Name Date Class

SECTION 1 Study Guide

The Rock Cycle

Chapter 4

Directions: *Place the letter of the term beside the correct definition.*

Definition

_____ **1.** a mixture of minerals, volcanic glass, organic material, or other materials

_____ **2.** illustrates the processes that create and change rocks

_____ **3.** formed when particles and bits of rock are cemented together

_____ **4.** formed when heat, pressure, or fluids act on other types of rock and affect their composition

_____ **5.** formed when hot magma cools and hardens (may be intrusive or extrusive rock)

_____ **6.** rock fragments, mineral grains, or organic remains that have been moved by wind, water, ice, or gravity

_____ **7.** principle that illustrates chemical elements from minerals and rocks are not lost or destroyed, but changed to a new form

_____ **8.** location where scientists first recognized the rock cycle

Vocabulary

a. conservation of matter

b. igneous rock

c. James Hutton

d. metamorphic rock

e. Mt. Rushmore, South Dakota

f. rock

g. rock cycle

h. sediments

i. sedimentary rock

j. Siccar Point, Scotland

k. volcanic

Directions: *List possible changes for each type of rock. (Hint: Refer to Figure 2 in your textbook for additional help.)*

	Type of Rock	May Change To	Or May Change To
9.	Igneous	magma	
10.	Sedimentary		
11.	Metamorphic	sediments	
12.	Sediments		

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

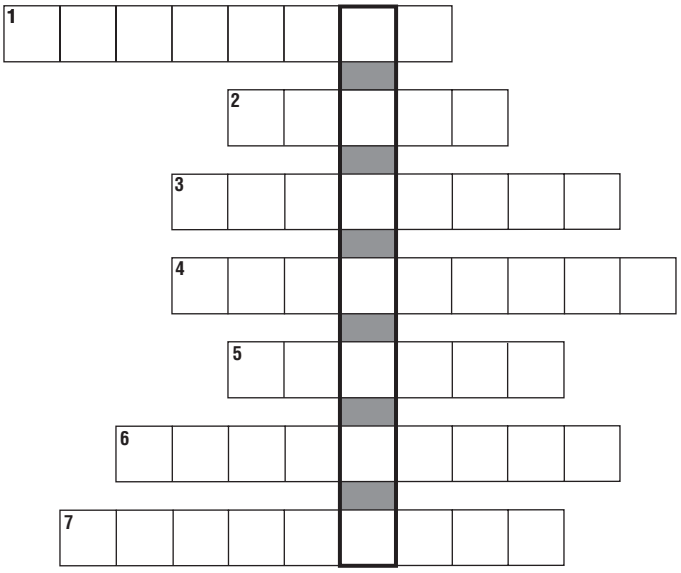
Name Date Class

SECTION 2 Study Guide

Igneous Rocks

Chapter 4

Directions: *Write the term that matches each description below on the spaces provided. The boxed letters should spell the kind of rocks that form from magma.*



1. Igneous rocks that are dense and dark-colored. They form from magma that is rich in iron and magnesium and poor in silica.
2. Thick, gooey, molten material inside a volcano or deep inside Earth
3. Igneous rocks that are light-colored and have a lower density. They form from thick, stiff magma that contains lots of silica and lesser amounts of iron and magnesium.
4. Igneous rocks that have mineral compositions between those of granitic and basaltic rocks
5. One kind of volcanic glass that has holes caused by pockets of gas
6. The kind of igneous rock that forms below Earth's surface
7. The kind of igneous rock that forms on or near Earth's surface
8. Magma forms this kind of rock. _____

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

Name Date Class

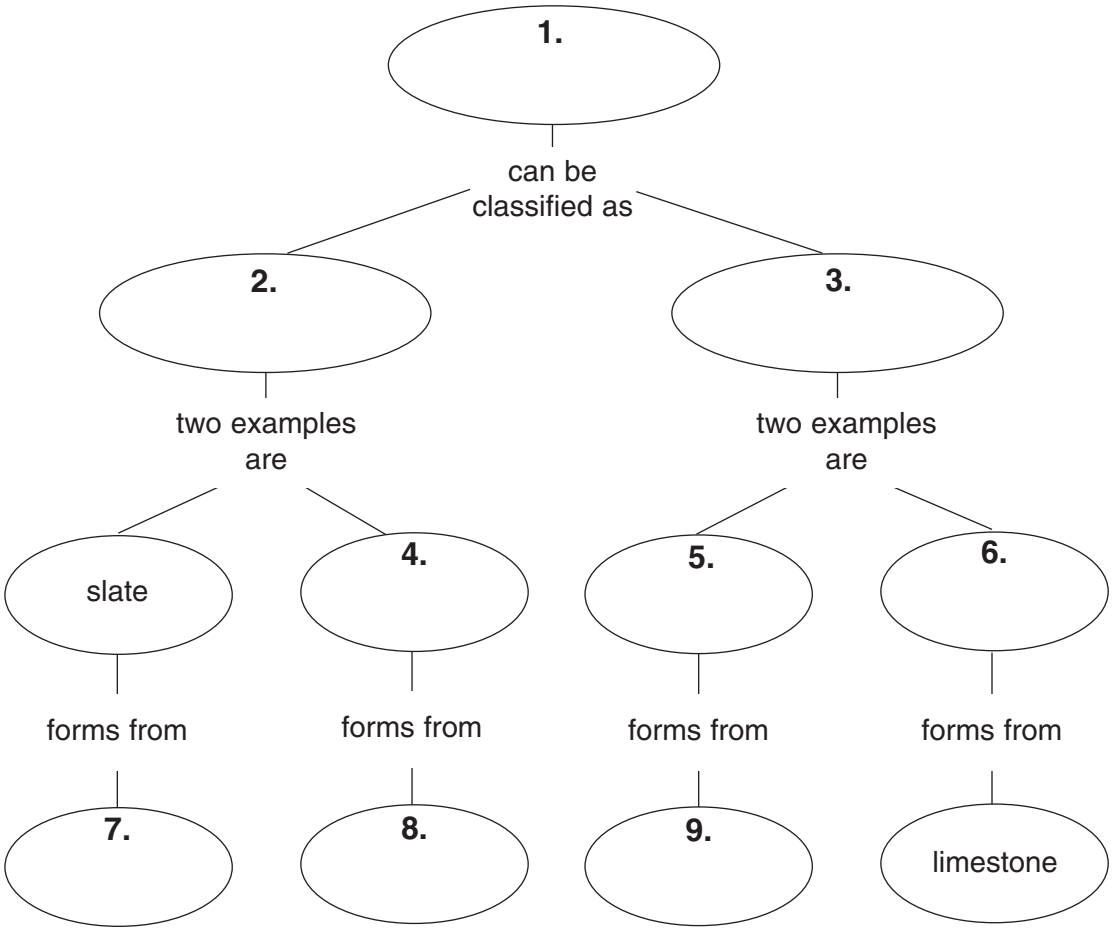
SECTION 3 Study Guide

Metamorphic Rocks

Chapter 4

Directions: *Complete the concept map using the terms below.*

metamorphic rocks	**foliated rocks**	**nonfoliated rocks**
marble	**quartzite**	**sandstone**
gneiss	**shale**	**granite**



Directions: *Write* **T** *if the statement is true. Write* **F** *if the statement is false.*

_____ **10.** Metamorphic rocks form only from igneous rocks.

_____ **11.** An igneous rock like granite can be formed into a metamorphic rock like gneiss.

_____ **12.** Heat and pressure have no effect on rocks.

_____ **13.** One type of rock, such as shale, can change into several different kinds of metamorphic rock.

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

Name Date Class

SECTION 4 Study Guide

Sedimentary Rocks

Chapter 4

Directions: *Complete the outline by filling in the blanks.*

Sedimentary Rocks

I. Materials that make up sediments

A. _____

B. _____

C. _____

II. Ways sedimentary rocks can form

A. _____

Definition: _____

_____

_____

B. _____

Definition: _____

_____

_____

C. _____

Definition: _____

_____

_____

III. Classification of sedimentary rocks

A. _____

Examples: _____

B. _____

Examples: _____

C. _____

Examples: _____

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.