

Skills Worksheet

Concept Review Chapter 19

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

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|-----------------------------------|---|
| _____ 1. layers of the atmosphere | a. all forms of energy that travel through space as waves |
| _____ 2. radiation | b. prevailing winds that blow from west to east between 30° and 60° latitude in both hemispheres |
| _____ 3. conduction | c. the curving of the path of a moving object from an otherwise straight path due to Earth's rotation |
| _____ 4. convection | d. troposphere; stratosphere; mesosphere; thermosphere |
| _____ 5. Coriolis effect | e. polar easterlies meet warm air from the westerlies, creating a stormy area |
| _____ 6. global winds | f. the transfer of energy as heat through a material |
| _____ 7. trade winds | g. prevailing winds that blow from east to west between 60° and 90° latitude in both hemispheres |
| _____ 8. westerlies | h. prevailing winds that blow from 30° to 0° latitude in both hemispheres |
| _____ 9. polar easterlies | i. looping patterns of air flow, called convection cells, that move from the poles to the equator |
| _____ 10. front | j. the movement of matter due to differences in density that are caused by temperature variations; can result in the transfer of energy as heat |

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

- _____ 11. The atmosphere is a mixture of gases that surround Earth. Which of the following is NOT a gaseous component of the atmosphere?
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|-------------------|-----------------|
| a. carbon dioxide | c. particulates |
| b. argon | d. nitrogen |
- _____ 12. Atmospheric pressure presses on the liquid mercury in a well of this instrument. The mercury rises in a tube as the atmospheric pressure rises. What is this instrument?
- | | |
|------------------------|----------------------|
| a. mercurial barometer | c. aneroid barometer |
| b. altimeter | d. thermometer |

Concept Review *continued*

- _____ 13. Changes in atmospheric pressure cause the sides of this instrument to bend inward or outward. Changes are measured on a scale. What is this instrument?
- mercurial barometer
 - altimeter
 - aneroid barometer
 - thermometer
- _____ 14. All radiant energy reaches Earth as a form of
- light waves.
 - sound waves.
 - electromagnetic waves.
 - ultraviolet waves.
- _____ 15. Solar energy warms Earth when radiation is
- reflected.
 - refracted.
 - scattered.
 - absorbed.
- _____ 16. Which of the following affects local wind patterns?
- trade winds
 - local temperature variations
 - solar storms
 - season changes
- _____ 17. The gas that makes up most of Earth's atmosphere is
- oxygen.
 - argon.
 - nitrogen.
 - ozone.
- _____ 18. Which of the following are NOT particulates?
- | | |
|-------------------|-----------------|
| a. carbon dioxide | c. volcanic ash |
| b. salt particles | d. pollen |
- _____ 19. The atmospheric layer that is closest to Earth and where all weather conditions exist is the
- | | |
|-----------------|------------------|
| a. troposphere. | c. stratosphere. |
| b. mesosphere. | d. thermosphere. |
- _____ 20. The main source of air pollution is
- the nitrogen cycle.
 - temperature inversions.
 - smog.
 - the burning of fossil fuels.