

Learning Critical Thinking Through Astronomy:
First Day

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STUDENT NOTE

PLEASE DO NOT DISTRIBUTE THIS DOCUMENT.

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Questions

Is there a disadvantage to working alone? Is there an advantage to working in groups?

Materials Needed

For this activity, you will need the following materials:

- a pencil (do not use ink)
- the ability to read and follow directions

Points To Remember

STUDENT NOTE

You should always begin by reading the instructions in greater detail than what you are most likely used to.

Unless otherwise explicitly instructed, your responses must not contain personal opinions. All of your responses must be in the form of complete sentences; the fewer sentences the better. Spelling and grammar must be correct. Effective communication is essential for both learning and doing science.

Don't ask instructors for answers to questions posed in activities; you won't get them. You may ask questions regarding the clarity of the instructions or the soundness of your reasoning. If you encounter a word you are not familiar with, don't ask the instructor about it. Look it up first in your glossary and then a dictionary or some other source if necessary. Ensure that all definitions are unanimously agreed upon before proceeding. There are, of course, sound reasons for these policies. See the instructor if you have questions, but do not complain about these policies. They are not negotiable.

1 This Class Is Different

1.1 Background Information

You should have read the definitions of teaching, learning, and taking a class that were provided to you by the instructor. Have those definitions in front of you as you work through this activity. Your instructor will also provide two other documents, one by Timothy F. Slater and the other by Richard M. Felder.

1.2 Begin By Reading

STUDENT NOTE

Read the article by Slater and the article by Felder. Just read them, and do not begin discussing them with anyone yet.

1. Think about Slater's Hidden Contract as he describes it. Describe the consequences of adhering to this Hidden Contract in a science course. Describe the consequences of abandoning the Hidden Contract in a science course. Include both the student's point of view and the instructor's point of view for each set of consequences.

1.3 Now It's Time To Collaborate

2. In your groups, take turns presenting your individual responses to the above questions. Listen respectfully, and allow EVERY person to present his or her responses before asking questions or asking for

elaboration. Use the space provided for writing anything you deem important.

Sample Student Version Activity

2 Inquiry

3. How do your personal attitudes about working in groups compare to those expressed by students in Felder's article?
4. Would you trust an individual's answer more than you would trust a group's answer? Defend your choice.
5. Do you think scientists work better as individuals or in groups? Defend your response.
6. What concerns, if any, do you have about working in groups that Felder does not address?
7. Is there a disadvantage to working alone? Is there an advantage to working in groups?

STUDENT NOTE

Have you seen this question somewhere before?

STUDENT NOTE

When you encounter a checkpoint, everyone in the class should come to the room's center (or some other designated place) for a meeting of the minds and to discuss questions up to that point. After some discussion, there must be unanimous agreement prior to leaving the checkpoint area.

||—— CHECKPOINT ——||

8. Map this activity into as many of the elements of thought as you can.

9. Every activity will have at least one standard associated with it.

STANDARD

I can articulate a justification for working in groups like scientists do.

3 Feedback

What could be done to make this activity more interesting? Please be honest.