

# Pre-Assessment: Carbon & Climate

Instructions: For each statement or question, circle the best answer. Do not skip any questions; be honest and do your best.

## True or False?

- 1 Weather and climate are two words for the same thing.  
True      False
- 2 The carbon cycle is the flow of carbon through living things and the environment.  
True      False
- 3 A single carbon atom always travels through the same processes, in the same order, through the carbon cycle.  
True      False
- 4 All carbon dioxide found in the atmosphere (air) is unnatural.  
True      False
- 5 Some actions humans take increase the amount of carbon dioxide in the atmosphere, and some actions decrease it.  
True      False
- 6 Until recently, Earth's climate has always been the same.  
True      False

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## Multiple Choice



- 7** How do scientists know how much carbon dioxide was in the Earth's atmosphere 800,000 years ago?
- A. Studying tree rings
  - B. Studying air bubbles in ice cores
  - C. Carbon dioxide readings from Mauna Loa Observatory in Hawaii
  - D. All of the above
- 8** How can we use forests to study climate and climate change?
- A. The type of forest found in a region is directly related to the climate.
  - B. Changes in forest regions can help us understand the effect of climate change.
  - C. Forests provide insight to changes in plant and animal species found there.
  - D. All of the above
- 9** What is one change that scientists have seen in plant species that they believe is related to changing climates?
- A. Plants are holding more water in their stems.
  - B. Plants are developing a natural sunscreen in their leaves to block the sun's rays.
  - C. Plants are blooming earlier in the spring and continuing to grow later in fall.
  - D. All of the above
- 10** Which of the following describes the most reliable source you might use to research climate change?
- A. Article with no author that comes up after a Google search
  - B. Recent article from a university professor that cites the sources of its information
  - C. A blog site sponsored by a group known for being extreme in their views
  - D. An academic article published 15 years ago