GEOS 53 Geologic Evolution of the Earth
Essay # 1

Essays should be typed (normal margins, double or 1 1/2 spaced and no less than 10 font) and between three to five pages. The essay should have a clear, concise introductory paragraph that captures the reader's attention and introduces the topic of the essay. The body of the essay should be followed by a concluding paragraph that is in some way linked to the introductory paragraph. Use your text, lecture notes and any other sources that you need. If you do use ideas, concepts or information that you did not develop yourself, you must use an appropriate citation and provide a complete reference in a bibliography at the end of the essay. Please do not use cover pages or binders/folders. One staple is appropriate. Do not use a separate page for the bibliography unless it is needed for space. Once returned to you the essays should be incorporated into your class portfolio.

Essay Topic #1.  **Life on a Traveling Continent**

Before starting your essay review your notes on climates and very carefully review the class handout and your class notes on Natural Selection.

In your essay you should incorporate **ALL** the following topics: What can happen to the climate of a continent and the temperature of the shallow water on its continental shelves as it moves from one place to another as part of moving plate of lithosphere? What can happen to animal and plant populations as continents move? What can cause plant and animal populations to become extinct? What can cause new plant and animal species to come into existence? What is the role of genetic mutation? Natural Selection?

**Scenario:** You are following the history of a land animal/land plant population on an island continent [or a group of animals living in the shallow waters on the southern side of the island] continent (about the size of Antarctica) as it moves SOUTH from an area of about 40-50° N latitude towards the equator. Your goal is to explain what changes, if any, might occur and the possible cause of those changes during the move South.

You may use a “generic” groups of land animals OR land plants OR shallow water ocean animals.

You may be creative and assume the role of one of these creatures and explain the “history your families ancestors” over the millions of years as “they” rode south at 9cm/yr on this continent or in the shallow waters adjacent to this continent.

Due Tuesday, June 29 no later than 5pm. Pacific Daylight Time.