

Name: ANSWER KEY Pd: \_\_\_ Ast: \_\_\_

### Ionic Bonds Practice

For help, refer to the periodic table and your handout with the table of common ions.

Write the correct charge on the line beside each ion:

- |                |                 |                |                 |                |
|----------------|-----------------|----------------|-----------------|----------------|
| 1. F <u>-</u>  | 2. Be <u>2+</u> | 3. Na <u>+</u> | 4. Ca <u>2+</u> | 5. O <u>2-</u> |
| 6. Cl <u>-</u> | 7. S <u>2-</u>  | 8. B <u>3+</u> | 9. K <u>+</u>   | 10. I <u>-</u> |

Write the correct charge on the line beside each polyatomic ion:

- |                              |                               |                               |                               |                               |
|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 11. NH <sub>4</sub> <u>+</u> | 12. CO <sub>3</sub> <u>2-</u> | 13. HCO <sub>3</sub> <u>-</u> | 14. PO <sub>4</sub> <u>3-</u> | 15. SO <sub>4</sub> <u>2-</u> |
|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|

Write the correct formula for each ionic compound:

- |  |   |  |                                     |
|--|---|--|-------------------------------------|
| 16. Li <sup>+</sup> and F <sup>-</sup>                             | <u>LiF</u>  | 17. Mg <sup>2+</sup> and F <sup>-</sup>                | <u>MgF<sub>2</sub></u>              |
| 18. Al <sup>3+</sup> and S <sup>2-</sup>                           | <u>Al<sub>2</sub>S<sub>3</sub></u>                | 19. K <sup>+</sup> and Cl <sup>-</sup>                 | <u>KCl</u>                          |
| 20. Ca <sup>2+</sup> and O <sup>2-</sup>                           | <u>CaO</u>  | 21. Li <sup>+</sup> and P <sup>3-</sup>                | <u>Li<sub>3</sub>P</u>              |
| 22. K <sup>+</sup> and Br <sup>-</sup>                             | <u>KBr</u>  | 23. Na <sup>+</sup> and PO <sub>4</sub> <sup>3-</sup>  | <u>Na<sub>3</sub>PO<sub>4</sub></u> |
| 24. NH <sub>4</sub> <sup>+</sup> and CO <sub>3</sub> <sup>2-</sup> | <u>(NH<sub>4</sub>)<sub>2</sub>CO<sub>3</sub></u> | 25. Mg <sup>2+</sup> and SO <sub>4</sub> <sup>2-</sup> | <u>MgSO<sub>4</sub></u>             |

Write the correct name next to the formula for each ionic compound:

- |  |                              |
|--|------------------------------|
| 26. Li <sub>2</sub> O                  | <u>LITHIUM OXIDE</u>         |
| 27. CaI <sub>2</sub>                   | <u>CALCIUM IODIDE</u>        |
| 28. K <sub>2</sub> CO <sub>3</sub>     | <u>POTASSIUM CARBONATE</u>   |
| 29. (NH <sub>4</sub> ) <sub>2</sub> O  | <u>AMMONIUM OXIDE</u>        |
| 30. Al(HCO <sub>3</sub> ) <sub>3</sub> | <u>ALUMINIUM BICARBONATE</u> |

Write the correct formula next to the name for each ionic compound:

- |                          |   |                                      |
|--------------------------|---|--------------------------------------|
| 31. Potassium Sulfide    | <u>K<sup>+</sup> S<sup>2-</sup></u>                           | <u>K<sub>2</sub>S</u>                |
| 32. Sodium Fluoride      | <u>Na<sup>+</sup> F<sup>-</sup></u>                           | <u>NaF</u>                           |
| 33. Magnesium Sulfide    | <u>Mg<sup>2+</sup> S<sup>2-</sup></u>                         | <u>MgS</u>                           |
| 34. Aluminum Phosphate   | <u>Al<sup>3+</sup> PO<sub>4</sub><sup>3-</sup></u>            | <u>AlPO<sub>4</sub></u>              |
| 35. Ammonium Bicarbonate | <u>NH<sub>4</sub><sup>+</sup> HCO<sub>3</sub><sup>-</sup></u> | <u>NH<sub>4</sub>HCO<sub>3</sub></u> |