Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chemical Reactions Webquest

***WEBSITE 1: Use the following website to answer the questions 1—8:***

<http://www.britannica.com/EBchecked/topic/108802/chemical-reaction>

1. What is a chemical reaction?
2. Give 3 examples of chemical reactions.
3. \_
4. \_
5. \_
6. Name two ways that a physical change is different from a chemical reaction.
   1. \_
   2. \_
7. Who discovered 33 elements, which led to the idea that chemical reactions involve the combination of elements, and encouraged others to pursue chemistry as a quantitative science?
8. What other scientist’s work was crucial to the history of the chemical reaction?

*Click to page Next Page*

1. What is the Law of Conservation of Matter?
2. What does it mean to have a chemical equation that is “balanced”?
3. What is stoichiometry?

***WEBSITE 2: Use the following website to answer questions 9—11:***

<http://chemistry.about.com/od/chemicalreactions/a/Synthesis-Reactions.htm>

1. What is a **synthesis** reaction?
2. What is the general form of a synthesis reaction?
3. Give one example of a synthesis reaction.

***WEBSITE 3: Use the following website to answer questions 12—14:***

<http://chemistry.about.com/od/chemicalreactions/a/chemical-decomposition-reaction.htm>

1. What is a **decomposition** reaction?
2. What is the general form of a decomposition reaction?
3. Give one example of a decomposition reaction.

***WEBSITE 4: Use the following website to answer questions 15—17:***

<http://chemistry.about.com/od/chemistryglossary/g/Single-Displacement-Reaction-Definition.htm>

1. What is a **single-displacement** reaction?
2. What is the general form of a single-displacement reaction?
3. Give an example of a single-displacement reaction.

***WEBSITE 5: Use the following website to answer questions 18—20:***

<http://chemistry.about.com/od/chemistryglossary/g/Double-Displacement-Reaction-Definition.htm>

1. What is a **double-displacement** reaction?
2. What is the general form of a double-displacement reaction?
3. Give an example of a double-displacement reaction.

***WEBSITE 6: Use the following website to answer questions 21—23:***

<http://chemistry.about.com/od/chemicalreactions/a/Combustion-Reactions.htm>

1. What is a **combustion** reaction?
2. What is the general form of a combustion reaction?
3. Give one example of a combustion reaction.

***WEBSITE 7: Use the following website to answer questions 24—28:***

<http://www.education.com/science-fair/article/chemical-reations-absorb-release-energy/>

1. What does the Greek root *“therm”* mean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What does the Greek root *“endo”* mean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What does the Greek root *“exo”* mean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is an endothermic reaction? Give an example of an endothermic reaction.
5. What is an exothermic reaction? Give an example of an exothermic reaction.

***WEBSITE 8: Use the following website to answer questions 29—31:***

<http://www.chem4kids.com/files/react_rates.html>

1. What is rate of a reaction?
2. What does it say about the molecules in a reaction if the rate is high or low?
3. Name 3 things that affect reaction rate AND HOW.

***On the right side of this page, click Equilibrium 1 to answer questions 32—39.***

1. What is equilibrium?
2. Name three characteristics of equilibrium.

*Click Part Two*

1. Who was Le Chatelier and what was his principal regarding equilibrium?

*Click Next Page on Chemical Reactions*

1. What is a catalyst?
2. What is activation energy?
3. How do catalysts impact equilibrium?
4. What is an inhibitor?
5. Why are inhibitors useful?