

**SECTION 5.1** *What are igneous rocks?, continued*

In your textbook, read about the mineral composition of igneous rocks.

Complete the table by filling in one of the following terms: *felsic*, *mafic*, *intermediate*, or *ultramafic*.

Description	Type of Igneous Rock
28. May be formed by fractional crystallization of olivine and pyroxene	
29. Contains moderate amounts of biotite, amphibole, and pyroxene	
30. Light-colored, high silica content, contains quartz	
31. Contains plagioclase, biotite, amphibole, pyroxene, and olivine	
32. Peridotite and dunites are examples.	
33. Dark-colored, low silica content, rich in iron and magnesium	
34. Diorite is an example.	
35. Gabbro is an example.	
36. Granite is an example.	
37. Low silica content, very high iron and magnesium content	

In your textbook, read about the grain size of igneous rocks.

Answer the following questions.

38. Does obsidian, a glassy rock, have a large grain size or a small grain size?

\_\_\_\_\_

39. Is obsidian an intrusive or extrusive igneous rock? How do you know?

\_\_\_\_\_

\_\_\_\_\_

40. How does the texture of gabbro compare to that of obsidian?

\_\_\_\_\_

\_\_\_\_\_

41. Is gabbro an intrusive or extrusive igneous rock? How do you know?

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\_\_\_\_\_

**SECTION 5.2** *Classifying Igneous Rocks, continued*

*In your textbook, read about igneous rocks as resources.*

Circle the letter of the choice that best completes the statement or answers the question.

- 12.** Igneous rocks are strong because of their
- a. temperature.
  - b. color.
  - c. water content.
  - d. interlocking grain textures.
- 13.** Which of the following is one of the most durable igneous rocks?
- a. granite
  - b. sandstone
  - c. marble
  - d. limestone
- 14.** Igneous rocks tend to be
- a. radioactive.
  - b. full of gold.
  - c. resistant to weathering.
  - d. vulnerable to weathering.
- 15.** Igneous intrusions often are associated with valuable
- a. radioactive elements.
  - b. ore deposits.
  - c. oil reservoirs.
  - d. fossil deposits
- 16.** Ore deposits sometimes are found as a(n)
- a. layered intrusion.
  - b. extrusion.
  - c. obsidian deposit.
  - d. molten rock.
- 17.** Metal-rich quartz veins are formed at the end of
- a. volcanic eruptions.
  - b. radioactive decay.
  - c. magma crystallization
  - d. the cooling of Earth's crust.
- 18.** What are pegmatites?
- a. veins of extremely large-grained minerals
  - b. magmas of differing densities
  - c. microscopic, interlocking crystal grains
  - d. small volcanoes
- 19.** What are kimberlites?
- a. felsic rocks
  - b. mafic rocks
  - c. intermediate rocks
  - d. ultramafic rocks
- 20.** Diamonds can form only
- a. under very low pressure.
  - b. under very high pressure.
  - c. above ground.
  - d. near radioactive elements.