

A

Thermosphere



Troposphere



B

Troposphere



Stratosphere



C

Mesosphere



D

Stratosphere



Thermosphere

Wrong answer

## Question 2

Which layer of the atmosphere contains most of the Earth's weather?

- ☒ Troposphere
- ☒ Thermosphere
- ☐ Mesosphere
- ☐ Stratosphere

Wrong answer

## Question 3

Which of the following describe the atmospheric convection process?

- ☒ Cooler air becomes less dense
- ☐ Cooler air expands
- ☒ Heated air becomes more dense
- ☒ Heated air expands
- ☐ Heated air becomes less dense

Wrong answer

#### Question 4

True/False. The unequal heating of the earth's surface is the primary cause of changing altimeter settings between weather reporting points

 ☐ True

 ☒ False

Correct answer

#### Question 5

True/False. Closely spaced isobars on a weather map is an indicator of light surface winds.

☐ True

 ☒ False

Wrong answer

### Question 6

0 / 3 pt

What three factors affect the amount of deflection caused by Coriolis force?

- ☒ speed of the object
- ☐ position on the earth's surface (latitude)
- ☒ direction of flight
- ☐ distance traveled
- ☒ weight of the aircraft

Wrong answer

### Question 7

0 / 1 pt

True/False. In the upper atmosphere, pressure gradient force and Coriolis force cause wind to flow roughly parallel to the isobars. However, within approximately 2,000 feet of the ground, friction caused by the earth's surface slows the movement of air. This reduces the effect of Coriolis force and causes the pressure gradient force to divert the wind toward the lower pressure area.

- ☐ True
- ☒ False

## Question 8

0 / 4 pts

Match the following types of breezes with the most appropriate descriptor.

✖ Sea Breeze

Occurs at night as land cools f ▼

Occurs during the day as the sun  
warms the land

✖ Land Breeze

Occurs during the day as the s ▼

Occurs at night as land cools faster  
than water

✖ Valley Breeze

Occurs during the day as the s ▼

Occurs during the day as the sun  
warms mountain slopes

✖ Mountain Breeze

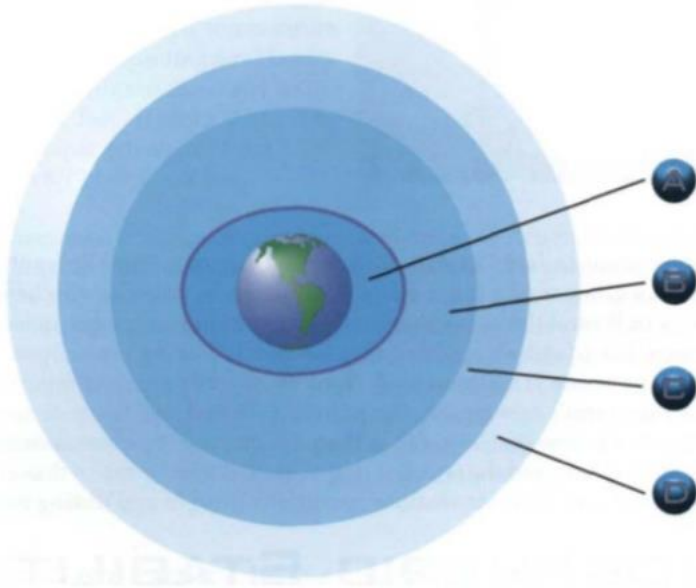
Occurs during the day as the s ▼

Occurs at night as the high terrain  
cools (relative to air over the valley)

## Question 1

4 / 4 pts

Identify the four major layers of the atmosphere depicted in the accompanying illustration.



✓ A

Troposphere



✓ B

Stratosphere



✓ C

Mesosphere



✓ D

Thermosphere



Correct answer

### Question 2

Which layer of the atmosphere contains most of the Earth's weather?

☐ Thermosphere

☒ Troposphere

☐ Stratosphere

☐ Mesosphere

Correct answer

### Question 3

Which of the following describe the atmospheric convection process?

☐ Heated air becomes more dense

☐ Cooler air expands

☐ Cooler air becomes less dense

☒ Heated air expands

☒ Heated air becomes less dense

Correct answer

#### Question 4

1 / 1 pts

True/False. The unequal heating of the earth's surface is the primary cause of changing altimeter settings between weather reporting points



☒ True

☐ False

Correct answer

#### Question 5

1 / 1 pts

True/False. Closely spaced isobars on a weather map is an indicator of light surface winds.

☐ True



☒ False



Correct answer

### Question 6

3 / 3 pts

What three factors affect the amount of deflection caused by Coriolis force?

- ☒ speed of the object
- ☒ distance traveled
- ☒ position on the earth's surface (latitude)
- ☐ direction of flight
- ☐ weight of the aircraft

Correct answer

### Question 7

1 / 1 pts

True/False. In the upper atmosphere, pressure gradient force and Coriolis force cause wind to flow roughly parallel to the isobars. However, within approximately 2,000 feet of the ground, friction caused by the earth's surface slows the movement of air. This reduces the effect of Coriolis force and causes the pressure gradient force to divert the wind toward the lower pressure area.

- ☒ True
- ☐ False

Correct answer

### Question 8

4 / 4 pts

Match the following types of breezes with the most appropriate descriptor.

✓ Sea Breeze

Occurs during the day as the s ▼

✓ Land Breeze

Occurs at night as land cools f ▼

✓ Valley Breeze

Occurs during the day as the s ▼

✓ Mountain Breeze

Occurs at night as the high ter ▼