

Meteorology Fundamentals Quiz

Meteorology · Answer Key · 8 Questions

1. What is the primary mechanism responsible for the formation of clouds?

- A) The evaporation of surface water.
- B) The condensation of water vapor onto condensation nuclei.**
- C) The freezing of atmospheric moisture.
- D) The sinking of dry air masses.

2. Which atmospheric layer is where most weather phenomena occur?

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

3. The Coriolis effect, which influences the direction of wind and ocean currents, is a result of Earth's:

- A) Gravitational pull
- B) Rotation**
- C) Tectonic activity
- D) Atmospheric pressure gradients

4. What type of cloud is typically associated with thunderstorms and heavy precipitation?

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

5. Which of the following is the most abundant gas in Earth's atmosphere?

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

6. A cold front is characterized by:

- A) Warm air mass displacing a cold air mass
- B) Cold air mass displacing a warm air mass**
- C) Stationary boundary between air masses
- D) Moist air mass replacing a dry air mass

7. What is the term for the amount of water vapor present in the air relative to the maximum amount it can hold at a given temperature?

- A) Dew point
- B) Absolute humidity
- C) Specific humidity
- D) Relative humidity**

8. The intertropical convergence zone (ITCZ) is a region characterized by:

- A) Descending air and clear skies
- B) Strong westerly winds and low precipitation
- C) Rising air, cloud formation, and heavy rainfall**
- D) Polar air masses meeting equatorial air masses