

# Test Two Preview

## AST 101 Solar System

Refer to the start of Test 1 Preview Sheet for general test preparation advice.

### Review of Introductory Course Note Set

**The gist: Study your Foundational Assignment answers for all the Introductory Course Notes Units, except for Units IV and VI, which were covered in class. Details follow...**

**In your review of the Introductory Note Set, read over the goals/benefits to attain in this course in Unit I.**

**In Unit II (on the teaching of science) just know the calls by experts, commissions and the like, for improvements in science teaching. I focused on these in class.**

**Skim Unit III (U.S. scientific illiteracy). By “skim,” I mean just note the interesting survey results.**

**Focus especially on Unit IV (Science) Memorize the definition of science (Section A of Unit IV). Understand the “Heart of Science” and the “Scientific Attitude.” In Unit IV, note especially, well, everything—read it through carefully. I’ve promised in class they will all be in Test 2.**

**In Unit V memorize the 8 aspects of critical thinking; I promised in class they will be covered on the test. (You may be helped by the article “Thinking Creatively and Critically.” See side cabinet in the classroom for a copy.)**

**In Unit VI, note especially the characteristics of pseudoscientific thinking and the differences between science and pseudoscience. At the end, recognize those pseudosciences related to astronomy.**

**I don’t expect for you to pick up a lot of the detailed information in unit VIII, just be able to briefly describe the three dangers of pseudoscience.**

**In Units IX and X, covering non-psychological and psychological factors that influence us into accepting pseudoscientific claims, make sure you are familiar with the first factor in each unit. I don’t expect you to be well familiar with all the factors I cover, though most are fairly straightforward and you should be able to mention several on the test.**

**Unit XI? Casinos - What they demonstrate on a daily basis.**

**Turn to the next unit in the Course Outline, Unit VII, on the description, age, and origin of the solar system.**

**Interesting and important subjects are covered here. Much of your “cosmic perspective” will derive from this part of the course. The “description” material in Section A of Unit VII is entirely descriptive. You are only working at the memorization level here. You may be queried on any of the material in this section. Section B (Age of Solar System) gives some historic background as well as two astrophysical determinations of the age that support the radiometric age determination. Don’t forget these independent confirmations of the Solar System’s age.**

**Section C: The origin of the Solar System. Evidence and theory are involved in understanding the origin of the solar system. Note the flow of the evidence provided that illuminates the details of this process theorized on the basis of gravitational collapse of an interstellar nebula. My main helpful suggestion here is to remember the name of each step in the process, step by step, being able to describe what is meant by each name. What is the condensation sequence? What were the two earlier scientific hypotheses proposed to explain the origin of the planets? I might ask for more than just their names.**

**The main points you must know regarding the comets and asteroids in Section D is information about their location, origin, and composition. Particular little hint: Our first, and still only, image of an actual comet nucleus remains Halley’s comet. Know what it looks like. (Image shown in class and in book). Hint: Comet Borelly looked similar, if you forget Halley. But Halley is in the book to refresh your memory.**

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