

Fundamentals of Climate Change

Climate Science · Practice Test · 8 Questions

1. Which gas is the primary driver of the current human-induced greenhouse effect?

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

2. What is the main cause of the rise in global sea levels?

- A) Increased rainfall
- B) Melting land ice and thermal expansion
- C) More underwater volcanoes
- D) Change in ocean currents

3. Which layer of the atmosphere acts like a blanket to trap heat around the Earth?

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

4. What happens to the Earth's average temperature when greenhouse gas concentrations increase?

- A) It stays the same
- B) It decreases significantly
- C) It increases
- D) It fluctuates randomly

5. The 'greenhouse effect' is a process that occurs when gases in Earth's atmosphere do what?

- A) Trap heat
- B) Create wind
- C) Reflect starlight
- D) Cool the oceans

6. Which of the following is a major source of atmospheric carbon dioxide?

- A) Solar power generation
- B) Burning fossil fuels
- C) Growing forests
- D) Volcanic eruptions

7. What is the relationship between Arctic sea ice and global temperatures?

- A) As temperatures rise, sea ice melts
- B) As temperatures rise, sea ice grows
- C) Sea ice has no effect on temperature
- D) Sea ice grows during heatwaves

8. What term describes the long-term shift in global or regional climate patterns?

- A) Weather
- B) Climate change
- C) Seasonal transition
- D) Tidal fluctuation