

7th Grade Science

Unit: Matter and Periodic Table
Lesson: Matter 4 – Chemical and Physical Changes Part 2

Name: _____

Date: Thursday, December 1, 2016

Homeroom: _____

OBJECTIVES: By the end of class, students will be able to...

SWBAT identify and describe physical and chemical changes of matter.

DO NOW

Agenda:

1. Do Now (in packet)
2. Opening
3. Notes (in packet and notebook)
4. Guided Practice (in packet)

5. Independent practice (in packet)
6. Homework Overview
7. Closing

Homework: Matter 4 – Chemical and Physical Change

Fill the in the chart below.

Situation	Physical or Chemical Change? Why?
Bread turns black after being the toaster too long.	
Water condenses outside of a glass of ice tea.	
Green leaves turn yellow, red and orange in the fall.	
Green bananas turn yellow.	
Yellow bananas turn brown.	
(Create your own situation)	

Physical and Chemical Changes Notes

Matter is anything that has _____ and _____.

All matter is made up of tiny particles called _____.

These tiny particles can join together to form _____.

Different substances are made up of different types of _____ and _____.

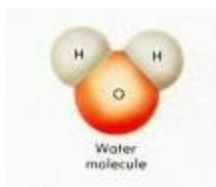
A _____ change is one that changes the way a substance **looks**, but it does not change way the atoms and molecules of the substance are connected.

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A _____ change is one that changes the way the atoms and molecules are connected and creates a _____ substance.

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Water (H₂O) is H₂O NO MATTER if it's in gas form, liquid form, or solid form.



Physical Changes:

Physical change: A change that _____ cause a new piece of matter to be made.

A piece of matter is going through a physical change if any of the following things happen:

- The piece of matter changes _____ or _____.

Examples:

- _____
- _____

- The substance _____ in a liquid.

Examples:

- _____
- _____

- The substance changes from one _____ to another.

Examples:

- _____
- _____

A physical change is usually a change that **CAN** be _____, or reversed.
(There are some exceptions to this rule!!!!)

Chemical Changes:

Chemical change: A change that _____ cause a new piece of matter to be made.

A piece of matter is going through a chemical change if any of the following things happen:

- The substance _____.

Examples:

- _____
- _____

- The substance changes _____ on its own (without something else heating or cooling it).

Example:

- _____

- The substance changes to an "unexpected" _____.
- The substance makes _____ (usually after two substances have combined).

Example:

- _____

A chemical change is a change that **CANNOT** be _____, or reversed.

NOTE: If a funny _____ is produced, this is often a sign that a chemical change has taken place!!

Practice: Write whether each of these changes is a chemical or physical change. Explain why you chose your answer. Use your notes to help you, and answer in **COMPLETE SENTENCES**.

1. Melting ice:


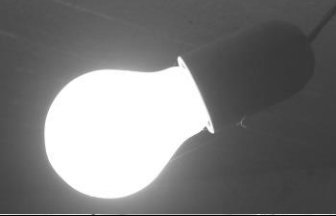


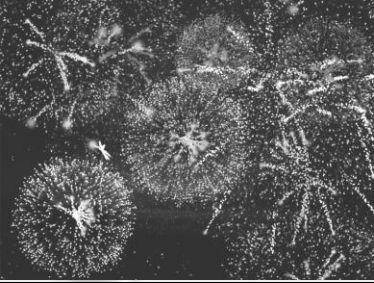

2. Baking cookies:

3. Breaking glass:

4. Melting wax:

5. Burning a candle:

Write Physical Change or Chemical Change next to the picture. **Explain** your answer.

Making toast	
A light bulb getting hot	
Adding sugar to a cup of tea	
Food going moldy	
Setting off a firework	
Diluting orange juice with water	

Review:

1. Law of conservation of mass/matter states:

2. Matter is made up of tiny particles called _____


3. Different atoms grouped together form _____

4. Properties describe matter. What are two ways physical properties can describe matter? The use of your 5 _____ and _____ (quantitative and qualitative).

5. What are words to look for when describing chemical properties?

6. What is the difference between chemical and physical changes?

7. Think back to a recent lunch or dinner. Describe in words two physical and two chemical changes that were involved in preparing and/or consuming the meal. Use complete sentences and be specific in your explanation of the change.

	<h1>7th Grade Science</h1> <p>Unit: Matter and Periodic Table Lesson: Matter 4 – Chemical and Physical Change</p>	<p>Name: _____</p> <p>Date: December 1, 2016</p> <p>Homeroom: _____</p> <p style="text-align: right;">_____ / 5 = _____ %</p>
DNG?	Strive Due Date: 12/2	A B C D F

1. Label each process as a physical or chemical change:
 - a. perfume evaporating on your skin _____
 - b. butter melting _____
 - c. wood rotting _____
 - d. charcoal heating a grill _____
 - e. autumn leaves changing color _____
 - f. a hot glass cracking when placed in cold water _____
 - g. melting copper metal _____
 - h. burning sugar _____
 - i. mixing sugar in water _____
 - j. digesting food _____

2. Which of the following would NOT be a physical change?
 - a. freezing water to make ice cubes
 - b. melting gold to make jewelry
 - c. burning gasoline in a lawnmower
 - d. boiling water for soup
 - e. tearing a piece of aluminum foil

3. Which of the following is NOT a physical change?
 - a. grating cheese
 - b. melting cheese
 - c. fermenting of cheese
 - d. mixing two cheeses in a bowl

4. Which are physical and which are chemical changes? Write Physical or Chemical on the line.
 - a. boil _____
 - b. burn (combustion) _____
 - c. condense _____
 - d. rust _____
 - e. crumple _____
 - f. ferment _____
 - g. melt _____
 - h. freeze _____