

Name:

Date:

Class:

Lesson 14.4: Influence of Climate on Agriculture

Know and Understand

Answer the following questions using the information provided in this lesson.

1. What is the term for the average temperature, precipitation, wind, and humidity of an area over a long period? (14.4.1)
 - A. Weather
 - B. Humidity
 - C. Climate
 - D. Atmosphere

Answer:

2. How is weather related to climate? (14.4.1)
 - A. The average daily weather over long periods makes up a region's climate.
 - B. Weather includes precipitation, but climate only includes temperature.
 - C. Weather includes temperature, but climate only includes precipitation.
 - D. Weather and climate are the same phenomenon.

Answer:

3. Which of the following is not one of the four factors that influence the climate of an area? (14.4.2)
 - A. Latitude
 - B. Altitude
 - C. Terrain
 - D. Rainfall

Answer:

4. Why do some areas of Earth receive more sunlight than other areas? (14.4.2)
 - A. Part of Earth is always shadowed.

- B. Areas near the equator receive more direct sunlight and thus more heat than polar regions.
- C. Some areas of Earth may be covered with clouds that reflect sunlight into space.
- D. All are correct.

Answer:

5. *True or False?* The seasons in the southern hemisphere are somewhat opposite those in the northern hemisphere and are generally much milder. (14.4.2)

Answer:

6. A warm air mass forms when it is formed _____. (14.4.2)

- A. near the equator
- B. over a warm ocean
- C. over land
- D. Both A and B.

Answer:

7. A cold air mass forms when it is formed _____. (14.4.2)

- A. over the Arctic
- B. over the equator
- C. over cool, dry land
- D. All are correct.

Answer:

8. How do jet streams affect the weather patterns on Earth? (14.4.2)

- A. Jet streams cool the planet.
- B. Jet streams move air masses and fronts around the globe.
- C. Jet streams dry the land after hurricanes and thunderstorms.
- D. All are correct.

Answer:

9. How does the cooling of air blowing across a mountain range affect the precipitation on the mountain? (14.4.2)
- A. The rising air warms as it passes over a mountain, releasing moisture.
 - B. The rising air cools as it passes over a mountain, releasing moisture.
 - C. The rising air becomes lighter and cannot hold moisture.
 - D. The rising air becomes heavier and can hold more moisture.

Answer:

10. What is the moderating effect of large bodies of water on nearby land? (14.4.2)
- A. Large bodies of water reflect sunlight back into the atmosphere, therefore reducing the greenhouse effect.
 - B. Large bodies of water produce wind that cools nearby land, especially if trees are present for shading.
 - C. Large bodies of water absorb and store much of the sun's solar heat energy in warm periods and release it in cold ones.
 - D. All are correct.

Answer:

11. How does the greenhouse effect help Earth? (14.4.3)
- A. It prevents Earth from becoming a very cold planet.
 - B. It reduces pollution through solar radiation.
 - C. It traps the sun's energy from escaping into the atmosphere.
 - D. It creates precipitation in the form of rainfall and snowfall.

Answer:

12. How does the greenhouse effect harm Earth? (14.4.3)
- A. It causes global cooling.
 - B. It is causing Earth's temperature to rise.
 - C. It is causing severe geological events, such as earthquakes and volcanic eruptions.
 - D. All are correct.

Answer:

13. Which of the following is not one of the four primary greenhouse gases? (14.4.3)

- A. Carbon dioxide
- B. Methane
- C. Ozone
- D. Argon

Answer:

14. Explain how the agricultural practices of early pioneers greatly affected the atmosphere. (14.4.4)

- A. They burned coal, which is high in methane and contributes to global warming.
- B. They cut down forests and burned the trees, releasing carbon into the atmosphere.
- C. They killed off herds of buffalo, which reduced methane in the atmosphere.
- D. None is correct.

Answer:

15. *True or False?* Today's agricultural practices no longer have a negative effect on Earth's climate. (14.4.4)

Answer: