

Chp 15 Little Book

# CHEMICAL REACTIONS

Draw examples of the 4 types of reactions in section 2

**Teach a parent: Today's concept :**  
**Teach your parents about the 4 different types of chemical reactions. Help your parent become an expert !**  
**Be sure they write what they have learned from your teaching**

**Parent Response**

1. \_\_\_\_\_ I'm not sure my child really understands, therefore, I don't either. Please work with him/her and let's try again.
2. \_\_\_\_\_ The concept was explained thoroughly with effective examples he/she created.  
 "By golly, I think they've got it!"
3. \_\_\_\_\_ WOW! My child did an exceptional job! It was logically explained, therefore I caught on immediately and feel confident about teaching it to others. The self-created examples were a perfect fit. My child even asked me a question at the end to make sure I understood. I believe my child could effectively teach this concept to others.

Parent Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Mom or Dad Comments: Please explain how your student taught you this concept and \* what you learned in 3-5 sentences! \* This is critical for them to receive full points**

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**Virtual Lab Videos: Endothermic & Exothermic Reactions**  
[http://www.classzone.com/books/ml\\_science\\_share/vis\\_sim/cim05\\_pg90\\_endotherm/cim05\\_pg90\\_endotherm.html](http://www.classzone.com/books/ml_science_share/vis_sim/cim05_pg90_endotherm/cim05_pg90_endotherm.html)

What chemicals were used in the Endothermic reaction. Describe what happened: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

What chemicals were used in the Exothermic reaction. Describe what happened: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Name: \_\_\_\_\_ pd: \_\_\_\_\_  
 Parent Signature confirming completion of Little Book



11. A chemical reaction in which energy is released or removed is called \_\_\_\_\_ and a chemical reaction in which energy is absorbed is called \_\_\_\_\_.

12. The law of conservation of energy states that \_\_\_\_\_  
\_\_\_\_\_

13. What is activation energy?  
\_\_\_\_\_  
\_\_\_\_\_

14. Copy the diagrams from figure 22 on page 387. Be sure to label.

<b>Exothermic Reaction</b>	<b>Endothermic Reaction</b>
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15. Some things affect the rate of reactions. Fill in the table below to describe these factors.

Factor	Explanation

**Definitions:**

All mixed up! Write the correct letter to define the word. What page do you find the word on

**Sect 3: Energy & Rates of Chemical Reactions Pg 385-386**

- |   |   |
|---|---|
| <p>Exothermic<br/>Correct letter: ___ pg: ____</p> <p>Endothermic<br/>Correct letter: ___ pg: ____</p> <p>Law of conservation of energy<br/>Correct letter: ___ pg: ____</p> <p>Activation energy<br/>Correct letter: ___ pg: ____</p> <p>Catalyst<br/>Correct letter: ___ pg: ____</p> <p>Inhibitor<br/>Correct letter: ___ pg: ____</p> | <p>a. A substance that speeds up a reaction without permanently being changed</p> <p>b. The minimum amount of energy needed for a substance to react</p> <p>c. A substance that slows down or stops a chemical reaction</p> <p>d. A chemical reaction that releases or removes energy</p> <p>e. A chemical reaction that absorbs energy</p> <p>f. Energy can neither be created nor destroyed in chemical reactions</p> |
|---|---|

Additional notes: \_\_\_\_\_  
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Chapter 15 Tour: Chemical Reactions

1. Look at the figures on p 374. What are three examples of chemical changes? \_\_\_\_\_

2. Fill in the grid below about the 4 clues of chemical reactions:

Clue	Explanation

3. What happens when you combine hydrogen and chlorine?  
\_\_\_\_\_

4. A \_\_\_\_\_ is a number written below & to the right of a chemical symbol in a formula.

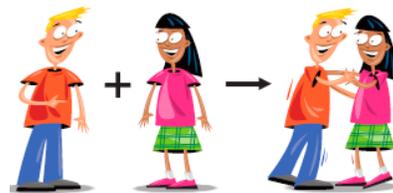
5. In  $C_6H_{12}O_6$ , we have \_\_\_\_\_ carbon atoms,  
\_\_\_\_\_ hydrogen atoms and \_\_\_\_\_ oxygen atoms.

6. What are the parts of a chemical reaction?  
\_\_\_\_\_  
\_\_\_\_\_

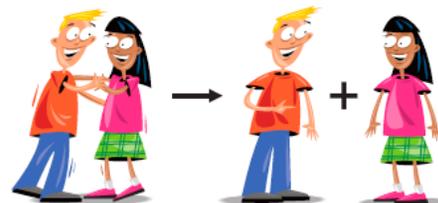
7. The law of conservation of mass states that : \_\_\_\_\_  
\_\_\_\_\_

8. Skim pages 382-384 & title the type of reactions below.

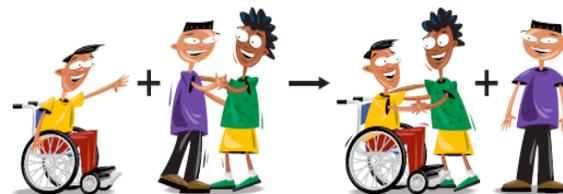
Reaction



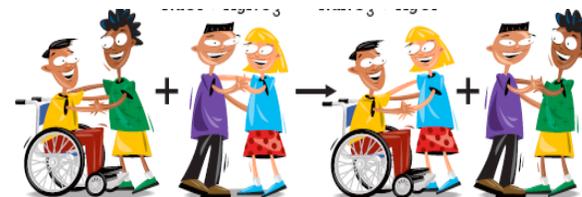
Reaction



Reaction



Reaction



9. What is the heading on page 385?  
\_\_\_\_\_

10. Look at figure 20. What are the 3 types of energy that can be released in reactions? \_\_\_\_\_  
\_\_\_\_\_