Climatology Essentials

Climatology · Answer Key · 10 Questions

1. Which climate classification system is most widely used to categorize the world's climates based on vegetation and temperature?

A) The Richter Scale
B) The Köppen Climate Classification
C) The Fujita Scale
D) The Mohs Scale

2. What is the primary factor that causes the seasonal changes in climate on Earth?

A) The distance between the Earth and the Sun
B) The Earth's axial tilt of approximately 23.5 degrees
C) Variations in solar radiation intensity
D) The orbit of the Moon around the Earth

3. The 'El Niño-Southern Oscillation' (ENSO) is a periodic fluctuation in sea surface temperature and air pressure across which ocean?

A) Atlantic Ocean
B) Indian Ocean
C) Pacific Ocean
D) Arctic Ocean

4. Which layer of the atmosphere contains the majority of the planet's weather and climate phenomena?

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

5. What is the main greenhouse gas responsible for the majority of human-caused radiative forcing?

A) Carbon dioxide
B) Nitrogen
C) Oxygen
D) Argon

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

6. Which phenomenon describes the long-term shift in global or regional climate patterns, often measured over periods of 30 years or more?

A) Weather event
B) Climate change
C) Meteorological disturbance
D) Diurnal cycle

7. What is the term for the average weather conditions of a specific region over a long period, typically 30 years?

A) Meteorology
B) Synoptic observation
C) Climate
D) Atmospheric pressure

8. Which of the following describes the 'rain shadow' effect?

A) The cooling of air as it rises over mountains
B) The area on the leeward side of a mountain range that receives significantly less precipitation
C) The reflection of solar radiation by clouds
D) The warming of air as it descends into a valley

9. What role do ocean currents play in the Earth's climate system?

A) They stabilize the ozone layer
B) They transport heat from the equator toward the poles
C) They increase the concentration of atmospheric oxygen
D) They prevent volcanic eruptions

10. Which wind belt is responsible for moving weather systems from west to east across the middle latitudes of the Northern Hemisphere?

A) Trade Winds
B) Polar Easterlies
C) Westerlies
D) Doldrums

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.