

**Balance the Following Using a PENCIL**

**Set 1**

- |    |    |   |                               |                                |     |    |   |                               |                                |
|----|----|---|-------------------------------|--------------------------------|-----|----|---|-------------------------------|--------------------------------|
| 1. | Zn | + | S $\rightarrow$               | ZnS                            | 6.  | Fe | + | Cl <sub>2</sub> $\rightarrow$ | FeCl <sub>3</sub>              |
| 2. | Zn | + | Cl <sub>2</sub> $\rightarrow$ | ZnCl <sub>2</sub>              | 7.  | Al | + | O <sub>2</sub> $\rightarrow$  | Al <sub>2</sub> O <sub>3</sub> |
| 3. | Zn | + | O <sub>2</sub> $\rightarrow$  | ZnO                            | 8.  | Pb | + | O <sub>2</sub> $\rightarrow$  | PbO                            |
| 4. | Mg | + | S $\rightarrow$               | MgS                            | 9.  | Ag | + | S $\rightarrow$               | Ag <sub>2</sub> S              |
| 5. | Al | + | S $\rightarrow$               | Al <sub>2</sub> S <sub>3</sub> | 10. | K  | + | S $\rightarrow$               | K <sub>2</sub> S               |

**Set 2**

- |     |                |   |                               |                                |     |    |   |                               |                                |
|-----|----------------|---|-------------------------------|--------------------------------|-----|----|---|-------------------------------|--------------------------------|
| 1.  | Zn             | + | S $\rightarrow$               | ZnS                            | 11. | Ag | + | I <sub>2</sub> $\rightarrow$  | AgI                            |
| 2.  | Zn             | + | O <sub>2</sub> $\rightarrow$  | ZnO                            | 12. | Pb | + | O <sub>2</sub> $\rightarrow$  | PbO                            |
| 3.  | Mg             | + | Cl <sub>2</sub> $\rightarrow$ | MgCl <sub>2</sub>              | 13. | Al | + | Br <sub>2</sub> $\rightarrow$ | AlBr <sub>3</sub>              |
| 4.  | Al             | + | O <sub>2</sub> $\rightarrow$  | Al <sub>2</sub> O <sub>3</sub> | 14. | Fe | + | F <sub>2</sub> $\rightarrow$  | FeF <sub>3</sub>               |
| 5.  | P              | + | O <sub>2</sub> $\rightarrow$  | P <sub>4</sub> O <sub>10</sub> | 15. | Sn | + | O <sub>2</sub> $\rightarrow$  | SnO                            |
| 6.  | Bi             | + | Cl <sub>2</sub> $\rightarrow$ | BiCl <sub>3</sub>              | 16. | Sb | + | S $\rightarrow$               | Sb <sub>2</sub> S <sub>5</sub> |
| 7.  | H <sub>2</sub> | + | N <sub>2</sub> $\rightarrow$  | NH <sub>3</sub>                | 17. | Ca | + | O <sub>2</sub> $\rightarrow$  | CaO                            |
| 8.  | Cu             | + | O <sub>2</sub> $\rightarrow$  | Cu <sub>2</sub> O              | 18. | Ba | + | O <sub>2</sub> $\rightarrow$  | BaO                            |
| 9.  | Sn             | + | Cl <sub>2</sub> $\rightarrow$ | SnCl <sub>4</sub>              | 19. | Mg | + | P $\rightarrow$               | Mg <sub>3</sub> P <sub>2</sub> |
| 10. | Na             | + | S $\rightarrow$               | Na <sub>2</sub> S              | 20. | K  | + | N <sub>2</sub> $\rightarrow$  | K <sub>3</sub> N               |

Worksheet #3

Balance the following equations (again):

