

1. Which weather conditions are most probable when the moisture content of the air increases, resulting in a lower atmospheric pressure?

- (1) sunny and fair
- (2) cold and windy
- (3) partly cloudy, with skies becoming clear
- (4) cloudy, with a chance of precipitation

2. Which gas in the atmosphere has the most influence on day-to-day weather changes?

- (1) ozone
- (2) oxygen
- (3) water vapor
- (4) carbon dioxide

3. Which atmospheric condition will cause the greatest amount of evaporation from the surface of a lake?

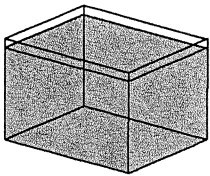
- (1) calm, dry, cold
- (2) moist, cold, windy
- (3) calm, moist, hot
- (4) dry, hot, windy

4. All of the glass containers shown below contain the same amount of water and are receiving the same amount of heat energy. In a given amount of time, the most water will evaporate from which container?

(1)



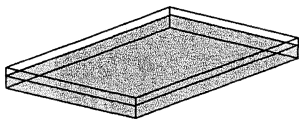
(2)



(3)



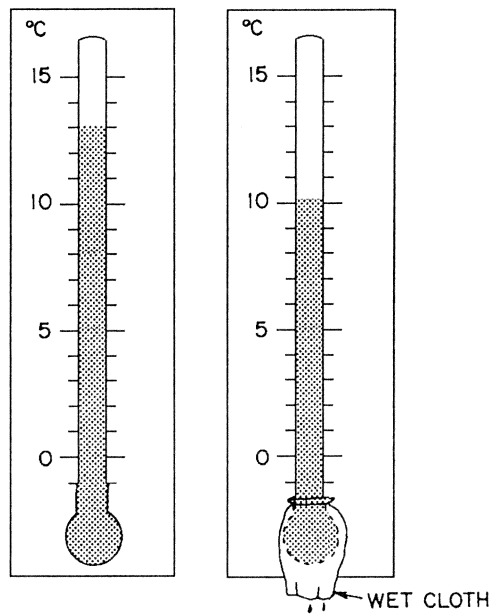
(4)



5. Two identical towels are hanging on a clothesline in a sunny location. One towel is wet, the other is dry. What is one reason that the wet towel feels cooler than the dry towel?

- (1) Water in the wet towel is evaporating.
- (2) Water in the wet towel prevents absorption of heat energy.
- (3) The dry towel receives more heat energy from the Sun than the wet towel does.
- (4) The dry towel has more room for heat storage than the wet towel does.

6. The two thermometers below show the dry-bulb and wet-bulb temperatures of the air.



What is the approximate dewpoint temperature of the air?

- (1) -25°C
- (2) 7°C
- (3) 3°C
- (4) 4°C

7. The relative humidity is 100% when

- (1) the atmosphere is relatively dry
- (2) the air is at its saturated vapor pressure
- (3) the air pressure is high
- (4) transpiration equals evaporation

8. The table below shows dry-bulb and wet-bulb temperature readings taken at four different locations, *A*, *B*, *C*, and *D*.

Location	Dry-Bulb Temperature (°C)	Wet-Bulb Temperature (°C)
A	13	9
B	18	15
C	23	21
D	28	27

Which location has the lowest relative humidity?

- (1) *A* (3) *C*
(2) *B* (4) *D*
9. What is the approximate dewpoint temperature when the dry-bulb temperature is 24°C and the wet-bulb temperature is 18°C?
(1) 6°C (3) 14°C
(2) 12°C (4) 17°C
10. When the dry-bulb reading of a thermometer is 20°C and the wet-bulb reading is 11°C, the relative humidity is approximately
(1) 17% (3) 33%
(2) 30% (4) 55%

11. A student used a sling psychrometer to measure the humidity of the air. If the relative humidity was 65% and the dry-bulb temperature was 10°C, what was the wet-bulb temperature?
(1) 5°C (3) 3°C
(2) 7°C (4) 10°C
12. When a person leaves the ocean after swimming on a windy day, the person usually feels cold because
(1) water evaporates from the skin
(2) water condenses on the skin
(3) salt is absorbed through the skin
(4) radiation is absorbed through the skin
13. Liquid water will continue to evaporate from the Earth's surface, increasing the amount of atmospheric water vapor, until
(1) transpiration occurs
(2) the relative humidity falls below 50%
(3) the atmosphere becomes saturated
(4) the temperature of the atmosphere becomes greater than the dewpoint temperature
14. When would the water in a Georgia pond evaporate fastest?
(1) in January, when the pond is frozen
(2) in March, when the pond ice is melting
(3) in May on a calm, sunny day
(4) in July on a hot, windy day