. Ionic or Covalent? Very hard and brittle compounds |

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| 13. Ionic or Covalent? Occurs between two nonmetals | 14. Ionic or Covalent?  Conducts electricity *once dissolved* in water |
| 15. Oxidation number of Aluminum? | 16. Oxidation number of Calcium? |
| 17. Oxidation number of Oxygen? | 18. Oxidation number of Fluorine? |
| 19. Oxidation number of Sodium? | 20. Oxidation number of Nitrogen? |
| 21. Oxidation number of Silicon? | 22. Oxidation number of Carbon? |
| 23. Lewis Dot Structure of Lithium? | 24. Lewis Dot Structure of Phosphorus? |

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| 24. Lewis Dot Structure of Neon? | 25. Lewis Dot Structure of Chlorine? |
| 26. Lewis Dot Structure of Magnesium? | 27. Lewis Dot Structure of Hydrogen? |
| 28. What are valence electrons? | 29. What are ions? |
| 30. What are isotopes? | 31. Why do atoms bond? |
| 32. Draw dot structure bond diagram for Mg and I | 33. Draw dot structure bond diagram for C and H |
| 34. Draw dot structure bond diagram for O and O | 35. Draw dot structure bond diagram for Na and Cl |

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| 36. Write chemical formula and name for Ca and O | 37. Write chemical formula and name for K and S |
| 38. Write chemical formula and name for B and N | 39.  Co = \_\_\_\_\_\_\_\_\_\_\_ |
| 40.  K = \_\_\_\_\_\_\_\_\_\_\_\_ | 41.  Cu = \_\_\_\_\_\_\_\_\_\_\_\_ |
| 42.  Zn = \_\_\_\_\_\_\_\_\_\_\_\_ | 43.  Ne = \_\_\_\_\_\_\_\_\_\_\_\_ |
| 44.  Br = \_\_\_\_\_\_\_\_\_\_\_\_ | 45.  As = \_\_\_\_\_\_\_\_\_\_\_\_ |
| 46.  Kr = \_\_\_\_\_\_\_\_\_\_\_\_ | 47.  He = \_\_\_\_\_\_\_\_\_\_\_\_ |