

Understanding Our Changing Climate

Climate Change · Answer Key · 20 Questions

1. What is the main gas that traps heat in the Earth's atmosphere, causing the planet to warm?

- A) Oxygen
- B) Nitrogen
- C) Carbon Dioxide**
- D) Hydrogen

2. Which human activity is a major contributor to increased carbon dioxide in the atmosphere?

- A) Planting trees
- B) Recycling paper
- C) Burning fossil fuels like coal and oil**
- D) Drinking water

3. What is the term for the long-term shift in weather patterns on Earth?

- A) Daily weather
- B) Seasonal changes
- C) Climate change**
- D) A storm

4. When the Earth's average temperature rises, what is this phenomenon commonly called?

- A) Global cooling
- B) Global warming**
- C) Local weather
- D) Ocean currents

5. What is one noticeable effect of climate change on polar regions?

- A) Ice sheets are growing thicker
- B) Sea ice is melting**
- C) Penguins are migrating north
- D) The North Pole is freezing solid

6. Which of these is a greenhouse gas that can be released from livestock and landfills?

- A) Helium
- B) Methane**
- C) Argon
- D) Neon

7. How does deforestation (cutting down forests) contribute to climate change?

- A) Forests absorb more carbon dioxide when cut down
- B) Trees release more oxygen when they are cut down
- C) There are fewer trees to absorb carbon dioxide from the air**
- D) Deforestation makes the Earth colder

8. What is happening to sea levels as the Earth warms?

- A) They are staying the same
- B) They are falling
- C) They are rising**
- D) They are freezing

9. Which of these animals is particularly vulnerable to changes in sea ice due to global warming?

- A) Kangaroo
- B) Lion
- C) Polar bear**
- D) Elephant

10. What is an example of a renewable energy source that helps reduce greenhouse gas emissions?

- A) Coal power
- B) Natural gas
- C) Solar power**
- D) Oil

11. When a lot of ice melts from glaciers and ice sheets, what can happen to rivers?

- A) They dry up
- B) They might flood more easily**
- C) They freeze over completely
- D) They become narrower

12. What is one way individuals can help reduce their carbon footprint?

- A) Driving a bigger car
- B) Using more electricity
- C) Walking or cycling instead of driving**
- D) Wasting food

13. Increased heat from climate change can lead to more of what type of extreme weather event?

A) Snowstorms

B) Droughts and heatwaves

C) Fog

D) Gentle rain

14. What does the term 'fossil fuels' refer to?

A) Rocks from the moon

B) Ancient plant and animal remains that produce energy when burned

C) New types of plastic

D) Renewable energy sources

15. How does planting trees help combat climate change?

A) Trees produce more carbon dioxide

B) Trees don't have any effect on climate

C) Trees absorb carbon dioxide from the atmosphere

D) Trees release heat

16. What is the name for the gases that trap heat in the atmosphere, like carbon dioxide and methane?

A) Cleaning gases

B) Cooling gases

C) Greenhouse gases

D) Exhaust gases

17. When ocean water warms up, it can take up more space. What effect does this have on sea levels?

A) It makes sea levels fall

B) It makes sea levels rise

C) It has no effect on sea levels

D) It makes sea levels freeze

18. Which of these is a source of energy that does NOT release greenhouse gases?

A) Burning wood

B) Wind power

C) Burning petrol

D) Burning coal

19. What can happen to coral reefs when ocean water gets too warm?

- A) They grow bigger and stronger
- B) They turn bright blue
- C) They turn white and can die**
- D) They become more colourful

20. What is the primary source of the extra carbon dioxide in the atmosphere that is causing climate change?

- A) Volcanoes erupting
- B) Ocean evaporation
- C) Human activities like burning fossil fuels**
- D) Plant respiration