

## Science Achievement Skills Senior Science The Third Day: Geology and Botany Ages 12+

## **Objectives at this age:**

- Students will complete their geology and botany science textbook.
- Upon completion of these textbook, students will be prepared to enroll in a college level geology and botany course.
- Student-created textbooks should demonstrate a basic understanding of geology and botany. However, students are encouraged to explore subjects in greater depth according to their interests and desires.

Student-created textbooks should include:

- A cover designed and created by the student
- An introduction to geology and botany written by the student that includes the question and discussion of why and how God organized and created the earth and the plants
- Definitions, illustrations, and descriptions of geology and botany terms and concepts listed in the Elementary Benchmark Achievements for geology and botany
- A combination of reports, essays, illustrations, and research papers to demonstrate student's knowledge of the following ten divisions of geology and botany. (At least 3 projects for each division)
  - Earth's Creation (theories, Bible-based, inner core, outer core, mantle, gravity, magnetic poles)
  - The Sea (Waters of the ocean, land on water, water on land)
  - The Land (volcanoes, valleys and mountains, earth's crust)
  - Challenges (earthquakes and weather patterns)
  - Seeds (growth patterns, photosynthesis, cell structure, reproduction)
  - Primitive plants and ferns
  - Grasses and Flowers
  - Herbs, Fruits and Vegetables
  - Trees, Shrubs, and Weeds
  - Famous scientists (Alfred Wegener, Louis Agassiz, Charles Darwin, Charles Richter, Freidrich Mohs, George Washington Carver)

- Conclusion written by the student that answers the question of why and how God created the earth and the plants. Students may consider searching the scriptures for the following terms to assist them in their study:
  - Dust, death, creation, seas, dry land, herb, fruit, grain, tree, water, earthquakes, whirlwind, flood
- Include a bibliography in the back of the book to reference the materials used in the creation of the textbook
- Optional: Table of contents and page numbers