



# Lecture and Note-taking Practice 1

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!

The clip that you will be listening to is from a lecture titled "Introduction to Cosmology" by Dr. James Bullock.

Please complete the following steps:

- A. Make sure you are familiar with the following vocabulary terminology. Use a dictionary if necessary.

cosmology

billion

periodic table

proton, neutron, electron

Andromeda galaxy

- B. Find the lecture online by:

➤ Putting the following key words into an internet search engine: **ocw uci cosmology lec 1**

Then click on "Physics 20B. Cosmology. Lec 1: Introduction to Cosmology".

➤ Or simply typing in or clicking on the following web address:

[http://ocw.uci.edu/lectures/physics\\_20b\\_cosmology\\_lec\\_1\\_introduction\\_to\\_cosmology.html](http://ocw.uci.edu/lectures/physics_20b_cosmology_lec_1_introduction_to_cosmology.html)

- C. Listen to the lecture from **26:05 to 44:26**. Take notes on one of the Cornell Note-taking templates you've been given.

- D. Use your notes to answer the questions on the next page.

1. True or False. It is good to participate in class and ask questions if you have any.
2. How long ago was time and space created?
  - a. 300,000 years ago
  - b. 12 million years ago
  - c. 150 million years ago
  - d. 14 billion years ago
3. True or False: The universe is constantly heating up and expanding.
4. Dr. Bullock gave an example of heating up the lecture room that all the students were sitting in. What point was he trying to illustrate?
  - a. He uses this idea to show that the universe is expanding and cooling.
  - b. He uses this idea to illustrate how heat breaks down things as small and simple as they can be.
  - c. He uses this idea to show that when you heat particles, they move faster and bang into each other.
5. What is making the universe expand quickly?
  - a. normal matter
  - b. dark matter
  - c. dark energy
6. Dr. Bullock gave the analogy that "light is like a messenger." What does that mean?
  - a. It takes time for light to travel, just as it takes a messenger time to travel. Light brings information about *when it left*, not current information, as a messenger does.
  - b. Light has provided most of the information that scientists have about the universe.
  - c. Messages are communicated by blinking lights.
7. At the speed of light, how many times would an object go around the earth in one second?
  - a. 8
  - b. 10
  - c. 14
  - d. 300,000
8. True or False. A light-year is the speed at which light travels.
9. From the list of main points given in the lecture, which one was discussed last?
  - a. Overview of Scientific Cosmology
  - b. Galaxies are evolving
  - c. Light-Years
  - d. Composition of the Cosmos
  - e. Looking back in Time
10. Which of the following language cues were used in the lecture?
  - a. "Imagine you're . . ."
  - b. "There's one more concept I just want to introduce now . . ."
  - c. "so another thing you'll hear a lot about astronomy is something called . . ."
  - d. All of the above