

Assessment

Chapter Test A Chapter 19**Chapter: The Atmosphere****MATCHING**

In the space provided, write the letter of the definition that best matches the term or phrase.

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|---------------------------------|---|
| _____ 1. mercurial
barometer | a. the coldest layer of the atmosphere, in which
temperature decreases as altitude increases |
| _____ 2. mesosphere | b. all forms of energy that travel through space
as waves |
| _____ 3. convection | c. an instrument that measures atmospheric
pressure by registering the changes in the
bending or bulging of the sides of a sealed
metal container. |
| _____ 4. stratosphere | d. the uppermost layer of the atmosphere, in
which temperature increases as altitude
increases; includes the ionosphere |
| _____ 5. Coriolis effect | e. an instrument that measures atmospheric
pressure by registering changes in the level
of mercury inside a tube |
| _____ 6. thermosphere | f. a layer of the atmosphere in which
temperature increases as altitude increases;
contains the ozone layer |
| _____ 7. radiation | g. the transfer of energy as heat through a
material |
| _____ 8. aneroid
barometer | h. the lowest layer of the atmosphere, in which
temperature drops as altitude increases, and
in which weather conditions exist |
| _____ 9. conduction | i. the curving of the path of a moving object
from an otherwise straight path due to
Earth's rotation |
| _____ 10. troposphere | j. the movement of matter due to differences in
density caused by temperature variations |

Chapter Test A continued**MULTIPLE CHOICE**

In the space provided, write the letter of the answer choice that best completes each statement or best answers each question.

- _____ 11. Which of the following pairs are NOT components of the atmosphere?
a. nitrogen/oxygen c. water vapor/particulates
b. ozone/argon d. atmospheric pressure/gravity
- _____ 12. One effect of air pollution is the destruction of
a. the nitrogen cycle. c. the ozone layer.
b. photosynthesis. d. chlorofluorocarbons.
- _____ 13. Solar radiation that is not reflected back into the atmosphere is absorbed by
a. microwaves. c. radio waves.
b. surface materials. d. the Coriolis effect.
- _____ 14. Albedo is the fraction of solar radiation reaching Earth that is
a. refracted. c. reflected.
b. destroyed. d. absorbed.
- _____ 15. Which of the following do NOT make up a global wind belt?
a. trade winds c. polar easterlies
b. westerlies d. fronts
- _____ 16. Local wind patterns are affected by local conditions and
a. temperatures. c. westerlies.
b. jet streams. d. rainfall.
- _____ 17. Prevailing winds that blow throughout the contiguous United States are called
a. doldrums. c. polar easterlies.
b. westerlies. d. trade winds.
- _____ 18. Because of the Coriolis effect, an object that travels north from the equator will curve to the
a. north. c. east.
b. south. d. west.
- _____ 19. Which of the following is NOT a particulate in the atmosphere?
a. dust c. pollen
b. salt d. gases
- _____ 20. Interactions between solar radiation and the ionosphere cause
a. auroras. c. temperature inversions.
b. smog. d. scattering.

Assessment

Chapter Test B**Chapter: The Atmosphere****MATCHING**

In the space provided, write the letter of the definition that best matches the term or phrase.

- | | |
|--------------------------------|---|
| _____ 1. exosphere | a. the layer of the atmosphere in which temperature decreases as altitude increases; where weather conditions exist |
| _____ 2. stratosphere | b. the curving of the path of a moving object from an otherwise straight path due to Earth's rotation |
| _____ 3. atmospheric pressure | c. the coldest layer of the atmosphere, in which temperature decreases as altitude increases |
| _____ 4. thermosphere | d. the layer of the atmosphere in which temperature increases as altitude increases; contains the ozone layer |
| _____ 5. Coriolis effect | e. the waves that make up all forms of radiation, or solar energy |
| _____ 6. electromagnetic waves | f. the fraction of solar radiation that is reflected off the surface of an object |
| _____ 7. troposphere | g. the layer of the atmosphere in which temperature increases as altitude increases; includes the ionosphere |
| _____ 8. albedo | h. the zone of indefinite altitude, which extends thousands of kilometers above the ionosphere |
| _____ 9. scattering | i. the phenomenon that makes the sky appear blue and the sun red at sunset |
| _____ 10. mesosphere | j. the force per unit area that is exerted on a surface by the weight of the atmosphere |

Chapter Test B *continued***MULTIPLE CHOICE**

In the space provided, write the letter of the answer choice that best completes each statement or best answers each question.

- _____ 11. Temperature inversions can intensify the effect of smog when cool, polluted ground air is trapped by
- a. a front.
 - b. mountains.
 - c. the ocean.
 - d. warm air.
- _____ 12. Which processes remove water vapor from the air?
- a. evaporation and transpiration
 - b. transpiration and condensation
 - c. condensation and precipitation
 - d. precipitation and evaporation
- _____ 13. Which of the following is NOT a common source of particulates?
- a. volcanic dust
 - b. salt particles
 - c. chlorofluorocarbons
 - d. pollen
- _____ 14. Radiation whose wavelengths are among the shortest are
- a. X rays.
 - b. visible light.
 - c. infrared waves.
 - d. radio waves.
- _____ 15. About how much of the solar energy that reaches Earth is absorbed by the land, oceans, and atmosphere?
- a. 20%
 - b. 30%
 - c. 50%
 - d. 70%
- _____ 16. The warming of the surface and lower atmosphere of Earth, which occurs when carbon dioxide, water vapor, and other gases in the air absorb and radiate infrared radiation, is known as
- a. thermal heat.
 - b. electromagnetic energy.
 - c. the greenhouse effect.
 - d. radiation.
- _____ 17. In general, the Coriolis effect is noticeable only on objects that move very fast or travel
- a. long distances.
 - b. during daylight hours.
 - c. from north to south.
 - d. along a wind belt.