

Content Practice A**Chapter 3.1 Review****LESSON 1****What is a mineral?**

Directions: On the line before each description, write the letter of the term that matches it correctly. Each term is used only once.

- | | |
|---|---------------------------------|
| _____ 1. a natural, inorganic, crystalline solid with a definite chemical composition | A. galena |
| _____ 2. 10 of the 30 common minerals | B. coral reefs |
| _____ 3. table salt | C. mineral |
| _____ 4. molten underground rock | D. native element |
| _____ 5. flows from volcanoes | E. halite |
| _____ 6. contains lead and sulfur atoms | F. rock-forming minerals |
| _____ 7. quartz and potassium feldspar | G. magma |
| _____ 8. calcite and halite | H. silicates |
| _____ 9. copper | I. lava |
| _____ 10. made from dissolved minerals | J. nonsilicates |

Key Concept Builder 

LESSON 1

What is a mineral?

Key Concept What is a mineral?

Directions: Complete this concept map by choosing terms from the word bank and writing them in the correct spaces.

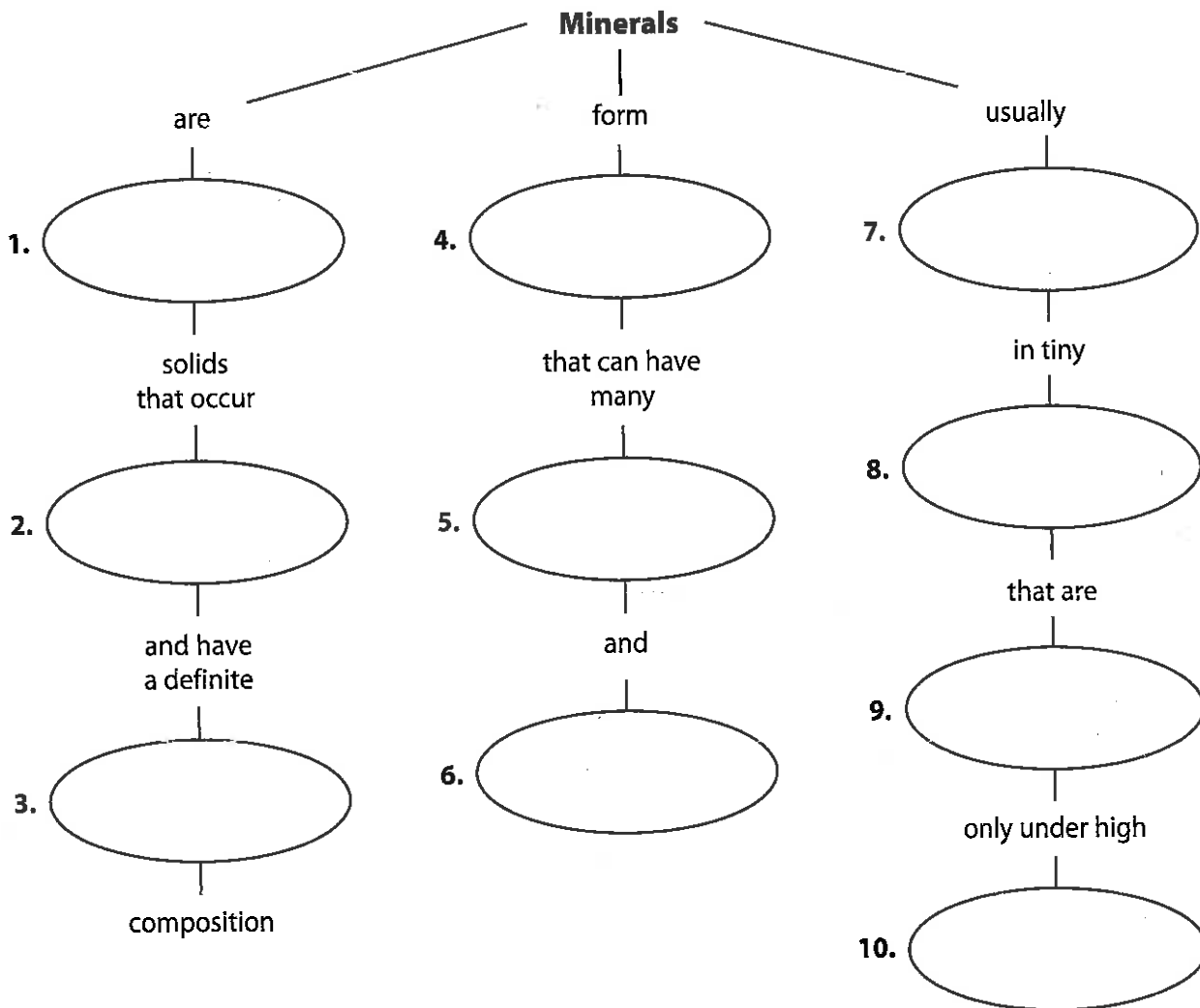
chemical
magnification

clusters
naturally

crystals
shapes

grow
sizes

inorganic
visible



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

Directions: On the line before each statement, write T if the statement is true or F if the statement is false.

- _____ 11. The angles between the lead and sulfur atoms are 90°.
- _____ 12. Scientists can examine the shapes of very small crystals using infrared images.

Key Concept Builder 

LESSON 1

What is a mineral?

Key Concept How do minerals form?

Directions: Explain how minerals form from each source in the space provided.

1. Cool solutions	2. Hot solutions
3. Magma	4. Solids

Directions: Answer each question on the lines provided.

5. What are two kinds of solid structures made by marine animals from minerals they extract from seawater?

6. How are minerals that are formed deep in Earth often brought to the surface?

7. What does the presence of large and small crystals in igneous rock indicate?

Challenge

LESSON 1

Is it a mineral?

What is the difference between a rock, a mineral, and some other substance? Minerals are the building blocks of rocks. The elements oxygen, silicon, aluminum, iron, magnesium, calcium, potassium, and sodium make up 99 percent of all minerals on Earth. Minerals are inorganic, which means they are not alive nor made of anything that once was alive. Minerals occur naturally. They are found in soil, rocks, and water, and they are not made by humans. Minerals are chemicals. For example, quartz is a mineral that is one part silicon and two parts oxygen. Silicon and oxygen are elements. Finally, minerals are usually solid crystals, which means they have a number of flat surfaces with a regular, orderly arrangement due to the way the atoms join together.

Classify

Thousands of minerals have been identified. Some are common, and some are rare and very expensive. Review the common substances in the table below. Find out whether each is a mineral and then justify your decision in the last column.

Substance	Is it a mineral? (Yes or No)	Justification
Gold		
Sugar		
Water		
Diamond		
Gypsum		
Plastic		
Ice		
Amber		
Hematite		

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