Name Date Class

SECTION 1 Reinforcement

Minerals

Directions: *Use the table below and your text to answer questions 1–10.*

Rock-forming Minerals

Chemical classification	Mineral	Elements
Silicates	potassium feldspar plagioclase feldspar amphiboles pyroxenes olivine micas clay minerals quartz	K, Al, Si, O Al, Si, O, Ca, Na Mg, Fe, Ca, Na, Al, Si, O Al, Si, O, Fe, Mg, Ca, Na Mg, Fe, Si, O K, Al, Si, O, (OH), Mg, Fe Al, Si, O, (OH) Si, O
Carbonates	calcite dolomite	Ca, (CO_3) Ca, Mg, (CO_3)
Oxides	hematite	Fe, O
Sulfates	gypsum anhydrite	Ca, (SO_4), H_2O
Halides	halite	Na, Cl

1. Draw a circle around each of the minerals listed below that does **NOT** belong to the silicate family.

   plagioclase amphibole gypsum mica pyroxene calcite quartz

2. Write the names and symbols of the two elements found in all silicate minerals.

   _____ and _____

3. To which chemical classification group does dolomite belong? _____

4. Give an example of a mineral that contains the (CO_3) group. _____

5. From what element do the sulfates get their names? _____

6. Give an example of an oxide. _____

7. Which of the rock-forming mineral groups makes up the largest group of minerals in Earth's crust?

   _____

8. Which group of rock-forming minerals contains the mineral gypsum?

   _____

9. What commonly used metal is extracted from hematite? _____

10. To which chemical classification group does halite belong? _____

Meeting Individual Needs

Name Date Class

SECTION 2 Reinforcement

Mineral Identification

Directions: *In the blank at the left, put a check mark (✓) next to each statement that agrees with the textbook.*

_____ 1. The physical properties of a mineral can be seen or measured in some way.

_____ 2. The physical properties of a mineral make it possible to identify the mineral.

_____ 3. Any mineral can be identified by a careful check of one physical characteristic.

_____ 4. Hardness is a measure of how easily a mineral can be located.

_____ 5. Friedrich Mohs developed a scale which lists minerals according to their hardness.

_____ 6. Quartz will scratch a piece of copper, so quartz is harder than copper.

_____ 7. The luster of a mineral is described as metallic or nonmetallic.

_____ 8. The luster of chrome would be described as nonmetallic.

_____ 9. Color alone is not usually enough to identify a mineral.

_____ 10. When some minerals are rubbed across unglazed porcelain, they leave a streak of powdered material.

_____ 11. Graphite is a mineral that does not leave a clear streak.

_____ 12. Topaz is a mineral that does not leave a clear streak.

_____ 13. Most minerals cannot be broken.

_____ 14. Mica shows clear cleavage.

_____ 15. Quartz is a mineral with cleavage.

Directions: *Match the mineral names in Column I with the descriptions in Column II. Write the letter of the correct description in the blank at the left.*

Column I	Column II
_____ 16. magnetite	a. light yellow color; metallic luster; greenish-black streak
_____ 17. pyrite	b. light color; fingernail will scratch it; leaves thick, powdery streak
_____ 18. talc	c. black color; black streak; dull metallic luster; is attracted to magnets
_____ 19. calcite	d. yellow color; scratched by copper penny; often found in flakes
_____ 20. gold	e. glassy luster; hardness of 3

Meeting Individual Needs

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SECTION 3 Reinforcement

Uses of Minerals

Directions: *Answer the following questions on the lines provided.*

1. Why are diamonds and rubies valuable? What are minerals like these called?

2. What characteristics make gemstones beautiful?

3. Quartz crystals can be used as gems. What other more practical uses can quartz crystals have?

4. What useful material may be obtained from bauxite? What useful material may be obtained from hematite? What are bauxite and hematite called, since they produce useful materials?

5. Where are vein mineral deposits found? How did they get there?

6. What is titanium and why is it useful?

Name _____ Date _____ Class _____

Chapter Review

Minerals

Part A. Vocabulary Review

Directions: *Unscramble the terms in italics to complete the sentences below. Write the terms on the lines provided.*

_____ 1. Minerals containing silicon, oxygen, and one or more other elements are called *scatesili.*

_____ 2. A naturally occurring, inorganic, crystalline solid is a *raleinm.*

_____ 3. A durable, lightweight metal derived from minerals such as ilmenite or rutile is *minatiut.*

_____ 4. The property of a mineral that shows the color of its powder is called *skeart.*

_____ 5. The property of a mineral that shows how it reflects light is called *strule.*

_____ 6. The property of a mineral that causes it to break in a smooth, flat plane is *aceglave.*

_____ 7. The property of a mineral that causes it to break with rough or jagged edges is *tracrufe.*

_____ 8. The German scientist Friedrich Mohs developed a scale to measure the *shrandes* of minerals.

_____ 9. Valuable, rare, and beautiful minerals, called *megs,* are often used in jewelry.

_____ 10. Minerals that can be mined at a profit are called *rose.*

_____ 11. Hot, melted rock beneath the surface of Earth is called *gamma.*

_____ 12. A *calstry* is a solid with a repeating arrangement of atoms.

_____ 13. A crystal system depends upon the way *moats* line up.

_____ 14. A mineral may be composed of more than one *metelen.*

_____ 15. Mineral deposits left behind that fill in the open spaces created by weaknesses in rock formations are called *eniv* mineral deposits.

_____ 16. Most industrial diamonds and other gems are *nhetiysct.*

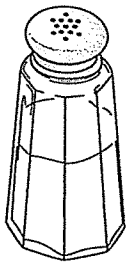
Assessment

Chapter Review (continued)

Part B. Concept Review

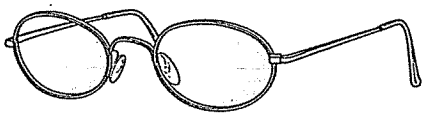
Directions: *Label each picture with the name of a mineral that is used in the object. Use the terms below.*

diamond **halite** **titanium** **graphite** **talc**

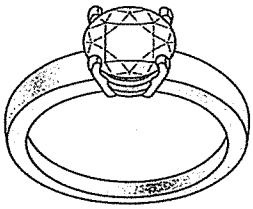


1.

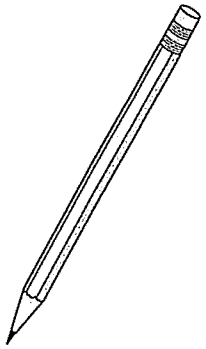
2.



3.



4.



5.

1. _____ 4. _____

2. _____ 5. _____

3. _____

Directions: *Answer the following questions on the lines provided.*

6. Explain the following statement: Every mineral is an element or a compound. Give an example of a mineral that is an element and a mineral that is a compound.

_____

_____

_____

7. Explain two ways that minerals form.

_____

_____

_____

8. List five properties that help identify minerals.

_____

_____

Assessment