

Wrong answer

### Question 1

0 / 1 pts

What is the average rate of temperature change associated with a change in altitude?

- ☒ 3°F per 1,000 feet
- ☐ 3.5°C per 1,000 feet
- ☐ 4°C per 1,000 feet
- ☒ 2°C per 1,000 feet

Correct answer

### Question 2

1 / 1 pts

True/False. When air rises, it expands to a larger volume. As the distance between molecules increases, the temperature of the air lowers. As a result, when a parcel of air rises, pressure decreases, volume increases, and temperature decreases. When air descends, pressure increases, volume decreases, and temperature goes up.

- ☒ True
- ☐ False

Wrong answer

### Question 3

0 / 2 pts

What two processes add water vapor to the atmosphere?

- ☐ Melting
- ☐ Freezing
- ☒ Sublimation
- ☒ Condensation
- ☐ Deposition
- ☐ Evaporation

Wrong answer

### Question 4

0 / 1 pts

At what height above the ground would you expect to find the base of the clouds if the surface temperature is 65°F and the surface dewpoint is 56°F? \_\_\_\_\_ feet AGL

- ☐ 1,000ft
- ☒ 3,000ft
- ☐ 2,000ft

### Question 5

1 / 4 pts

Refer to the attached image. Identify the clouds in the following photos.

[Scanned Documents.pdf](#) ↓

✓ A

Cirrus ▼

✗ B

Stratus ▼

Alto cumulus

✗ C

Towering Cumulus ▼

Stratus

✗ D

Alto cumulus ▼

Towering Cumulus

Correct answer

### Question 6

True/False. Advection fog normally occurs when the wind is calm.

☐ True

☒ False

Correct answer

### Question 7

What must happen for a cloud to precipitate?



☐ need unstable air

☐ need temperature to be cold

☒ particles must grow in size until they can no longer be supported by the atmosphere





### Question 8

What is the difference between rain and rain showers?

- ☐ rain showers covers wider surface areas
-  ☐ rain showers change intensity, and stop suddenly
-  ☒ rain is steady and stops gradually
- ☐ rain is heavier

### Question 9

Select the characteristics of a stable airmass.

- ☐ microbursts
-  ☒ stratiform clouds
- ☐ cirrus clouds
-  ☒ smooth air
- ☐ rising air
- ☐ clear visibility
-  ☐ steady rain
- ☐ lenticular clouds
-  ☒ restricted visibility

### Question 10

1 / 3 pts

Match the following fronts with the weather characteristics you would expect to see as the front approaches.

✓ Warm front

Stratus clouds, fog, light to mc ▼

✗ Cold front

Nimbostratus clouds, light to l ▼

towering cumulus clouds, short  
periods of showers, fair visibility in  
haze, high dewpoint

✗ Occluded front

towering cumulus clouds, shoi ▼

Nimbostratus clouds, light to heavy  
precipitation, poor visibility in  
precipitation, steady dewpoint

Correct answer

### Question 1

1 / 1 pts

What is the average rate of temperature change associated with a change in altitude?

- ☒ 2°C per 1,000 feet
- ☐ 3°F per 1,000 feet
- ☐ 4°C per 1,000 feet
- ☐ 3.5°C per 1,000 feet

Correct answer

### Question 2

1 / 1 pts

True/False. When air rises, it expands to a larger volume. As the distance between molecules increases, the temperature of the air lowers. As a result, when a parcel of air rises, pressure decreases, volume increases, and temperature decreases. When air descends, pressure increases, volume decreases, and temperature goes up.

- ☒ True
- ☐ False

Correct answer

### Question 3

2 / 2 pts

What two processes add water vapor to the atmosphere?

☐ Condensation

☐ Deposition

☐ Freezing

☐ Melting

☒ Sublimation

☒ Evaporation

Correct answer

### Question 4

1 / 1 pts

At what height above the ground would you expect to find the base of the clouds if the surface temperature is 65°F and the surface dewpoint is 56°F? \_\_\_\_\_ feet AGL

☐ 1,000ft

☒ 2,000ft

☐ 3,000ft



Correct answer

### Question 5

4 / 4 pts

Refer to the attached image. Identify the clouds in the following photos.

[Scanned Documents.pdf](#) 

✓ A

Cirrus



✓ B

Alto cumulus



✓ C

Stratus



✓ D

Towering Cumulus



Correct answer

### Question 6

1 / 1 pts

True/False. Advection fog normally occurs when the wind is calm.

☐ True

✓ ☒ False

Correct answer

### Question 7

1 / 1 pts

What must happen for a cloud to precipitate?

- ☒ particles must grow in size until they can no longer be supported by the atmosphere
- ☐ need unstable air
- ☐ need temperature to be cold

Correct answer

### Question 8

2 / 2 pts

What is the difference between rain and rain showers?

- ☐ rain showers covers wider surface areas
- ☐ rain is heavier
- ☒ rain is steady and stops gradually
- ☒ rain showers change intensity, and stop suddenly

Correct answer

### Question 9

Select the characteristics of a stable airmass.

☒ ☒ restricted visibility

☒ ☒ smooth air

☐ rising air

☐ clear visibility

☐ microbursts

☐ lenticular clouds

☒ ☒ stratiform clouds

☒ ☒ steady rain

☐ cirrus clouds

Correct answer

### Question 10

3 / 3 pts

Match the following fronts with the weather characteristics you would expect to see as the front approaches.

✓ Warm front

Stratus clouds, fog, light to mc ▼

✓ Cold front

towering cumulus clouds, shor ▼

✓ Occluded front

Nimbostratus clouds, light to l ▼