



Elements of meteorology

Question 1

Clouds can form in the atmosphere because cold air cannot hold as much moisture (water vapor) as warm air can hold.

TRUE FALSE

Question 2

The air flowing around the low pressure center of a large storm rotates

- a) cyclonically in both hemispheres.
- b) anti-cyclonically in both hemispheres.
- c) cyclonically in the northern hemispheres and anti-cyclonically in the southern hemisphere.
- d) anti-cyclonically in the northern hemisphere and cyclonically in the southern hemisphere.

Question 3

The greenhouse effect causes the surface of the earth to be warmer than it would have been in the absence of an atmosphere, because

- a) the atmosphere behaves like a greenhouse.
- b) the atmosphere works like a blanket.
- c) the greenhouse gases trap heat.
- d) the surface is warmed by radiation from both the air and the sun.

Question 4

The basic cause of the greenhouse effect is

- a) the burning of fossil fuels.
- b) forest clearing in the Amazon.
- c) both of the above.
- d) none of the above.

Question 5

What is the stability of a parcel of air which is buoyant?

- a) stable
- b) unstable
- c) neutral
- d) undefined

Question 6

If you were looking down at earth from a weather satellite and your eyes could see in the infrared portion of the spectrum (say, from 8 - 12 micrometer wavelength), then the warmest things (earth's surface) would appear brightest (white), and the coldest things (high clouds) would appear darkest (black).

- TRUE FALSE

Question 7

The blue of the sky is caused when sunlight is scattered primarily by

- a) dust.
- b) nitrogen and oxygen.
- c) water vapor
- d) ozone

Question 8

Water draining from a bathtub or sink rotates

- a) clockwise in the northern and counter-clockwise in the southern hemisphere.
- b) counter-clockwise in the northern and clockwise in the southern hemisphere.
- c) cyclonically in both hemispheres.
- d) in a direction unrelated to the hemisphere.

Question 9

A mirage is an optical illusion.

TRUE FALSE

Question 10

On the (primary) rainbow, red is seen

- a) on the inside of the bow.
- b) on the outside of the bow.
- c) in the middle (between the other colors) of the bow.
- d) it varies from storm to storm.