

Historical Milestones in Climate Change Science and Policy

Climate Change · Practice Test · 15 Questions

1. What was the first significant international agreement to address climate change, signed in 1992?

- A) The Kyoto Protocol
- B) The Paris Agreement
- C) The United Nations Framework Convention on Climate Change (UNFCCC)
- D) The Montreal Protocol

2. Which scientific body, established in 1988, provides policymakers with regular scientific assessments on climate change?

- A) The International Panel on Climate Science (IPCS)
- B) The Intergovernmental Panel on Climate Change (IPCC)
- C) The World Meteorological Organization (WMO)
- D) The Global Climate Research Programme (GCRP)

3. Svante Arrhenius, in 1896, published a paper calculating the expected temperature increase due to a doubling of atmospheric carbon dioxide. What was the primary focus of his concern regarding this phenomenon?

- A) Increased frequency of extreme heatwaves
- B) Potential for a new ice age due to atmospheric cooling
- C) Widespread flooding from melting glaciers
- D) The possibility of a warmer climate leading to agricultural benefits

4. The 'Year Without a Summer' in 1816 is often attributed to a massive volcanic eruption. Which volcano is most widely believed to be responsible?

- A) Mount Vesuvius
- B) Mount Tambora
- C) Krakatoa
- D) Mount St. Helens

5. What significant event in 1958, led by Charles David Keeling, began a continuous measurement of atmospheric CO₂ concentrations at Mauna Loa Observatory?

- A) The launch of the first weather satellite
- B) The establishment of the Global Carbon Project
- C) The Keeling Curve project
- D) The International Geophysical Year

6. The Kyoto Protocol, adopted in 1997, committed industrialized countries to reducing greenhouse gas emissions. Which of these countries did NOT ratify the Kyoto Protocol?

- A) Canada
- B) Germany
- C) Japan
- D) Australia

7. In what year did the United States formally withdraw from the Paris Agreement, only to rejoin later?

- A) 2017
- B) 2019
- C) 2020
- D) 2021

8. The concept of the 'greenhouse effect' was first described by Joseph Fourier in 1824. What did he hypothesize was responsible for warming the Earth?

- A) The reflection of sunlight by clouds
- B) The absorption and re-emission of infrared radiation by atmospheric gases
- C) The Earth's internal geothermal heat
- D) The presence of ozone in the upper atmosphere

9. What was the primary environmental concern driving the negotiation of the Montreal Protocol in 1987, which has a significant indirect link to climate change?

- A) Acid rain
- B) Ozone depletion
- C) Deforestation
- D) Ocean acidification

10. The first major international conference explicitly focused on climate change, the World Climate Conference, took place in 1979. What was a key outcome of this conference?

- A) The establishment of the IPCC
- B) The signing of the Paris Agreement
- C) The declaration of climate change as a global crisis
- D) Recommendations for systematic observation of climate and climate change

11. Which major scientific study, published in 1970, provided early evidence of anthropogenic warming and linked it to industrial CO2 emissions?

- A) The Manabe and Wetherald 1D radiative-convective climate model
- B) The NAS Report on Global Warming
- C) The Hansen et al. 1988 NASA study
- D) The Charney Report on CO2 and Climate

12. The Copenhagen Summit in 2009, intended to be a successor to the Kyoto Protocol, resulted in a significant political agreement but lacked legally binding targets. What was this agreement commonly known as?

- A) The Copenhagen Accord
- B) The Copenhagen Declaration
- C) The Copenhagen Mandate
- D) The Copenhagen Protocol

13. The melting of the Larsen B ice shelf in Antarctica in 2002 was a dramatic event. What scientific significance did its rapid disintegration hold for climate change research?

- A) It proved that all ice shelves are unstable
- B) It demonstrated the potential for rapid, cascading ice loss due to warming
- C) It had no significant impact on sea level rise
- D) It was primarily caused by seismic activity

14. In 1908, an event in Siberia caused widespread devastation and is now thought by many scientists to be a result of an extraterrestrial impact. What is this event commonly called?

- A) The Tunguska Event
- B) The Siberian Blast
- C) The Baikal Impact
- D) The Omsk Anomaly

15. The concept of 'climate forcing' became a key term in understanding climate change. Who is widely credited with developing the mathematical framework for calculating radiative forcing in the early 20th century?

- A) Emil Wiechert
- B) Nils Ekholm
- C) Albert Einstein
- D) Arthur Schuster