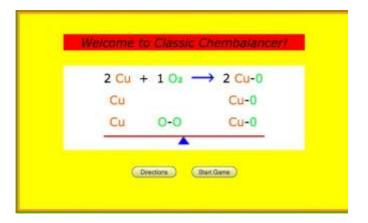
## **Directions:**

- 1. Click on 'Start Game'
- 2. Enter coefficients in the preceding boxes. Do not leave any boxes blank, instead enter "1".
- 3. Click the 'Balanced' button.
- 4. If you didn't get it right, try again.
- 5. If you were correct, fill in the correct coefficients on this worksheet.
- 6. Continue with the Review Chembalancer and the Brain Boggler Chembalancer.



## Classic Chembalancer

Questions Fill in the blanks below as you go through the game. This is so I have a record that you did your assignment.

1. \_\_\_\_ Fe + \_\_\_ S 
$$\rightarrow$$
 \_\_\_ FeS

2. 
$$\underline{\hspace{1cm}}$$
 H<sub>2</sub> +  $\underline{\hspace{1cm}}$  Cl<sub>2</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  HCl

3. 
$$\underline{\hspace{1cm}}$$
 Mg +  $\underline{\hspace{1cm}}$  O<sub>2</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  MgO

4. \_\_\_\_ 
$$O_2 +$$
 \_\_\_\_  $H_2 \rightarrow$  \_\_\_\_  $H_2O$ 

5. 
$$\underline{\hspace{1cm}}$$
 HgO  $\rightarrow$   $\underline{\hspace{1cm}}$  Hg +  $\underline{\hspace{1cm}}$  O<sub>2</sub>

6. \_\_\_\_ Ca + \_\_\_ 
$$H_2O \rightarrow$$
\_\_\_ Ca(OH)<sub>2</sub> + \_\_\_  $H_2$ 

7. \_\_\_\_ 
$$CH_4 + __ O_2 \rightarrow __ CO_2 + __ H_2O$$

8. \_\_\_\_\_ 
$$Na_2O_2 +$$
 \_\_\_\_\_  $H_2SO_4 \rightarrow$  \_\_\_\_\_  $Na_2SO_4 +$  \_\_\_\_  $H_2O_2$ 

9. 
$$\underline{\hspace{1cm}}$$
 N<sub>2</sub> +  $\underline{\hspace{1cm}}$  H<sub>2</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  NH<sub>3</sub>

10. \_\_\_\_ Al + \_\_\_ 
$$O_2 \rightarrow$$
 \_\_\_  $Al_2O_3$ 

11. \_\_\_\_ KMnO<sub>4</sub> 
$$\rightarrow$$
 \_\_\_ K<sub>2</sub>O + \_\_ MnO + \_\_ O<sub>2</sub>

Draw the molecules just like the program did to figure out the answer to #12.

12. \_\_\_\_ Na + \_\_\_ 
$$H_2O \rightarrow$$
 \_\_\_ NaOH + \_\_\_  $H_2$ 

## Review Chembalancer

**Questions** Fill in the blanks below as you go through the game. This is so I have a record that you did your assignment.

- 2. \_\_\_\_\_ Na + \_\_\_\_\_  $O_2 \rightarrow$  \_\_\_\_\_ Na<sub>2</sub> $O_2$
- 3. \_\_\_\_  $Hg + _{O_2} \rightarrow _{HgO}$
- 4.  $Ag_2O \rightarrow Ag + O_2$
- 5. \_\_\_\_\_ Ba(OH)<sub>2</sub>+ \_\_\_\_\_ H<sub>3</sub>PO<sub>4</sub>  $\rightarrow$  \_\_\_\_\_ BaHPO<sub>4</sub> + \_\_\_\_ H<sub>2</sub>O
- 6. \_\_\_\_\_ NaOH + \_\_\_\_\_  $H_3PO_4 \rightarrow$  \_\_\_\_\_ Na<sub>2</sub>HPO<sub>4</sub> + \_\_\_\_\_  $H_2O$
- 7. \_\_\_\_  $C_4H_8$  + \_\_\_  $O_2$  → \_\_\_  $CO_2$  + \_\_\_  $H_2O$
- 8. \_\_\_\_  $C_3H_8 +$  \_\_\_\_  $O_2 \rightarrow$  \_\_\_  $CO_2 +$  \_\_\_  $H_2O$
- 9. \_\_\_\_ Fe + \_\_\_  $Cl_2 \rightarrow$  \_\_\_  $FeCl_3$
- 10.  $\_$  Al +  $\_$  HCl  $\rightarrow$   $\_$  AlCl<sub>3</sub> +  $\_$  H<sub>2</sub>

Draw the molecules just like the program did to figure out the answer to #11.

11. \_\_\_\_ HgO  $\rightarrow$  \_\_\_ Hg + \_\_\_ O<sub>2</sub>

## Brain Boggle Chembalancer

**Questions** Fill in the blanks below as you go through the game. This is so I have a record that you did your assignment.

- 1. \_\_\_\_\_  $F_2$  + \_\_\_\_  $Al_2O_3$   $\rightarrow$  \_\_\_\_  $AlF_3$  + \_\_\_\_  $O_2$
- 2. \_\_\_\_\_  $C_2H_6$  + \_\_\_\_\_  $O_2$   $\rightarrow$  \_\_\_\_\_  $CO_2$  + \_\_\_\_\_  $H_2O$
- 3. \_\_\_\_  $NH_3 +$  \_\_\_\_  $O_2 \rightarrow$  \_\_\_\_ NO + \_\_\_\_  $H_2O$
- 4. \_\_\_\_  $C_5H_{12}$  + \_\_\_\_  $O_2$   $\rightarrow$  \_\_\_\_ CO + \_\_\_\_  $H_2O$
- 5. \_\_\_\_  $C_8H_{18}$  + \_\_\_\_  $O_2$   $\rightarrow$  \_\_\_\_ CO + \_\_\_  $H_2O$