16. How could some chemical changes be reversed? Give an example.

_____

_____

_____

_____

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?

_____ **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.

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

_____ **21.** grinding baking soda into a powder

_____ **22.** souring milk

_____ **23.** freezing water into ice cubes

_____ **24.** burning a wooden match

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

_____ **26.** bending an iron nail

Name _____ Class _____ Date _____

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

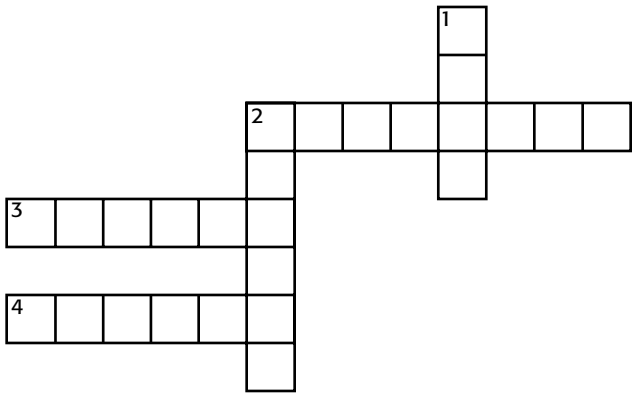
3. a measure of the gravitational force exerted on an object; its value can change with the location of the object in the universe

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).

Name _____ Class _____ Date _____

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.

_____ **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	I	M	M	Q	W	T	I	D	I	R	X	D	P	V	Y	Y	C	H	H
J	T	A	S	Y	T	V	F	R	B	Q	T	L	E	T	Y	R	Y	D	H
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	R	D	G	G	P	V	S	M	K	O	R	O	Z	X	I	P	T	O	W
Z	H	M	Z	D	S	Y	Q	C	R	C	E	A	B	E	C	E	I	Y	N
B	S	Q	C	B	M	Y	J	P	A	R	K	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	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
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	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
E	P	U	X	A	Z	G	D	P	R	D	V	T	S	T	B	E	B	W	A
E	K	G	B	U	P	W	D	G	M	P	S	C	H	O	A	X	Y	J	L
M	B	X	P	A	S	H	K	U	Z	C	N	Y	E	U	Y	P	V	J	X