



Lecture and Note-taking Practice 4

Being able to take effective notes during a lecture is an important skill that takes time and practice to get comfortable with. This assignment is an opportunity for you to get some experience listening to part of an authentic lecture on a university campus and taking notes good enough to answer the questions that follow. You will get the added benefit of learning something important from the content of the lecture! As your final lecture, this lecture clip is a little longer than the previous three. It is great information to know. I hope you enjoy it!

The clip that you will be listening to is from a lecture titled "The Atmosphere: Global Energy Balance and Temperature" by Dr. Julie Ferguson.

Please complete the following steps:

A. Make sure you are familiar with the following vocabulary terminology.

solar

scatter

radiation

emit

atmosphere

global warming

infrared

B. Find the lecture online by:

- Putting the following key words into an internet search engine: **ocw uci ESS 5 Lec 04**
Click on "ESS 5. Lec 04. The Atmosphere: Global Energy Balance and Temperature".
- Or simply typing in the following web address:

http://ocw.uci.edu/lectures/ess_5_lec_04_the_atmosphere_global_energy_balance_and_temperature.html (0:00 - 43)

C. Listening to the lecture from **7:30 to 43:09**. Take notes on one of the Cornell Note-taking templates you've been given.

D. Use your notes to answer the questions on the following page. You can check your answers later.

1. What is the connection between Goldilocks and the earth?
 - a. People are generally very familiar with both of them.
 - b. Both are very precious.
 - c. As there was only one bear that was “just right” in the Goldilocks story, the earth is the only planet of the three that is “just right” for life and for water.
 - d. Goldilocks went into a house misused and broke things as we have done on earth.
2. True or False. Two influences of our global temperature that do not change enough to cause to much alteration in the earth’s temperature is the sun’s luminosity and the earth’s distance from the sun.
3. Of the following five factors that controls the temperature on earth, which one was mentioned THIRD in the lecture?
 - a. Distance from the sun
 - b. Earth’s temperature and outgoing radiation
 - c. Greenhouse effect
 - d. Atmosphere and albedo
 - e. The sun’s luminosity
4. True or False. The sky is blue because of the mie scattering.
5. How much visible light do you think is absorbed by the gases in the atmosphere?
 - a. All
 - b. Most
 - c. Little
6. True or False. Water is the surface that absorbs the most solar radiation on the planet.
7. What is NOT true about the planetary albedo?
 - a. It is the amount of solar radiation that is reflected away from the earth.
 - b. It is the fraction of incoming radiation that is absorbed by the earth.
 - c. It plays no part in heating up the earth.
 - d. It is 0.30.
8. Why did Dr. Ferguson give the example of a car in the summer time?
 - a. To give an example of the greenhouse effect.
 - b. Because everyone has been in a car before.
 - c. To encourage learners to park in the shade or to use car shades when it is hot outside.
 - d. To give an example of visible and infrared light.
9. Which of the following language cues there were used in the lecture signals an important term in the course?
 - a. “What are we going to do today?”
 - b. “Anyone that has taken a class with me has probably heard of this word and you will all be very familiar with this by the end of the course as well”
 - c. “The word we use for this is . . . “
 - d. “Basically, albedo is just a word for . . .”
10. Which of the following statements does Dr. Ferguson probably **NOT** agree with?
 - a. It is exciting how science can explain why the sky is blue and why sunsets are so orange and yellow.
 - b. The ozone layer’s absorption of UV rays are directly linked to global warming.
 - c. The greenhouse effect is mainly a positive and beneficial to human beings on earth.
 - d. The term “albedo” is an important term to know in this class.