**Determining Chemical Formulas of Ionic Compounds**

Honors Chemistry Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period: 1 2 3 4 5 6 7

**Directions**:

Cut out the ions from the two attached pages as needed. On the back of this WS and WS1 make the following compounds, glue them in place, and write the formula for each.

Follow your teacher’s example.

Then write the formulas for #13-40. Use your periodic table and “Charges of Common Ions” reference sheet to help you.

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| 1. magnesium chloride \_\_\_\_\_\_\_ | 7. potassium sulfide \_\_\_\_\_\_\_\_ |
| 2. aluminum sulfate \_\_\_\_\_\_\_\_ | 8. calcium hydroxide \_\_\_\_\_\_\_\_ |
| 3. hydrogen fluoride \_\_\_\_\_\_\_\_ | 9. rubidium iodide \_\_\_\_\_\_\_\_ |
| 4. gallium nitrate \_\_\_\_\_\_\_\_\_ | 10. copper(I) oxide \_\_\_\_\_\_\_\_ |
| 5. silver carbonate \_\_\_\_\_\_\_\_ | 11. sodium chloride \_\_\_\_\_\_\_\_ |
| 6. iron(III) phosphate \_\_\_\_\_\_\_\_ | 12. Make one! \_\_\_\_\_\_\_\_\_ |

|  |  |
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| 13. mercury(II) chloride | 27. calcium oxide |
| 14. iron(III) chloride | 28. mercury(I) chloride |
| 15. hydrogen iodide | 29. sodium thiosulfate |
| 16. aluminum oxide | 30. potassium chromate |
| 17. calcium nitrate | 31. iron(III) nitrate |
| 18. sodium cyanide | 32. chromium(II) iodide |
| 19. aluminum bromide | 33. radium bromide |
| 20. iron(II) sulfate | 34. ammonium phosphate |
| 21. silver carbonate | 35. copper(I) sulfate |
| 22. barium thiocyanate | 36. ammonium hydroxide |
| 23. ammonium nitrate | 37. hydrogen iodate |
| 24. zinc oxide | 38. calcium hypochlorite |
| 25. tin(IV) oxide | 39. sodium oxalate |
| 26. sodium arsenate | 40. silver chloride |

modified from Calhoun Chemical, Battle Creek, MI