

## **EARTH SCIENCE 8A**

The course uses the text Holt Earth Science, 1982. Each unit begins with an observation skill activity which provides comparing and contrasting experience. The labs and activities follow a scientific procedure format. There are tests for each unit and a final exam.

### UNIT 1 - Lab Procedures, Techniques and Measurement

The unit introduces the skills of reading illustration and classification in the field of science. It continues with graphing and analyzing data; metric measurement-length, volume, and mass; introduce the use of lab equipment, lab techniques and lab safety; problem solving; and the Law of Probability.

### UNIT 2 - Plate Tectonics

The unit introduces the concepts of the layers of the earth; crystal plates; the movement of the earth; and the relationships of faults, earthquakes, volcanoes, and mountains.

### UNIT 3 - Geologic Time

The unit introduces the concepts of geologic eras; sequencing by rock layers; fossil records; index fossils; and geological time.

### UNIT 4 - Classifying Matter

The unit introduces the concepts of the properties of matter, atoms, elements and compounds; identifying and classifying matter, the periodic table and atomic weight; particles, physical states, physical and chemical changes of matter; and density of matter.

### UNIT 5 - Rocks and Minerals

The unit introduces the spheric layers. It continues with identifying minerals, crystal shapes and sizes; the properties of minerals, color streak, hardness tests; identifying and classifying igneous, sedimentary and metamorphic rocks; and the effects of physical weathering.