

Group Project 1: Changes in geological thinking

Purpose: Due to the development of plate tectonics and other theories, geology textbooks have changed a lot in the past several decades. On the pages that follow are excerpts from *A Textbook of Geology* by Longwell, Knopf and Flint, published in 1932, and *A Text-Book of Geology* by Pirsson, published in 1915. Some of the information found in that book is quite different than what you will find in modern textbooks. You are going to investigate these differences by making a **three-minute oral presentation** with at least **one visual element** and **writing a summary** of the same.

Timeline for the project:

Day 1 (Thursday): Form groups of three or four. Assign a role to each of the members; such as a **researcher**, a **writer/recorder**, and a **presenter**.

Read the following set of numbered selections from the textbook and choose one of the six that you will answer these questions about:

- How is the content of the selection **different** in modern textbooks? (Aha! Clearly, you will need a modern textbook from the front cabinet).
- What developments in the past seventy years have given us evidence that the new content is **true** (or at least a better reflection of nature)?

Let me know which selection you are going to do; I do not want repeated presentations, so each group will cover a different selection. To assure that your group gets the selection it wants, give me a **list of the group members and the number of three selections** you would be interested in researching and presenting.

Begin determining the answers to these questions about your selection by reading the appropriate sections of a recent geology textbook ("recent" is published within the last ten years).

Day 2 (Tuesday): You will have some time to discuss progress within the group. Each group will **tell me what the difference is** between what the selection states and what the modern textbook states. At the end of this period, your group should have answers to the two bullet points about your selection that will make a good three-minute oral presentation. At this point, assign someone to coordinate the presentation and someone else to write up the answers on paper to turn in to me. You should also determine what **visual element** you will use: it could be an overhead transparency, a website, a Powerpoint slide or even a poster.

Day 3 (Thursday): Each group will present their oral presentation, first **summarizing** their selection, then stating the **difference** between the selection's information and a modern textbook's interpretation of the same topic, and finally, **why** we now think about that topic that way. A *short* question-and-answer period will ensue. You will have access to a slide projector, an overhead projector and a computer projector to illustrate your talk. Turn in the written summary, along with a **bibliography**.