

Atmosphere 1 Self-Check

- Due Feb 18 at 11:59pm
- Points 20
- Questions 4
- Time Limit None

Instructions

Please complete this self-check assignment after viewing all the content for [Atmosphere 1 - Composition and Structure \(https://catcourses.ucmerced.edu/courses/30528/pages/atmo-1-atmospheric-composition-and-structure-toc\)](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.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	15 minutes	7 out of 20 *

* Some questions not yet graded

Score for this quiz: 7 out of 20 *

* Some questions not yet graded

Submitted Feb 15 at 7:12pm

This attempt took 15 minutes.



Question 1

5 / 5 pts

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

Correct!

Oxygen

Correct!

Nitrogen

Correct!

Carbon Dioxide

420 ppm (0.042%)



Correct!

Argon

1%



Correct!

Water vapor

1-4%



Question 2

2 / 2 pts

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

Correct!

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



Question 3

Not yet graded / 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:

Your Answer:

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.



Question 4

0 / 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?

Correct Answer

☐ 33 degrees Celsius

You Answered

☒ 33 degrees Fahrenheit

☐ 23 degrees Celsius

☐ 3 degrees Celsius

Quiz Score: 7 out of 20

* Some questions not yet graded