

Pioneers and Milestones in Climatology

Climatology · Practice Test · 10 Questions

1. Who is credited with being the first to theorize the 'greenhouse effect' in 1824, suggesting that the atmosphere acts like a glass vessel?

- A) Joseph Fourier
- B) John Tyndall
- C) Svante Arrhenius
- D) Guy Stewart Callendar

2. In 1859, which scientist identified that water vapor and carbon dioxide are the primary atmospheric gases responsible for trapping heat?

- A) James Hansen
- B) John Tyndall
- C) Milutin Milankovitch
- D) Vladimir Köppen

3. What is the name of the long-term project started by Charles David Keeling in 1958 to record the continuous rise of atmospheric carbon dioxide concentrations?

- A) The Mauna Loa Curve
- B) The Vostok Ice Core Project
- C) The Keeling Curve
- D) The IPCC Baseline

4. Which scientist first calculated in 1896 that doubling the amount of carbon dioxide in the atmosphere would raise global temperatures by 5 to 6 degrees Celsius?

- A) Gilbert Plass
- B) Svante Arrhenius
- C) George Simpson
- D) C.G. Abbot

5. In the 1920s, who proposed the theory that cyclic changes in Earth's orbit, known as 'eccentricity, obliquity, and precession,' drive glacial-interglacial cycles?

- A) Milutin Milankovitch
- B) Alfred Wegener
- C) L.F. Richardson
- D) Vilhelm Bjerknes

6. What was the first official international organization established in 1873 to standardize global meteorological observations?

- A) World Meteorological Organization (WMO)
- B) International Meteorological Organization (IMO)
- C) Global Climate Forum
- D) Intergovernmental Panel on Climate Change

7. In 1938, who was the first to demonstrate that global warming was actually occurring by linking temperature increases to rising carbon dioxide levels?

- A) Guy Stewart Callendar
- B) Roger Revelle
- C) Hans Suess
- D) Bert Bolin

8. Which research vessel was the first to provide significant oceanographic and climatological data from the deep Arctic in the late 19th century?

- A) HMS Challenger
- B) Fram
- C) USS Jeanette
- D) Belgica

9. What is the name of the system developed by Wladimir Köppen in 1884 to categorize global climates based on vegetation and temperature?

- A) Holdridge Life Zones
- B) Köppen Climate Classification
- C) Thornthwaite System
- D) Bailey's Ecoregions

10. The first evidence of climate-altering pollutants in the stratosphere was discovered in the 1970s; which compounds were identified as responsible for ozone depletion?

- A) Sulfur hexafluoride
- B) Chlorofluorocarbons (CFCs)
- C) Nitrous oxide
- D) Hydrofluorocarbons