

Skills Worksheet

Chapter Review

USING KEY TERMS

1. In your own words, write a definition for the term *rock cycle*.

Complete each of the following sentences by choosing the correct term from the word bank.

stratification foliated
extrusive igneous rock texture

2. The _____ of a rock is determined by the sizes, shapes, and positions of the minerals the rock contains.
3. _____ metamorphic rock contains minerals that are arranged in plates or bands.
4. The most characteristic property of sedimentary rock is _____.
5. _____ forms plains called *lava plateaus*.

UNDERSTANDING KEY IDEAS

Multiple Choice

- _____ 6. Sedimentary rock is classified into all of the following main categories except
- a. clastic sedimentary rock.
 - b. chemical sedimentary rock.
 - c. nonfoliated sedimentary rock.
 - d. organic sedimentary rock.
- _____ 7. An igneous rock that cools very slowly has a _____ texture.
- a. foliated
 - b. fine-grained
 - c. nonfoliated
 - d. coarse-grained
- _____ 8. Igneous rock forms when
- a. minerals crystallize from a solution.
 - b. sand grains are cemented together.
 - c. magma cools and solidifies.
 - d. mineral grains in a rock recrystallize.

Chapter Review *continued*

- _____ 9. A _____ is a common structure found in metamorphic rock.
- a. ripple mark
 - b. fold
 - c. sill
 - d. layer
- _____ 10. The process in which sediment is removed from its source and transported is called
- a. deposition.
 - b. erosion.
 - c. weathering.
 - d. uplift.
- _____ 11. Mafic rocks are
- a. light-colored rocks rich in calcium, iron, and magnesium.
 - b. dark-colored rocks rich in aluminum, potassium, silica, and sodium.
 - c. light-colored rocks rich in aluminum, potassium, silica, and sodium.
 - d. dark-colored rocks rich in calcium, iron, and magnesium.

Short Answer

12. Explain how composition and texture are used by scientists to classify rocks.

13. Describe two ways a rock can undergo metamorphism.

14. Explain why some minerals only occur in metamorphic rocks.

15. Describe how each type of rock changes as it moves through the rock cycle. Make a diagram to help explain your answer.

16. Describe two ways rocks were used by early humans and ancient civilizations.

Chapter Review *continued*

CRITICAL THINKING

17. **Concept Mapping** Use the following terms to construct a concept map: *rocks, metamorphic, sedimentary, igneous, foliated, nonfoliated, organic, clastic, chemical, intrusive, and extrusive.*

Chapter Review *continued*

18. **Making Inferences** If you were looking for fossils in the rocks around your home and the rock type that was closest to your home was metamorphic, do you think that you would find many fossils? Explain your answer.

19. **Applying Concepts** Imagine that you want to quarry, or mine, granite. You have all of the equipment, but you have two pieces of land to choose from. One area has a granite batholith underneath it. The other has a granite sill. If both intrusive bodies are at the same depth, which one would be the better choice for you to quarry? Explain your answer.

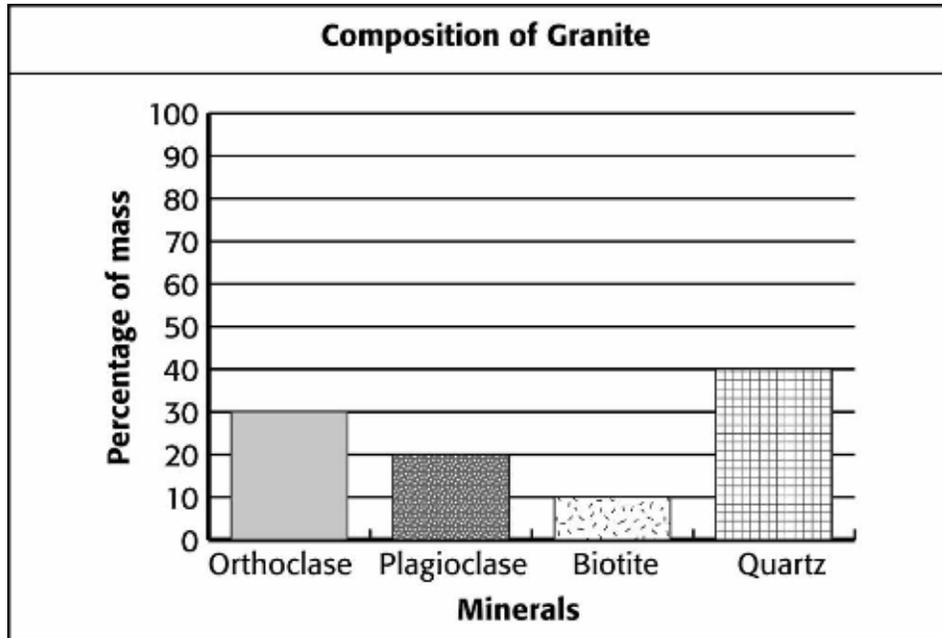
20. **Applying Concepts** The sedimentary rock coquina is made up of pieces of seashells. Which of the three kinds of sedimentary rock could coquina be? Explain your answer.

21. **Analyzing Processes** If a rock is buried deep inside the Earth, which geological processes cannot change the rock? Explain your answer.

Chapter Review *continued*

INTERPRETING GRAPHICS

The bar graph below shows the percentage of minerals by mass that compose a sample of granite. Use the graph below to answer the questions that follow.



22. Your rock sample is made of four minerals. What percentage of each mineral makes up your sample?

23. Both plagioclase and orthoclase are feldspar minerals. What percentage of the minerals in your sample of granite are not feldspar minerals?

24. If your rock sample has a mass of 10 g, how many grams of quartz does it contain?

25. Design a method other than this graph to show the percentage of each of the four minerals in your sample of granite.
