

Introduction to Meteorology

Meteorology · Answer Key · 18 Questions

1. What is the most abundant gas in Earth's atmosphere?

- A) Oxygen
- B) Carbon Dioxide
- C) Nitrogen**
- D) Argon

2. Which layer of the atmosphere is closest to the Earth's surface and where most weather occurs?

- A) Stratosphere
- B) Mesosphere
- C) Thermosphere
- D) Troposphere**

3. What instrument is used to measure atmospheric pressure?

- A) Thermometer
- B) Anemometer
- C) Barometer**
- D) Rain gauge

4. What causes wind?

- A) Earth's rotation
- B) Uneven heating of the Earth's surface**
- C) The Moon's gravity
- D) Ocean currents

5. A visible mass of condensed water vapor or ice crystals suspended in the atmosphere is called a:

- A) Fog
- B) Cloud**
- C) Hail
- D) Dew

6. Which type of cloud is typically associated with thunderstorms?

- A) Cirrus
- B) Cumulus
- C) Stratus
- D) Cumulonimbus**

7. What is the process by which water changes from a liquid to a gas?

- A) Condensation
- B) Precipitation
- C) Evaporation**
- D) Sublimation

8. What is the name for the average weather conditions in a particular region over a long period of time?

- A) Weather
- B) Atmosphere
- C) Climate**
- D) Meteorology

9. Which phenomenon is characterized by lightning and thunder?

- A) Blizzard
- B) Hurricane
- C) Tornado
- D) Thunderstorm**

10. What is the primary source of energy for Earth's weather systems?

- A) Geothermal heat
- B) The Moon
- C) The Sun**
- D) Nuclear reactions in the Earth's core

11. An anemometer is used to measure:

- A) Temperature
- B) Wind speed**
- C) Humidity
- D) Air pressure

12. What is the scientific study of the atmosphere and its phenomena called?

- A) Geology
- B) Oceanography
- C) Meteorology**
- D) Astronomy

13. Which of the following is a form of precipitation?

- A) Fog
- B) Dew
- C) Frost
- D) Snow**

14. What causes the Earth to have different seasons?

A) The Earth's distance from the Sun

B) The tilt of the Earth's axis

C) The Moon's phases

D) Changes in solar activity

15. Which layer of the atmosphere protects us from most of the Sun's harmful ultraviolet (UV) radiation?

A) Troposphere

B) Stratosphere

C) Mesosphere

D) Exosphere

16. What is the term for the amount of water vapor in the air?

A) Temperature

B) Wind

C) Humidity

D) Air pressure

17. Which weather hazard is a rapidly rotating column of air that extends from a thunderstorm to the ground?

A) Hurricane

B) Blizzard

C) Tornado

D) Hailstorm

18. What is the state of the atmosphere at a particular place and time?

A) Climate

B) Weather

C) Atmosphere

D) Meteorology