Atmosphere 1 Self-Check

Started: Feb 15 at 6:57pm

Quiz Instructions

Please complete this self-check assignment after viewing all the content for **Atmosphere 1 - Composition and Structure (https://catcourses.ucmerced.edu/courses/30528/pages/atmo-1-atmospheric-composition-and-structure-toc)** . You can go back and look at the content to help answer the questions.

Question 1 5 pts

Match the gas present in Earth's atmosphere with its current concentration in Earth's atmosphere:

Oxygen	21%
Nitrogen	78%
Carbon Dioxide	420 ppm (0.042%)
Argon	1%
Water vapor	1-4%

Question 2 2 pts

What was the concentration of oxygen in Earth's atmosphere right after the Earth formed?

- (●) 0% (there was no oxygen)
- ( ) 21%
- ( ) 78%
- ( ) 10%

Question 3 10 pts

In a well-written paragraph of a few sentences (probably 4-6), describe how the greenhouse effect works and keeps Earth's surface temperature far higher than we would expect based on the distance to the sun:

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12pt Paragraph

When sunlight reaches earth, greenhouse gases, such as carbon dioxide, water vapor, and methane, present in the atmosphere, trap and re-radiate the heat, warming up Earth. This process successfully traps heat in the atmosphere, causing a warming effect that keeps the Earth's surface temperature higher than it would be if the atmosphere did not contain greenhouse gases. This process is called the greenhouse effect. The greenhouse effect is critical for sustaining a habitable temperature on Earth by preventing excessive heat loss.

p ▸ span 81 words

Question 4 3 pts

How much warmer is the Earth than is expected based on its distance to the sun and the amount of sunlight it receives?

- ○ 33 degrees Celsius
- ◉ 33 degrees Farenheit
- ○ 23 degrees Celsius
- ○ 3 degrees Celsius

Quiz saved at 7:12pm Submit Quiz