ALBERTA SCIENCE 20 · UNIT C · 10 QUESTIONS

The Changing Earth — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Tree rings are a proxy record that provides information about**

- **A** growing conditions, such as temperature and precipitation, for each year of the life of the tree
- **B** the exact carbon dioxide level of the atmosphere 500 million years ago
- **C** the positions of the continents in the past
- **D** volcanic eruptions and nothing else

Understand It with Pulse | Flag a mistake

2 **Deforestation increases atmospheric carbon dioxide mainly because it**

A adds more water vapour to the air

B increases the amount of dust in the atmosphere

C warms the soil so that it releases oxygen

D removes trees that would otherwise absorb carbon dioxide during photosynthesis

Understand It with Pulse | Flag a mistake

3 **Which of the following is a natural cause of short term climate cooling?**

A An increase in sunspot activity

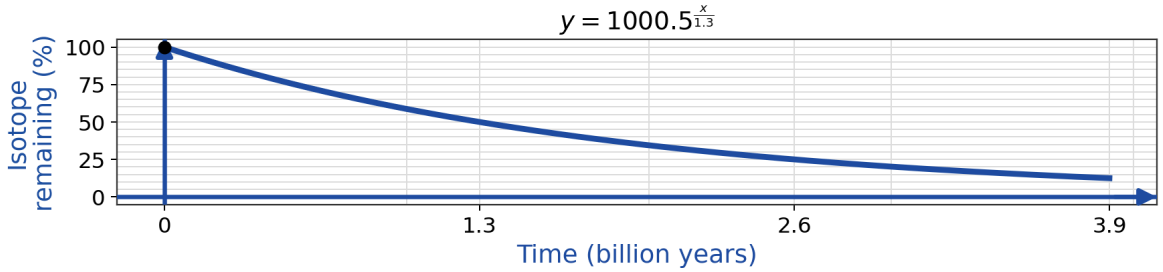
B Aerosols released into the atmosphere by a major volcanic eruption

C Burning natural gas for heating

D Melting permafrost releasing methane

Understand It with Pulse | Flag a mistake

4 **The graph shows the percentage of a radioactive isotope remaining in a rock sample over time. The percentage remaining after 2.6 billion years is**



A 12.5%

B 25%

C 50%

D 100%

Understand It with Pulse | Flag a mistake

5 **In the carbon cycle, the process by which green plants take in carbon dioxide from the atmosphere is**

- A cellular respiration
- B decomposition
- C photosynthesis
- D combustion

Understand It with Pulse | Flag a mistake

6 **Evidence that the continents were once joined into a single landmass comes from the observation that**

- A the coastlines of South America and Africa fit together like pieces of a puzzle
- B both continents have the same weather today
- C the Atlantic Ocean is becoming shallower every year
- D the same species of ocean fish live on both coasts today

Understand It with Pulse | Flag a mistake

7 **The thawing of permafrost in northern Canada is a climate concern because thawing permafrost**

A releases oxygen that accelerates warming

B causes new glaciers to form

C causes global sea level to fall

D releases stored carbon dioxide and methane, adding greenhouse gases to the atmosphere

Understand It with Pulse | Flag a mistake

8 **In a model of the carbon cycle, a forest absorbs 850 tonnes of carbon per year through photosynthesis and releases 790 tonnes per year through respiration and decomposition. The net amount of carbon stored by the forest over 12 years, in tonnes, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **Which of the following changes would tend to cool the climate of Earth over long periods of time?**

A More dark ocean surface exposed as ice melts

B Increased snow and ice cover reflecting more sunlight back to space

C Higher concentrations of methane in the atmosphere

D A decrease in the reflectivity, or albedo, of the surface of Earth

Understand It with Pulse | Flag a mistake

10 **The geological time scale is divided into eras based mainly on**

A the thickness of rock layers in a region

B written human historical records

C major changes in the kinds of life on Earth, such as mass extinctions

D the positions of the continents only

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. D
3. B
4. B
5. C
6. A
7. D
8. 720
9. B
10. C

© 2026 Brett Robbins. All Rights Reserved.