

M O D E R N E A R T H S C I E N C E

Chapter 11

Resources and Energy

Read each statement below. If the statement is true, write *T* in the space provided. If the statement is false, write *F* in the space provided.

- _____ 1. Fossil fuels are available in limitless supplies.
- _____ 2. Energy obtained directly from heat in the earth's crust is called geothermal energy.
- _____ 3. Placer deposits are formed by contact metamorphism.
- _____ 4. The process of splitting the nucleus of a large atom into two or more smaller nuclei is called nuclear fission.
- _____ 5. Anthracite is a light-colored mineral commonly used as a gemstone.
- _____ 6. Halite, sulfur, and diamond are nonmetallic minerals used as building materials.
- _____ 7. Microorganisms that lived in ancient oceans and lakes are an important source of hydrocarbons.
- _____ 8. All of the world's energy needs could easily be met by modern wind-driven generators.
- _____ 9. Sulfur dioxide is a pollutant that is commonly produced when fossil fuels are burned.
- _____ 10. Petroleum is used to produce plastics, detergents, and some medicines and insecticides.

Choose the one best response. Write the letter of that choice in the space provided.

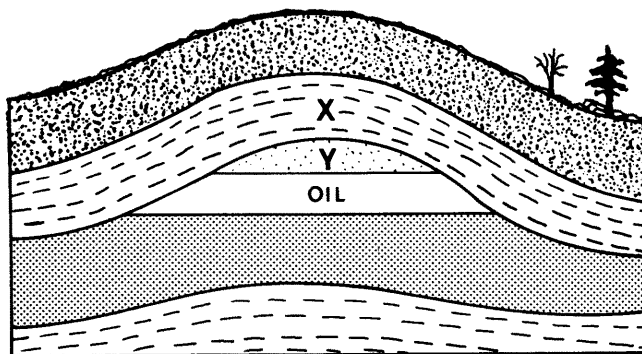
- _____ 11. Magnetite and hematite are important sources of:
- a. mercury. b. lead. c. iron. d. copper.
- _____ 12. Which of the following is produced by the process of carbonization?
- a. gold b. coal c. quartz d. cinnabar
- _____ 13. Nonmetallic minerals prized for their brilliance and color are called:
- a. metals. b. placers. c. ores. d. gemstones.

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Choose the one best response. Write the letter of that choice in the space provided.

- _____ 14. Which of the following minerals is obtained from bauxite?
- a. gold b. aluminum c. platinum d. sulfur
- _____ 15. Bituminous coal is produced when extreme pressure is applied to:
- a. lignite. b. anthracite. c. natural gas. d. crude oil.
- _____ 16. In general, the most efficient conductors of heat and electricity are:
- a. metals. b. petrochemicals.
c. gemstones. d. ores.
- _____ 17. Using a rooftop collector to capture the sun's energy is an example of:
- a. nuclear fusion. b. nuclear fission.
c. active solar heating. d. passive solar heating.
- _____ 18. Recently, scientists have focused sunlight onto liquid saltpeter in order to make use of:
- a. nuclear energy. b. geothermal energy.
c. solar energy. d. hydroelectric energy.

Use the diagram below to answer questions 19 and 20.



- _____ 19. Which of the following is most likely to be found in the layer labeled Y?
- a. gasoline b. water c. natural gas d. peat
- _____ 20. The layer labeled X is most likely composed of:
- a. lignite. b. sandstone. c. bauxite. d. shale.

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Complete each statement by writing the correct term or phrase in the space provided.

21. A narrow, fingerlike band of a mineral is called a _____ .
22. Fossil fuels are made up of compounds of carbon and hydrogen
called _____ .
23. Chromium, nickel, and lead ores commonly form underground within cooling
_____ .
24. The rock immediately above a deposit of petroleum is called a _____ .
25. Fossil fuels are found in the earth in the form of crude oil, or unrefined
_____ .
26. The sun's energy that reaches the earth is produced by the process of nuclear
_____ .
27. In the future, nuclear fusion reactors may be fueled by an almost limitless supply of hydrogen
atoms from the _____ .
28. In a geothermal generating plant, energy is produced when steam turns a
_____ .
29. Chemicals derived from petroleum are called _____ .
30. Fuel rods in a nuclear reactor are made from isotopes of the
element _____ .

Read each question or statement and answer it in the space provided.

31. Describe how substitution and recycling can be used to conserve mineral resources.
