

Name: _____ Date: _____

Answer Key: Changing Climates 4th Grade Analytical Quiz

Evaluate how shifting weather patterns affect local habitats and interpret data on human-made heat traps during this mid-unit assessment.

1. If a coastal city experiences more frequent high-tide flooding than it did fifty years ago, which climate change impact is most likely responsible?

Answer: B) Global sea level rise

Global sea level rise, caused by melting land ice and warming oceans, leads to more frequent flooding in low-lying coastal areas.

2. True or False: Planting a community garden in an empty city lot can help lower local temperatures and absorb carbon dioxide.

Answer: A) True

Plants absorb carbon dioxide during photosynthesis and provide shade/moisture, which helps cool down urban 'heat islands.'

3. When we use energy from the sun or wind instead of burning oil, we are choosing to use _____ energy sources.

Answer: B) renewable

Renewable energy comes from sources that do not run out and typically create much less pollution than fossil fuels.

4. Which of these is a direct example of an animal 'adapting' to a changing climate rather than a cause of global warming?

Answer: A) A bird species migrating earlier in the spring because of warmer temperatures

Adaptation refers to how living things change their behavior or location to survive in new environmental conditions.

5. True or False: The greenhouse effect is a natural process that keeps Earth warm enough for life, but humans are making it stronger.

Answer: A) True

Name: _____ **Date:** _____

While some greenhouse effect is necessary for life, human activities have added too many gases, causing the planet to warm too quickly.

6. The long-term pattern of weather in a specific area, usually measured over 30 years or more, is called _____.

Answer: C) climate

Climate is the average weather over a long period, whereas weather describes what is happening outside right now.

7. How does the 'Urban Heat Island' effect relate to climate change in big cities?

Answer: B) Concrete and asphalt trap heat, making cities warmer than rural areas

Human-made surfaces like roads and buildings absorb and hold more heat than natural landscapes, intensifying warming in populated areas.

8. To reduce the amount of waste in landfills and save energy, many schools participate in _____ programs.

Answer: C) recycling

Recycling reduces the need to extract new raw materials and saves the energy required to manufacture items from scratch.

9. True or False: Weather and climate mean exactly the same thing to scientists.

Answer: B) False

Weather is short-term (minutes to days), while climate is the long-term average of weather patterns.

10. Which of these actions would be considered a way to 'mitigate' (or slow down) climate change?

Answer: C) Walking or biking to school instead of driving

Walking and biking reduce the amount of greenhouse gases released from vehicle exhausts, helping to slow the rate of warming.