

Sample Quiz 4

Multiple Choice

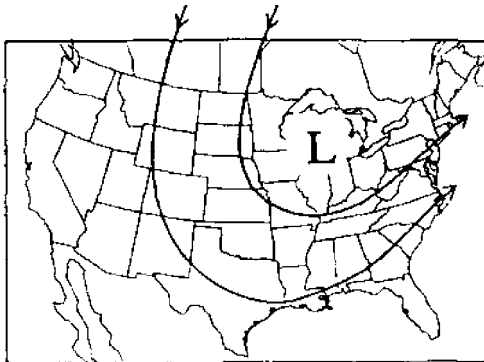
Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. The nighttime counterpart of the sea breeze circulation is called a
 - a. chinook.
 - b. Santa Ana.
 - c. land breeze.
 - d. night breeze.
 - e. foehn.
- _____ 2. The majority of the United States lies within a _____ wind belt.
 - a. westerly
 - b. easterly
 - c. northerly
 - d. southerly
- _____ 3. In the 3-cell model, converging surface winds and rising air motions are found at
 - a. the equator and 30° latitude.
 - b. the equator and 60° latitude.
 - c. 30° latitude and 60° latitude.
 - d. 30° latitude and the poles.
- _____ 4. The polar jet stream is strongest and moves furthest south in the
 - a. winter.
 - b. spring.
 - c. summer.
 - d. fall.
- _____ 5. Average winter temperatures in Great Britain and Norway would probably be much colder if it were not for the
 - a. Labrador current.
 - b. North Atlantic Drift.
 - c. Canary current.
 - d. North Equatorial current.
 - e. Greenland current.
- _____ 6. The ocean current that flows southward parallel to the west coast of North America is the
 - a. Aleutian current.
 - b. California current.
 - c. Gulf Stream.
 - d. Baja Drift.
- _____ 7. The slowing of the wind due to the *random motion* of air molecules is called
 - a. eddy viscosity
 - b. mechanical turbulence
 - c. molecular viscosity
 - d. convective turbulence

Name: _____

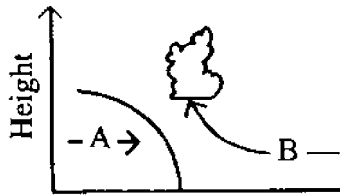
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- _____ 8. The wind's speed generally increases with height above the earth's surface because
- only the lowest layer of air rotates with the earth
 - air temperature normally decreases with height
 - wind instruments are not accurate at the earth's surface
 - friction with the earth's surface slows the air near the ground
 - air parcels expand and become less dense as they rise above the surface
- _____ 9. Compared to an mP air mass, mT air is
- warmer and drier.
 - warmer and moister.
 - colder and drier.
 - colder and moister.
- _____ 10. The greatest contrast in both temperature and moisture will occur along the boundary separating which air masses?
- cP and cT
 - mP and mT
 - mP and cT
 - mT and cP
 - cT and mT
- _____ 11. The air mass with the highest actual water vapor content is
- mT.
 - cT.
 - mP.
 - cP.
- _____ 12. The upper air flow on the map below would bring _____ air masses into western Canada and the United States and _____ air masses into the eastern United States.



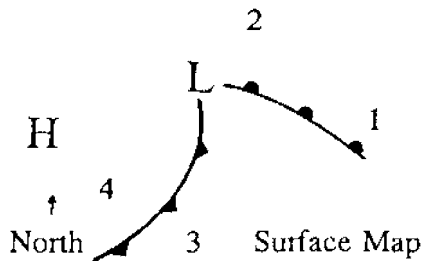
- mP, mT
 - cA, mP
 - mP, cP
 - cA, mT
 - cT, mT
- _____ 13. What type of air mass would be responsible for daily afternoon thunderstorms along the Gulf Coast?
- mP
 - mT
 - cP
 - cT

- ____ 14. Cumuliform cloud development would be most likely in which of the following?
- cT air mass moving over a mountain range
 - cP air mass moving over warm water
 - mT air mass moving over cold land surface
 - cT air mass moving over cold water
- ____ 15. Which of the following is not correct concerning a cold front?
- it marks the position of a trough of low pressure
 - it marks a zone of shifting winds
 - it is colored purple on a weather map
 - it has cold air behind it
- ____ 16. The below diagram represents a side view of



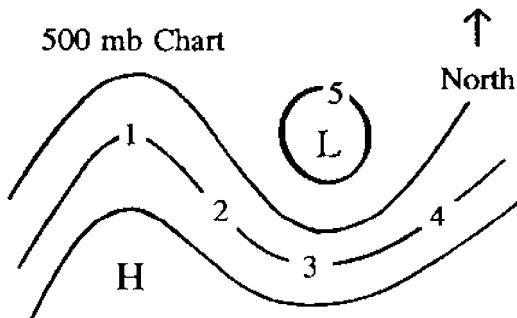
- a cold front.
- a warm front.
- an occluded front.
- a stationary front.

Surface Weather Map



- ____ 17. Refer to the Surface Weather Map. Clearing skies are most likely at position
- 1.
 - 2.
 - 3.
 - 4.
- ____ 18. Refer to the Surface Weather Map. Which position is located in the warm sector?
- 1
 - 2
 - 3
 - 4

- ____ 19. A stationary front does not move because
- winds on both sides of the front are calm.
 - the winds blow parallel to the front.
 - the front is between high and low pressure.
 - the winds blow against each other and are of equal strength.
- ____ 20. According to the model of the life cycle of a wave cyclone, the storm system is normally most intense
- as a frontal wave.
 - as an open wave.
 - as a stationary wave.
 - when the system first becomes occluded.

Exhibit 8-2

- ____ 21. Refer to Exhibit 8-2. A developing wave cyclone would most likely be found below
- 1.
 - 2.
 - 3.
 - 4.
 - 5.
- ____ 22. The type of weather system known as a 'mid-latitude cyclone' cannot form over the tropical ocean because
- surface temperature contrasts are not large
 - the ocean surface has a lot of waves
 - the Coriolis force is weak in the tropics
 - both (a) and (b)
 - both (a) and (c)

Sample Quiz 4
Answer Section

MULTIPLE CHOICE

1. ANS: C
2. ANS: A
3. ANS: B
4. ANS: A
5. ANS: B
6. ANS: B
7. ANS: C
8. ANS: D
9. ANS: B
10. ANS: D
11. ANS: A
12. ANS: D
13. ANS: B
14. ANS: B
15. ANS: C
16. ANS: A
17. ANS: D
18. ANS: C
19. ANS: B
20. ANS: D
21. ANS: D
22. ANS: E