#### Classic Chembalancer Worksheet

# http://funbasedlearning.com/chemistry/chemBalancer/default.htm

- 1. Click Start Game in the yellow box
- 2. Begin each time by putting "1" in each white box
- 3. Change the numbers in the white boxes until you have the same amount of each symbol on both sides of the arrow
- 4. Click the balanced button in the green box to check your answer
- 5. If you answer is correct, then record the correct answers in the blanks below
- 6. If you answer is not correct or needs to be reduced, then you will have the chance to fix it and try the balanced button again
- 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. \_\_\_\_  $HgO \rightarrow$  \_\_\_\_ Hg + \_\_\_\_  $O_2$
- 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. \_\_\_\_  $N_2 +$ \_\_\_  $H_2 \rightarrow$ \_\_\_  $NH_3$
- 10. Al +  $O_2 \rightarrow Al_2O_3$
- 11. \_\_\_\_  $KMnO_4 \rightarrow$  \_\_\_\_  $K_2O +$  \_\_\_\_ MnO + \_\_\_\_  $O_2$

## Now it's your turn:

Balance these on your own, you may draw out the symbols if you'd like.

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

13. \_\_\_\_\_ 
$$H_2SO_4 +$$
 \_\_\_\_  $NaOH \rightarrow$  \_\_\_\_  $Na_2SO_4 +$  \_\_\_\_  $H_2O$ 

#### **Review Chembalancer Worksheet**

## http://funbasedlearning.com/chemistry/chemBalancer2/default.htm

- 1. Click Start Game in the yellow box
- 2. Begin each time by putting "1" in each white box
- 3. Change the numbers in the white boxes until you have the same amount of each symbols on both sides of the arrow
- 4. Click the balanced button in the green box to check your answer
- 5. If you answer is correct, then record the correct answers in the blanks below
- 6. If you answer is not correct or needs to be reduced, then you will have the chance to fix it and try the balanced button again

1.	S +	$O_2 \rightarrow$	$SO_2$
1.	3 ±	$O_2 \rightarrow$	302

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. 
$$C_4H_8 + C_2 \rightarrow CO_2 + H_2O$$

8. 
$$C_3H_8 + C_2 \rightarrow CO_2 + H_2O$$

9. \_\_\_\_ Fe + \_\_\_ 
$$Cl_2 \rightarrow$$
 \_\_\_\_ Fe $Cl_3$ 

10. Al + 
$$HCl \rightarrow AlCl_3 + H_2$$

#### Now it's your turn:

Balance these on your own, you may draw out the symbols if you'd like.

11. \_\_\_\_\_ 
$$HgO \rightarrow$$
 \_\_\_\_\_  $Hg +$  \_\_\_\_\_  $O_2$ 

12. \_\_\_\_ 
$$NCl_3 +$$
\_\_\_  $H_2O \rightarrow$ \_\_\_  $HClO +$ \_\_\_  $NH_3$ 

## **Brain Boggle Chembalancer Worksheet**

## http://funbasedlearning.com/chemistry/chemBalancer3/default.htm

- 1. Click Start Game in the yellow box
- 2. After the second question, *no symbols* will be shown as you attempt to balance the equations. This will start to prepare you for balancing reactions without writing extra symbols. You may still draw your own if you'd like, but you are not encouraged to do so.
- 3. Click the balanced button in the green box to check your answer
- 4. If you answer is correct, then record the correct answers in the blanks below
- 5. If you answer is not correct or needs to be reduced, then you will have the chance to fix it and try the balanced button again

1. \_\_\_\_ 
$$F_2$$
 + \_\_\_  $Al_2O_3 \rightarrow$  \_\_\_  $AlF_3$  + \_\_\_  $O_2$ 

2. 
$$C_2H_6 + C_2H_6 + CO + CO + H_2O$$

3. \_\_\_\_\_ 
$$NH_3 +$$
 \_\_\_\_\_  $O_2 \rightarrow$  \_\_\_\_\_  $NO +$  \_\_\_\_\_  $H_2O$ 

4. 
$$C_5H_{12} + C_9 + CO + H_2O$$

5. \_\_\_\_ 
$$C_8H_{18} +$$
\_\_\_  $O_2 \rightarrow$ \_\_  $CO +$ \_\_  $H_2O$