

Section: Air Masses and Fronts

1. What causes changes in the weather?

2. What is a large body of air that has similar temperature and moisture throughout called?

AIR MASSES

- _____ 3. What are the two main characteristics of air masses?

- a. density and moisture
- b. mass and temperature
- c. moisture content and temperature
- d. shape and mass

4. On weather maps, a two-letter symbol system is used to describe the characteristics of each air mass. Give the four letters used in this system, and tell what each letter represents.

5. Name three places where polar air masses form and cause cold winter weather in the United States.

6. Which warm air mass that influences the weather in the United States develops over land?

7. Which air masses cause the hurricanes and thunderstorms that occur on the East Coast and in the Midwest?

DR 16-2 *continued*

FRONTS

- _____ 8. What usually happens when two types of air masses meet?
- Cold air rises.
 - Warm air rises.
 - The masses disappear.
 - Air from the two masses mixes together.
9. The boundary between air masses of different densities and usually different temperatures is called a(n) _____.

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|---|---------------------|
| _____ 10. A warm air mass moves over a cold, denser air mass. | a. cold front |
| _____ 11. A warm air mass is caught between two colder air masses. | b. warm front |
| _____ 12. A cold air mass meets a warm air mass but the two remain separated. | c. occluded front |
| _____ 13. A cold air mass moves under a warm, less dense air mass. | d. stationary front |

14. Describe the typical weather brought by each front below.

Cold front: _____

Warm front: _____

Occluded front: _____

Stationary front: _____

AIR PRESSURE AND WEATHER

15. An area in the atmosphere that has lower pressure than the surrounding areas, with winds spiraling toward the center, is called a(n) _____

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16. The rotation of air around a high-pressure center is called a(n)

17. How are cyclones formed?

18. How does a cyclone affect the weather?

19. How does an anticyclone affect the weather?

