

8th Grade
Earth Science

Earth features

Composition - earth's crust, mantle, and core; distribution of metals, minerals

Landforms - mountains, valleys, continents

Bodies of water - oceans, lakes, ponds, bottom of ocean, rivers

Atmosphere - layers of atmosphere (ionosphere, stratosphere, etc.)

Rocks, soil- soil types, soil formation, pH of soil, classes of rocks, specific rocks and their uses

Ice forms - glaciers, icebergs, Antarctic

Earth processes

Weather and climate - weather maps, weather forecasts, hurricanes, seasons of the year

Physical cycles - rock cycle, water cycle

Building and breaking - plate tectonics, earthquakes, volcanoes

Earth's history - geologic timetable, formation of fossils, fossil fuels, and mineral resources

Earth in the universe

Earth in the solar system - earth/sun/moon system, night/day, tides, north/south hemisphere, seasons

Planets in the solar system - planets' features, order of planets in the solar system

Beyond the solar system - galaxies, black holes, quasars, types of stars, constellations of stars

Evolution of the universe - origin/history/future of the universe

History of science and technology

Famous scientists, classic experiments, historical development of scientific ideas, industrial revolution, classic inventions

Nature of science

Nature of scientific knowledge - scientific methods, knowledge subject to verification, knowledge subject to change

Science and other disciplines

Science and mathematics - explicit mathematics instruction in the science curriculum

Science and other disciplines - science curriculum incorporated with language arts, social studies, or the arts; examples include chemistry of painting, using art or music to represent or illustrate science concepts, studying the role of science in other cultures, writing stories as metaphors that illustrate science concepts