

**Standards Covered in Unit 2**

**Composition of Earth**

3. Plate tectonics operating over geologic time has changed the patterns of land, sea, and mountains on Earth's surface. As the basis for understanding this concept:
  - c. Students know how to explain the properties of rocks based on the physical and chemical conditions in which they formed, including plate tectonic processes.
7. Each element on Earth moves among reservoirs, which exist in the solid earth, in oceans, in the atmosphere, and within and among organisms as part of biogeochemical cycles. As a basis for understanding this concept:
  - a. Students know the carbon cycle of photosynthesis and respiration and the nitrogen cycle.
  - b. Students know the global carbon cycle: the different physical and chemical forms of carbon in the atmosphere, oceans, biomass, fossil fuels, and the movement of carbon among these reservoirs.
9. The geology of California underlies the state's wealth of natural resources as well as its natural hazards. As a basis for understanding this concept:
  - a. Students know the resources of major economic importance in California and their relation to California's geology.

**INVESTIGATION AND EXPERIMENTATION**

1. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other four strands, students should develop their own questions and perform investigations. Students will:
  - b. Identify and communicate sources of unavoidable experimental error.
  - d. Formulate explanations by using logic and evidence.
  - g. Recognize the usefulness and limitations of models and theories as scientific representations of reality.
  - k. Recognize the cumulative nature of scientific evidence.

The above standards will be covered by the Benchmark Tests given at the end of each unit. Students should use these standards as a study guide. General tutoring is available after school for all science classes; ask your teacher for details. Targeted tutoring will be available specifically for those students who do not pass the Benchmark Test. Details regarding targeted tutoring will be sent home as required.