

Climate Change: Global Geography and Facts

Climate Change · Answer Key · 10 Questions

1. Which of the following major river deltas is most vulnerable to rising sea levels due to climate change, threatening millions of people and significant agricultural land?

- A) Mississippi River Delta (USA)
- B) Nile River Delta (Egypt)**
- C) Amazon River Delta (Brazil)
- D) Yangtze River Delta (China)

2. The phenomenon of 'permafrost thaw' due to rising global temperatures is a significant concern in which geographical region, releasing potent greenhouse gases?

- A) Sahara Desert
- B) Amazon Rainforest
- C) Siberia and the Arctic tundra**
- D) Himalayan mountain range

3. Which island nation is often cited as one of the first to face existential threat from sea-level rise, with plans for potential relocation of its population?

- A) Maldives**
- B) Madagascar
- C) Cuba
- D) Japan

4. Ocean acidification, a direct consequence of increased atmospheric CO2 absorption by oceans, poses a severe threat to marine ecosystems. Which region's coral reefs are particularly well-known for their susceptibility to this and warming waters?

- A) The Caribbean Sea
- B) The Mediterranean Sea
- C) The Great Barrier Reef (Australia)**
- D) The Red Sea

5. The expansion of deserts, or desertification, exacerbated by climate change and unsustainable land use, is a critical issue in which vast continent?

- A) Europe
- B) North America
- C) Africa**
- D) South America

6. Which of the following major glaciers or ice sheets is experiencing significant and well-documented melting, contributing to global sea-level rise?

- A) Gangotri Glacier (India)
- B) Perito Moreno Glacier (Argentina)
- C) Greenland Ice Sheet**
- D) Franz Josef Glacier (New Zealand)

7. The 'rain shadow' effect, where mountains block rain-producing weather systems, can lead to drier conditions on one side. Climate change can intensify or alter these patterns, impacting regions like the one downwind of which significant mountain range?

- A) The Andes Mountains
- B) The Alps
- C) The Rockies
- D) The Himalayas**

8. As Arctic sea ice diminishes due to warming temperatures, which shipping route is becoming increasingly navigable, with significant geopolitical and environmental implications?

- A) The Suez Canal
- B) The Panama Canal
- C) The Northern Sea Route (NSR)**
- D) The Strait of Malacca

9. The depletion of glaciers in the Himalayas is a major concern for water security in many populous downstream nations, including India and China, affecting which major river system?

- A) The Congo River
- B) The Yangtze and Yellow Rivers**
- C) The Murray-Darling River
- D) The Volga River

10. Which region, known for its unique biodiversity and high altitude, is experiencing rapid glacial retreat, threatening its water resources and ecosystems?

- A) The Patagonian Ice Field
- B) The Tibetan Plateau**
- C) The Vatnajökull ice cap (Iceland)
- D) The Antarctic Peninsula