ame		Class	Date	
Directe	ed Reading B continued			
	<del>-</del>			
<b>6.</b> How	could some chemical change	es be reversed?	Give an example.	
	<u> </u>		•	<b>1</b>
	Photosynthesis reverses combustio	•		
	also electric current can separate 23 from water 2xH2O, Then an explosi		, , , , ,	
	and make water again.	on can take nyaro,	gen and oxygen gas	

#### PHYSICAL VERSUS CHEMICAL CHANGES



- **17.** 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?

physical changes

- 18. The composition of a substance does not change during
  - a. physical changes.
  - **b.** chemical changes.
  - c. reactivity.
  - **d.** reversibility.



- 19. The chemical changes that happen when a firework explodes are
  - a. physical changes.
  - **b.** easily reversed.
  - **c.** almost impossible to reverse.
  - **d.** changes only in state.

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

chemical **20.** effervescent tablets bubbling in water

<sup>physical</sup> **21.** grinding baking soda into a powder

<mark>chemical</mark> **22.** souring milk

physical 23. freezing water into ice cubes

chemical **24.** burning a wooden match

physical **25.** mixing drink mix into water

physical **26.** bending an iron nail

Name Class Date
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Skills Worksheet

## **Vocabulary and Section Summary B**

# What Is Matter? **VOCABULARY**

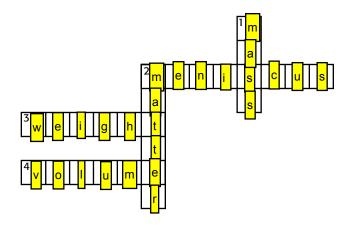
After you finish reading the section, try this puzzle! Use the clues below to solve the crossword puzzle.

#### **ACROSS**

- **2.** the curve at a liquid's surface by which one measures the volume of the liquid
- **3.** a measure of the gravitational force exerted on an object; its value can change with the location of the object in the universe
- **4.** a measure of the size of a body or region in three-dimensional space

#### **DOWN**

- **1.** a measure of the amount of matter in an object
- **2.** anything that has mass and takes up space



#### **SECTION SUMMARY**

#### Read the following section summary.

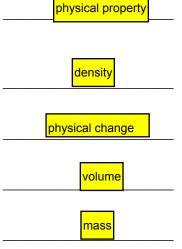
- Two properties of matter are volume and mass.
- Volume is the amount of space taken up by an object.
- Mass is a measure of the amount of matter in an object.
- The SI unit of volume is the liter (L). The SI unit of mass is the kilogram (kg).
- Weight is a measure of the gravitational force on an object, usually in relation to Earth. Weight is expressed in newtons (N).

Skills Worksheet

### **Vocabulary and Section Summary B**

#### **Physical Properties VOCABULARY**

After you finish reading the section, try this puzzle! In the space provided, write the term described. Then, find the words in the word search puzzle on the next page. Words are hidden vertically, horizontally, diagonally, and backward. physical property **1.** a characteristic of a substance that does not



- involve a chemical change, such as density, color, or hardness
- **2.** the ratio of the mass of a substance to the volume of the substance
- **3.** a change of matter from one form to another without a change in chemical properties
- **4.** a measure of the size of a body or region in three-dimensional space
- **5.** a measure of the amount of matter in an object

#### **SECTION SUMMARY**

#### Read the following section summary.

- Physical properties of matter can be observed without changing the identity of the matter.
- Examples of physical properties are melting temperature, density, hardness, thermal conductivity, and electrical conductivity.
- Density is the amount of matter in a given space.
- Density can be used to identify substances because the density of a substance is constant at a given pressure and temperature.
- When a substance undergoes a physical change, its identity stays the same.
- Physical changes include dissolving, cutting, bending, freezing, and melting.

Name	Class	Date

### Vocabulary and Section Summary B continued

W				-									_			$\overline{}$				
K         S         L         O         K         L         Q         P         Z         W         D         X         S         R         N         Z         G         O         X         B           S         B         C         N         R         C         U         I         W         C         F         G         E         A         D         S         V         H         N         A           F         H         C         S         G         H         C         F         P         U         C         P         T         M         R         X         I         A         U         A           R         D         G         G         P         V         S         M         K         O         R         O         Z         X         I         A         U         A           Z         H         M         Z         D         S         Y         Q         C         E         A         B         E         C         E         I         Y         N         I         A         I         A         I         A         I	W	I	М	M)	Q	W	Т	I	D	I	R	X	D	Р	V	\ <del>\</del>	Υ	С	Н	Н
S         B         C         N         R         C         U         I         W         C         F         G         E         A         D         V         H         N         A           F         H         C         S         G         H         C         F         P         U         C         P         T         M         R         X         I         A         U         A           R         N         D         G         P         V         S         M         K         D         R         O         Z         X         I         P         I         O         W           Z         H         M         Z         D         S         Y         Q         C         R         C         E         A         B         E         C         E         I         Y         N         I         P         B         P           Z         N         O         C         B         M         Y         J         P         A         R         E         I         Y         N         I         P         I         D         I         I	J	T	A	S	Υ	Т	٧	F	R	В	Q	Т	L	E	(T/	Υ	R	Υ	D	Н
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R         R         D         G         G         P         V         S         M         K         O         R         O         Z         X         I         P         I         O         W           Z         H         M         Z         D         S         Y         Q         C         R         C         E         A         B         E         C         E         I         Y         N         I         P         B         P           E         Z         N         O         K         G         V         L         Q         L         M         L         Y         M         Z         N         N         L         B         P           E         Z         N         O         K         G         V         L         Q         L         M         L         Y         M         Z         N         N         L         B         P           E         Z         N         D         A         E         B         G         Y         F         W         D         N         L         Q         N         L         Q         N	S	В	С	N	R	С	U	ı	W	С	F	G	E	A	D	5	٧	Н	N	Α
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E       Z       N       O       K       G       V       L       Q       L       M       L       Y       M       Z       N       N       L       B       O         L       Q       U       O       L       D       A       E       B       G       Y       F       W       D       R       Z       R       L       Q       V         G       P       S       B       M       C       L       X       S       B       L       Z       Q       E       P       G       X       O       I       U         G       R       Q       X       I       A       K       Q       O       E       Q       F       N       Q       I       X       H       Y       W       H       H       Y       W       H       H       Y       W       H       H       Y       W       H       H       Y       W       H       H       Y       X       I       C       K       M       I       B       W       I       I       D       D       M       K       Y       D       D       D </td <td>Z</td> <td>Н</td> <td>М</td> <td>Z</td> <td>D</td> <td>S</td> <td>Υ</td> <td>Q</td> <td>c</td> <td>R</td> <td>c</td> <td>Е</td> <td>Α</td> <td>В</td> <td>Е</td> <td>С</td> <td>Е</td> <td>1</td> <td>B</td> <td>N</td>	Z	Н	М	Z	D	S	Υ	Q	c	R	c	Е	Α	В	Е	С	Е	1	B	N
L       Q       U       O       L       D       A       E       B       G       Y       F       W       D       R       Z       R       L       Q       V         G       P       S       B       M       C       L       X       S       B       L       Z       Q       E       P       G       X       O       I       U         G       R       Q       X       I       A       K       Q       O       E       Q       F       N       Q       I       X       H       Y       W       H         P       Y       K       S       G       A       W       U       X       B       S       Z       K       S       K       B       V       A       Q       U         A       D       Y       Q       X       F       X       I       C       K       M       I       B       W       I       I       Q       O       X       W         D       H       P       H       Y       S       I       C       A       L       C       H       A <td< td=""><td>В</td><td>S</td><td>Q</td><td>С</td><td>В</td><td>М</td><td>Υ</td><td>J</td><td>P</td><td>A</td><td>R</td><td>K</td><td>Е</td><td>ı</td><td>Υ</td><td>N</td><td>I</td><td>Р</td><td>В</td><td>Р</td></td<>	В	S	Q	С	В	М	Υ	J	P	A	R	K	Е	ı	Υ	N	I	Р	В	Р
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P       Y       K       S       G       A       W       U       X       B       S       Z       K       S       K       B       V       A       Q       U         A       D       Y       Q       X       F       X       I       C       K       M       I       B       W       I       I       O       O       X       W         D       H       P       H       Y       S       I       C       A       L       C       H       A       N       G       E       L       D       M       K         P       X       B       H       F       T       S       X       B       S       Z       D       P       B       X       U       N       M       O         A       O       H       P       P       W       N       O       G       U       J       N       A       O       B       Q       M       F       P       M         A       O       H       P       W       N       O       P       R       D       V       T       S       T <td< td=""><td>G</td><td>Р</td><td>S</td><td>В</td><td>М</td><td>/c/</td><td>L</td><td>Х</td><td>S</td><td>В</td><td>L</td><td>Z</td><td>Q</td><td>Е</td><td>Р</td><td>G</td><td>Х</td><td>0</td><td>ı</td><td>U</td></td<>	G	Р	S	В	М	/c/	L	Х	S	В	L	Z	Q	Е	Р	G	Х	0	ı	U
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