Click on the link to access the Phet Simulation for balancing equations →

After clicking on the link, click on Equations and use the simulation to balance each equation. After balancing each equation by adding the correct number of each molecule, you will record the correct coefficients and put them into this LWS. You will need to submit all recorded entries to receive full credit for this assignment.

Synthesis reactions	Decomposition reactions	Combustion reactions
$\square C + \square O_2 \rightarrow \square CO$	$\square CH_3OH \rightarrow \square CO + \square H_2$	$\square C_2H_4 + \square O_2 \rightarrow \square CO_2 + \square H_2O$
$\square N_2 + \square O_2 \rightarrow \square N_2O_5$	$\square NO_2 \rightarrow \square NO + \square O_2$	$\square C_2H_5OH + \square O_2 \rightarrow \square CO_2 + \square H_2O$
$\square P + \square O_2 \rightarrow \square P_2O_5$	$\square PCl_3 \rightarrow \square P + \square Cl_2$	$\square CH_3OH + \square O_2 \rightarrow \square CO_2 + \square H_2O$
$\square C_2H_2 + \square H_2 \rightarrow \square C_2H_6$	$\square H_2O_2 \rightarrow \square H_2O + \square O_2$	$\square C_2H_2 + \square O_2 \rightarrow \square CO_2 + \square H_2O$

Synthesis Reactions

1. $___ C + ___ O_2 \rightarrow ___ CO$

2. $___ N_2 + ___ O_2 \rightarrow ___ N_2O_5$

3. $___ P + ___ O_2 \rightarrow ___ P_2O_5$

4. $___ C_2H_2 + ___ H_2 \rightarrow ___ C_2H_6$

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Decomposition Reactions

5. ___ CH_3OH → ___ CO + __ H_2

6. ___ NO_2 → ___ NO + __ O_2

7. ___ PCl_3 → ___ P + ___Cl_2

8. ___ H_2O_2 → ___ H_2O + __ O_2

Combustion Reactions

9. __ C_2H_4 + __ O_2 → __ CO_2 + __ H_2O

10. __ C_2H_5OH + __ O_2 → __ CO_2 + __ H_2O

11. __ CH_3OH + __ O_2 → __ CO_2 + __ H_2O

12. __ C_2H_2 + __ O_2 → __ CO_2 + __ H_2O

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