

Chapter 3

Chapter 3, Test A

Climates of the Earth

I

MATCHING

Match each item in Column A with the items in Column B. Write the correct letters in the blanks. (4 points each)

- | | |
|---|------------------------|
| _____ 1. the earth's trip around the sun, 365 1/4 days | A. taiga |
| _____ 2. the day when the sun is directly over the Equator and the day and night are almost equal in length | B. Antarctic Circle |
| _____ 3. 23 1/2°S latitude | C. natural vegetation |
| _____ 4. a line in the Southern Hemisphere that marks the boundary of endless daylight starting on about December 22 | D. lichens |
| _____ 5. a windless area at the Equator | E. deciduous |
| _____ 6. plant life that grows in a certain area if the natural environment has not been changed by people | F. revolution |
| _____ 7. trees that lose their leaves in autumn | G. equinox |
| _____ 8. plants that grow on rocks | H. Tropic of Capricorn |
| _____ 9. heavy poles on which houses rest | I. pilings |
| _____ 10. a haze caused by the action of ultraviolet radiation from the sun on atmosphere polluted with gases from automobile exhaust | J. smog |
| | K. doldrums |
| | L. currents |
| | M. hypothesis |
| | N. weather |
| | O. temperature |

II

MULTIPLE CHOICE

In the blank at the left, write the letter of the choice that best completes the statement or answers the question. (5 points each)

- | | | |
|---|--------------------------|----------------------------------|
| _____ 11. Not all places on the earth receive the same amount of direct sunlight because of | a. volcanic eruptions. | c. the tilt of the earth's axis. |
| | b. climate. | d. precipitation. |
| _____ 12. The earth's rotation causes | a. the changing seasons. | c. earthquakes. |
| | b. day and night. | d. tsunami. |

- _____ 13. The prevailing winds in the belts of latitude between 30°N and 60°S are called westerlies because they
- are caused by the west-wind-drift ocean current.
 - are warm winds.
 - blow in a somewhat west-to-east direction.
 - blow in a somewhat east-to-west direction.
- _____ 14. The climates of places at the same latitude can be very different depending on whether there are large bodies of water nearby because
- there is much warm rain near a large body of water.
 - the sun's rays reflect off the water.
 - land elevation is generally higher.
 - water is slower to heat and to cool than land is.
- _____ 15. The world's dry climate zones include desert and
- steppe.
 - humid subtropical.
 - tropical savanna.
 - subarctic.
- _____ 16. Ice cap climate zones support no vegetation because
- there is not enough precipitation.
 - average monthly temperatures never rise above freezing.
 - there are six months of darkness.
 - there is only rocky soil.
- _____ 17. Houses in the deserts often have light-colored roofs to
- attract the sun's heat.
 - attract precipitation.
 - help the rain run off easily.
 - reflect the sun's heat.
- _____ 18. Smoke from the burning of fossil fuels reduces the amount of sunlight that reaches the ground because the particles in the smoke
- thin the ozone layer.
 - increase ultraviolet radiation.
 - scatter the sun's rays.
 - release carbon dioxide.
- _____ 19. Weather patterns prevalent in a particular area are known as
- climate.
 - doldrums.
 - temperature.
 - greenhouse effect.
- _____ 20. One explanation for the four glacial eras is
- human activity that brought about changes in the earth's atmosphere.
 - changes in the rate of the earth's rotation.
 - variations in the sun's output of energy and in the earth's orbit.
 - fluctuations in the amount of water on the earth's surface.

**ESSAY**

● Answer one of the following questions on a separate sheet of paper. (10 points)

21a. In what ways do latitude, elevation, wind, water, and landforms affect the earth's climate?

21b. In what ways have people adapted to climate?