Name	Class	Date
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Skills Worksheet

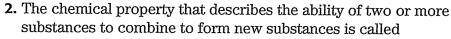
## **Directed Reading A**

# **Section: Chemical Properties CHEMICAL PROPERTIES**

Write the letter of the correct answer in the space provided.

- 1. The property of matter that describes its ability to change into new matter with different properties is known as a(n)
  - a. chemical change.
- c. chemical property.

- b. physical change.
- d. physical property.

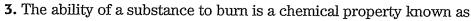


a. reactivity.

c. density.

**b.** flammability.

d. solubility.



a. reactivity.

c. density.

**b.** flammability.

d. solubility.



4. An iron nail is reactive with

- a. rubbing alcohol.
- b. other iron nails.
- c. wood in a house.
- d. oxygen in the air.

B

- **5.** Which of the following statements is true about characteristic properties of matter?
  - a. Characteristic properties depend on the size of the sample.
  - **b.** Characteristic properties may be either physical or chemical properties.
  - c. Characteristic properties only involve chemical properties.
  - **d.** Characteristic properties only involve the physical nature of the matter.
- **6.** Describe the ways that burning changes the nature of wood.

7. A substance always has **Chemical** properties, even though they are difficult to observe.

8. Scientists use Character 131 Coroperties to help them identify and classify matter.

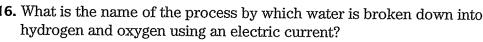
Name	Class	Date		
Directed Reading A continued				
CHEMICAL CHANGES AND NEW SU	JBSTANCES			
9. Chemical changes are the	process by wh	ich substances		
a. move from place to pla				
<ul><li>b. change into new substa</li><li>c. change in their physica</li></ul>				
d. become greater in mass				
10. Which of the following wo	ould NOT be co	onsidered an example of a		
chemical change?				
<ul><li>a. the bubbling action of e</li><li>b. the green coating on co</li></ul>		blets		
c. the melting of a Popsic				
<b>d.</b> the burning of rocket for				
11. How do you know that baking a ca	ke involves che	emical changes?		
		•		
12. List some signs or clues that show	w that a change	e you are observing is a		
chemical change.				
Ohamaal Ahaa	3A			
· ·	9	identity of the substances		
involved, they are hard to reverse				
14. How could some chemical changes be reversed? Give an example.				
	•			

Name	Class	Date
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#### PHYSICAL VERSUS CHEMICAL CHANGES

15. What is the most important question to ask to determine whether a change is physical or chemical?

- a. Was there a color change?
- **b.** Did the composition change?
- c. Was there a change in size?
- d. Did the change involve a change in state?



- a. electrolysis
- b. decomposition
- c. reactivity
- d. reversibility

  17. During DASICA Change. the composition of a substance does not change.

Identify whether the following changes are physical changes or chemical changes. Label each change either PC for physical change or CC for chemical change.

18. Mixing vinegar and baking soda

19. Grinding baking soda into a powder

20. Souring milk

**21.** Melting an ice cream bar

22. Burning a wooden match

23. Shooting off fireworks

**24.** Mixing drink mix into water

**PC25.** Bending an iron nail

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Name	Class	Date	

Skills Worksheet )

### **Directed Reading B**

**Section: What Is Matter?** MATTER

Circle the letter of the best answer for each question.

- 1. What do humans, hot soup, and a neon sign have in common?
  - **a.** They are brightly colored.
- c. They are made of matter.
- **b.** They are found in space.
- **d.** They have the same volume.
- 2. What has mass and takes up space?
  - a. volume

c. weight

b. matter

d. space

#### **MATTER AND VOLUME**

- 3. What does the word volume mean?
  - a. the amount of matter
- **c.** the amount of space
- **b.** an effect of gravity
- d. an effect of mass
- **4.** Why can't another CD fit in a rack once it is completely filled?
  - a. because all the space taken up
    - **b.** because the CD has mass
    - c. because space has three dimensions
  - d. because the CD is too large

### **Liquid Volume**

- 5. What unit is used to measure the volume of water in a lake?
  - a. grams (g)

c. meters (m)

**b.** liters (L)

- **d.** milliliters (mL)
- 6. What unit would you use to measure the volume of soda in a can?
  - a. centimeters (cm)
- c. liters (L)

**b.** grams (g)

d. milliliters (mL)

Measuring the Volume of Liquids Read the words in the box. Read the sentences. Fill in each blank the word or phrase that best completes the sentence.  Cubic irregular solid volume meniscus milliliter (mL) cubic centimet  7. To measure volume with a graduated cylinder, look at the bottom of the Menscus  Volume of a Regularly Shaped Solid Object  8. The volume of solid objects is usually expressed in	Name	Class	Date
Read the words in the box. Read the sentences. Fill in each blank the word or phrase that best completes the sentence.  Cubic irregular solid volume meniscus milliliter (mL) cubic centimet  7. To measure volume with a graduated cylinder, look at the bottom of the MENSCUS  Volume of a Regularly Shaped Solid Object  8. The volume of solid objects is usually expressed in Lubic units.  9. To find the of a regular solid, multiply its length, width, and height.  10. One cubic centimeter (1 cm³) is equal to one Milliliter  Volume of an Irregularly Shaped Solid Object  11. To find the volume of a(n) Tryeqular Solid measure the amount of water that the object displaces.  12. To express the volume of the irregular solid, you must change milliliters to Cubic Centimeters  WATTER AND MASS  Circle the letter of the best answer for each question.  13. What is the amount of matter in an object called?	MA.		
meniscus. milliliter (mL). cubic centimet  7. To measure volume with a graduated cylinder, look at the bottom of the Meniscus.  Volume of a Regularly Shaped Solid Object  8. The volume of solid objects is usually expressed in units.  9. To find the of a regular solid, multiply its length, width, and height.  10. One cubic centimeter (1 cm³) is equal to one is equal to one  Volume of an Irregularly Shaped Solid Object  11. To find the volume of a(n) Solid object displaces.  12. To express the volume of the irregular solid, you must change milliliters to Centimeters.  MATTER AND MASS Circle the letter of the best answer for each question.  3. What is the amount of matter in an object called?	Read the words in the	e box. Read the sentences.	<u>Fill in each blank</u> with tence.
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Circle the letter of the best answer for each question.  3. What is the amount of matter in an object called?			
		best answer for each quest	tion.
a. matter c. volume	<b>3.</b> What is the amoun	t of matter in an object cal	lled?
<b>b.</b> mass <b>d.</b> weight		_	

Nam	ne	_ Class	Date
Di	rected Reading B continued		
1	Diff Defenses Billion and	1 181-:b-4	
	e Difference Between Mass and <u>cle the letter</u> of the best answe	_	uestion.
	Which of the following is a m		
1-44	a. inertia	c. volume	
	<b>b.</b> mass	d. weight	
15	What is the force called that l	keens object	s from floating into space?
	a. mass		ional force
	<b>b.</b> inertia	<b>d.</b> weight	
16	Which of the following is true	about the v	veight of an object?
. 0.	a. Weight is measured with a		
	<b>b.</b> Weight is the same on the n		•
	c. Weight is the same as mass		
A	d. Weight depends on location		erse.
17.	Which of the following is true	e about the n	nass of an object?
	a. Mass depends on location.		
	<b>b.</b> Mass is a measure of gravit	y.	
ĺ	<b>c.</b> Mass is always the same.		
6	d. Mass depends in part on we	eight.	
18.	How could you change the m	ass of an ob	ject?
	a. move it to the moon		
	<b>b.</b> take some of its matter awa	ay .	
	c. make Earth spin faster		
	<b>d.</b> change the object's weight		
Me	asuring Mass and Weight		
19.	What is the weight on Earth o	of an object	with a mass of 100 g?
	a. newton	<b>c.</b> 1 mL	
9	<b>b.</b> 1 cm <sup>2</sup>	<b>d.</b> 1 kilogra	am

Na	me	Class	Date		
	Directed Reading B continued				
Re th	Read the words in the box. Read the sentences. Fill in each blank with the word or phrase that best completes the sentence.				
	weight ne	wton			
	kilogram ma	SS •			
	If a brick and a sponge harmore	•	brick has		
	The SI Unit for mass is the	•	***************************************		
22.	The unit for weight is the state the Lewton				
23.	If you know an object's maits Weight				
INI	ERTIA				
Circ	<u>cle the letter</u> of the best ans	wer for each question.			
24.	What is the tendency of an called?	object to resist changes	in motion		
	a. mass	<b>c.</b> inertia			
	<b>b.</b> gravity	<b>d.</b> weight			
25.	What will cause changes in	the motion of objects?			
	<b>a.</b> a shift in the object's colo	or <b>c.</b> a change in volum	.e		
1	<b>b)</b> an outside force	<b>d.</b> a change in mass			
Mass: The Measure of Inertia					
26.	Which of the following is th	e easiest to start moving	;?		
	a. a cart loaded with two potatoes				
	<b>b.</b> a cart loaded with many potatoes				
(	an empty cart with no potatoes				
-	d. a cart with one potato				