Notes to Students

If you are reading these notes it means that you are probably an elementary teacher or are working toward a career in teaching. Congratulations, this is a wonderful, fulfilling endeavor! It will be your responsibility to help children develop their reasoning skills and conceptual understanding in many areas, including science.

This activities manual is designed to help you understand fundamental concepts in Earth and space science that you will be teaching someday. The activities are designed as guided-inquiry. This means you will be an active learner who discovers concepts and processes by making observations and conclusions based on the observations. This requires you to uproot any false understandings (misconceptions) you may have accumulated in your lifetime and exercise your own reasoning skills. The process is sometimes a little uncomfortable and requires you to take risks. It is okay to make mistakes as long as you come to the correct answer eventually. Your instructor will be your guide through this process. When you have finished the activities on a topic, your instructor will hold a discussion to fill in missing information, clarify your understanding, and provide additional concept material. DON’T READ THE MATERIAL IN YOUR TEXT AHEAD OF TIME! That removes some of the “discovery” aspects of the activities. Be open and you will be amazed at what you can accomplish yourself and what you will be able to do with kids in a classroom.

I will certainly appreciate your suggestions for changes to any of the activities.

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