

EARTH SCIENCE 8B

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. The course begins by offering the student the opportunity to write a letter to NASA for information to use in Units 9 and 10. There are tests for each unit and a semester exam.

UNIT 6 - Natural Resources - Identification and Conservation

The unit involves the study of: the concepts of renewable and nonrenewable natural resources; fossil fuels; use of energy; world population and demand for energy; recycling; air, water and soil pollution; solar, geothermal and wind power; nuclear energy; and conservation at home and in the world.

UNIT 7 - Water On The Earth

The unit involves the study of: the water cycle; ground water and the water table; rivers; glaciers; the ocean floor; sea water; currents; waves; tsunami and tides; ocean life; and water pollution.

UNIT 8 - Atmosphere and Weather

The unit involves the study of: air - atmospheric layers, gases, volume and pressure; types of heat transfer - radiant, convection, and reflection; water in the air - humidity and relative humidity, clouds and precipitation; air masses - location and movement; severe weather - weather changes, plotting hurricanes, cloud seeding and blizzards; collecting weather information and weather forecasting through mapping.

UNIT 9 - Earth, Moon and Space Exploration

The unit involves the study of: mapping the earth - latitude and longitude; types of maps - topographic, contour, and time zones; the causes of the seasons; the earth and moon system - eclipses and moon phases; the moon - history, conditions and survival on it; rockets and satellites - orbits, a lab on thrust; space exploration - with emphasis on the U.S. program and the application of space technology.

UNIT 10 - Our Solar System and the Universe

The unit involves the study of: the origin and structure of the solar system; the sun - structure and sun spots; the inner planets - Mercury, Venus, Earth and Mars; the outer planets - Jupiter, Saturn, Uranus, Neptune and Pluto; other objects in the solar system - Halley's Comet; the life cycles of stars; North Sky constellations - including charts; galaxies. The unit concludes with discussion of the possible origins of the universe and the possibility of extra-terrestrial life.