

Assessment

Chapter Test A Chapter 21

Chapter: Weather

MATCHING

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

- | | |
|-------------------------------|--|
| _____ 1. radiosonde | a. a severe storm that develops over tropical oceans and has strong winds that spiral in toward the intense, low-pressure storm center |
| _____ 2. hurricane | b. an air mass characterized by cold, moist air |
| _____ 3. tornado | c. instruments carried aloft by balloons to measure upper-atmospheric conditions |
| _____ 4. maritime polar | d. an air mass characterized by warm, dry air |
| _____ 5. thunderstorm | e. a destructive, rotating column of air that has very high wind speeds and that may be visible as a funnel-shaped cloud |
| _____ 6. continental tropical | f. an instrument that measures the speed of the wind |
| _____ 7. radar | g. an air mass characterized by cold, dry air |
| _____ 8. anemometer | h. a system that uses reflected radio waves to determine the velocity and location of objects |
| _____ 9. continental polar | i. an air mass characterized by warm, moist air |
| _____ 10. maritime tropical | j. a usually brief, heavy storm that consists of rain, strong winds, lightning, and thunder |

MULTIPLE CHOICE

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

- _____ 11. When air moves slowly, it takes on the temperature and humidity of its region, becoming a(n)
- | | |
|--------------------|-----------------|
| a. occluded front. | c. air mass. |
| b. hurricane. | d. storm surge. |
- _____ 12. When a bend forms in a cold front, it begins the process of forming an area of low pressure with rotating winds that move toward the rising air of the central low-pressure region. This storm is called a(n)
- | |
|-------------------------|
| a. midlatitude cyclone. |
| b. occluded front. |
| c. anticyclone. |
| d. stationary front. |

Chapter Test A *continued*

- _____ 13. Meteorologists do NOT use supercomputers for
- storing weather data.
 - controlling weather.
 - solving mathematical equations.
 - storing records for quick retrieval.
- _____ 14. Which of the following is NOT a type of air mass?
- maritime continental
 - continental polar
 - maritime polar
 - continental tropical
- _____ 15. What do weather centers all over the world do with the information they collect?
- use it only for local forecasts
 - sell it to other nations
 - destroy it
 - exchange it with other centers
- _____ 16. What do scientists use to convey information on a weather map?
- computer codes
 - states and capitals
 - colors and symbols
 - global and regional data
- _____ 17. Which of the following does NOT measure lower-atmospheric weather conditions?
- | | |
|---------------|----------------|
| a. radiosonde | c. thermometer |
| b. barometer | d. wind vane |
- _____ 18. Meteorologists have NOT tried to control
- | | |
|-------------------|----------------|
| a. precipitation. | c. hurricanes. |
| b. winds. | d. lightning. |
- _____ 19. What do meteorologists use to help them make forecasts from data they have input into computers?
- | | |
|---------------|--------------------|
| a. altimeters | c. weather maps |
| b. barometers | d. computer models |
- _____ 20. Storms along a cold front are usually short-lived and sometimes violent, while storms along a warm front
- are short-lived and weak.
 - produce precipitation over a large area and are occasionally violent.
 - are narrow, produce little rain, and are always violent.
 - are long-lived but always weak.

Assessment

Chapter Test B**Chapter: Weather****MATCHING**

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

- | | |
|------------------------------|---|
| _____ 1. hurricane | a. a usually brief, heavy storm that brings rain, strong winds, lightning, and thunder |
| _____ 2. midlatitude cyclone | b. a line of thunderstorms that forms as a cold air mass overtakes a warm air mass |
| _____ 3. tornado | c. an area of low pressure characterized by rotating wind that moves toward the rising air of the central low-pressure region |
| _____ 4. squall line | d. a severe storm that originates over tropical seas with strong winds that spiral in toward an intense low-pressure center |
| _____ 5. anticyclone | e. a destructive, rotating column of air that has very high wind speeds and that may be visible as a funnel-shaped cloud |
| _____ 6. thunderstorm | f. a weather event in which air sinks and flows outward from a center of high pressure, with winds circulating clockwise in the Northern Hemisphere |

MULTIPLE CHOICE

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

- _____ 7. One weather event that scientists have NOT tried to control is
- | | |
|-------------------|----------------|
| a. lightning. | c. tornadoes. |
| b. precipitation. | d. hurricanes. |
- _____ 8. Which of the following is NOT a main type of air mass?
- | | |
|-------------------------|-------------------------|
| a. continental polar | c. maritime polar |
| b. continental tropical | d. midlatitude tropical |
- _____ 9. All the following instruments measure lower atmospheric conditions EXCEPT
- | | |
|-----------------|-----------------|
| a. radiosondes. | c. barometers. |
| b. wind vanes. | d. anemometers. |

Chapter Test B *continued*

- _____ 10. An instrument package that is carried high into the atmosphere by a helium-filled weather balloon to measure relative humidity, air pressure, and air temperature is called a(n)
- a. forecaster.
 - b. radiosonde.
 - c. radar.
 - d. anemometer.
- _____ 11. An air mass that originates in Canada and brings dry, cold weather is classified as
- a. continental polar.
 - b. continental tropical.
 - c. maritime polar.
 - d. maritime tropical.
- _____ 12. An air mass that originates in the Pacific or Atlantic Ocean and brings warm, moist air to a region is classified as
- a. continental polar.
 - b. continental tropical.
 - c. maritime polar.
 - d. maritime tropical.
- _____ 13. A system that uses reflected radio waves to determine the velocity and location of objects is called
- a. radiosonde.
 - b. radar.
 - c. a weather satellite.
 - d. a supercomputer.
- _____ 14. An air mass that originates in the southwestern United States and brings dry, warm air to a region is classified as
- a. continental polar.
 - b. continental tropical.
 - c. maritime polar.
 - d. maritime tropical.
- _____ 15. When a fast-moving cold front overtakes a warm front and lifts the warm air mass off the ground completely, it is called a(n)
- a. occluded front.
 - b. warm front.
 - c. stationary front.
 - d. cold front.
- _____ 16. An air mass that originates in the Pacific or Atlantic Ocean and brings cold, moist air to a region is classified as
- a. continental polar.
 - b. continental tropical.
 - c. maritime polar.
 - d. maritime tropical.