

Lesson 1 Understanding Chemical Reactions

Scan Lesson 1. Read the lesson titles and bold words. Look at the pictures. Identify three facts you discovered about chemical reactions. Record your facts in your Science Journal.

Main Idea

Changes in Matter

I found this on page _____.

Signs of a Chemical Reaction

I found this on page _____.


What happens during a chemical reaction?

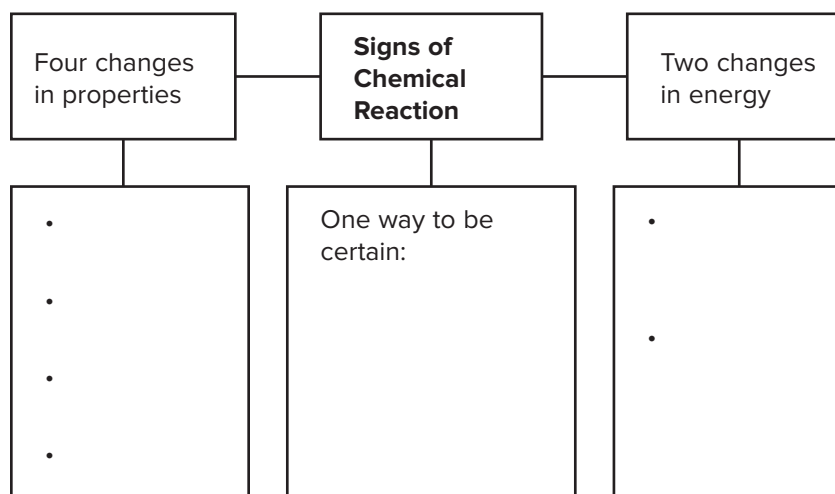
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Details

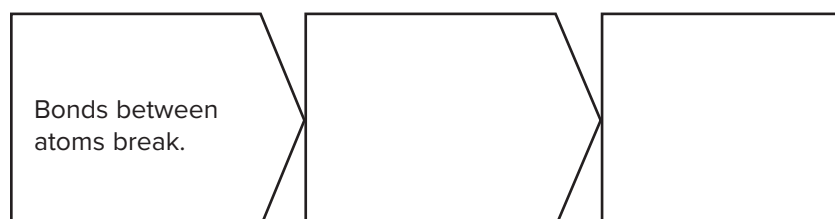
Differentiate a physical change from a chemical change.

Physical Change	Chemical Change

 **Identify** signs of a chemical reaction.



 **Sequence** changes in atoms during a chemical reaction.



Lesson 1 | Understanding Chemical Reactions (continued)

Main Idea

Chemical Equations

I found this on page _____.

I found this on page _____.

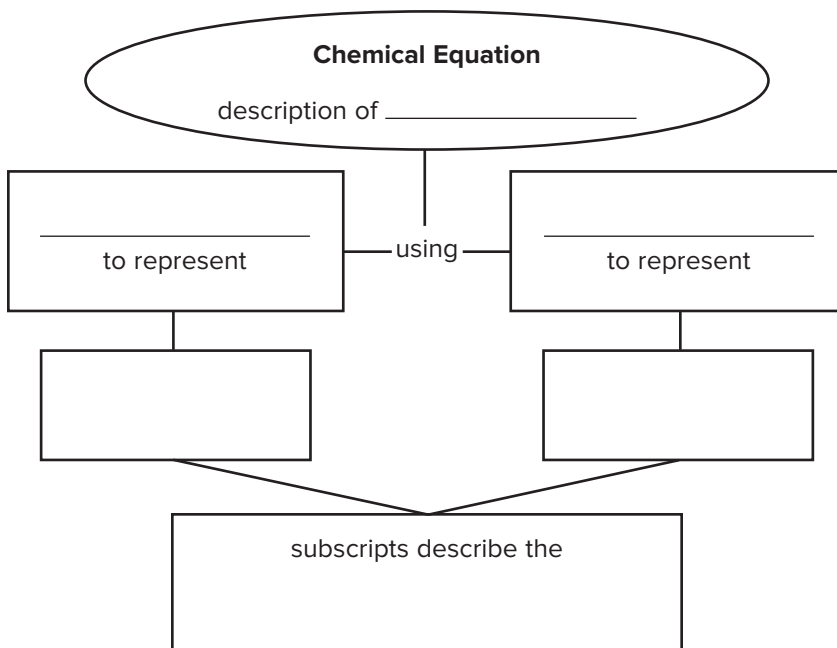
Conservation of Mass

I found this on page _____.

Details



Distinguish the parts of a chemical equation.



Detail information regarding the writing of chemical equations.

Define <i>reactant</i> .	
Define <i>product</i> .	
Write the general structure for a chemical equation.	
How is the arrow sign read?	
Write the equation for "carbon plus oxygen produces carbon dioxide."	



Restate the law of conservation of mass.

Lesson 1 | Understanding Chemical Reactions (continued)

Main Idea

Details

I found this on page _____.

I found this on page _____.

I found this on page _____.

I found this on page _____.

I found this on page _____.

 **Relate** atoms to mass in a chemical reaction.

Mass before a chemical reaction	is equal to	
Number of atoms in the reactants		

Paraphrase what it means when you say a chemical equation is balanced.

Explain the meaning of chemical formulas. Circle the coefficient.


H ₂ O	2H ₂ O
means	means

Order the steps in balancing a chemical equation.

1. _____
2. _____
3. _____
4. _____

Balance the chemical equation for carbon monoxide.



 **Analyze It** Look back at the picture of the firefly on the first page of Lesson 1. How could you conclude that the firefly's blinking is a chemical rather than a physical change simply by viewing the picture and without reading the text on the page?
