

Cocalico School District
Year-at-a-Glance - Curriculum Overview

Department: Science

Course: Earth and Space Sciences

Grade Level: 6

Big Ideas

- To learn how the dynamic systems of Earth change its surface.
- To learn how the Earth’s processes affect and are affected by human activities.
- To learn how to use data to understand weather and climate.
- To learn how to observe and learn about the universe from our Earthly perspective.
- To learn how the universe is composed of different objects which are organized into systems, each of which develops according to accepted physical processes and laws.
- To practice the basics of scientific inquiry.

Units of Study	% of Course Time	Textbooks & Supplemental Materials	Assessments	Standards Addressed
<ul style="list-style-type: none"> • Nature of Science: Scientific investigations, Scientific method, Laboratory Tools and Safety 	10%	<ul style="list-style-type: none"> • Investigations found in curriculum textbook 	<ul style="list-style-type: none"> • Investigation Assessments 	<ul style="list-style-type: none"> • 3.2.7.A • 3.2.7.B • 3.2.7.C • 3.2.7.D
<ul style="list-style-type: none"> • Earth’s Dynamic Systems: History of Planet Earth, Plate Tectonics, Natural Disasters, Natural Resources, Earthquake Waves, Layers of the Earth, Types of Rocks, Rock Cycle, Landforms, Types of Volcanoes, Erosion, and Weathering 	40%	<ul style="list-style-type: none"> • STCMS Textbook: “Earth’s Dynamic Systems”, Haley, Carolina, 2018 • Videos, websites, and materials needed for various investigations 	<ul style="list-style-type: none"> • Lesson quizzes • Unit Test • Investigation Assessments 	<ul style="list-style-type: none"> • 3.5.7.A • 3.5.7.B • 3.2.7.B
<ul style="list-style-type: none"> • Weather and Climate: Heat, Temperature, Natural Hazards (Storms), Layers of the Atmosphere, Water Cycle, Air Pressure, Wind, Ocean Currents, Weather Maps, Climate Change 	30%	<ul style="list-style-type: none"> • STCMS Textbook: “Weather and Climate”, C. Risko, Carolina, 2017 • Videos, websites, and materials needed for various investigations 	<ul style="list-style-type: none"> • Lesson quizzes • Unit Test • Investigation Assessments • Biome Project 	<ul style="list-style-type: none"> • 3.5.7.C • 3.5.7.D • 3.2.7.B
<ul style="list-style-type: none"> • Space Systems Exploration: Patterns in our Solar System, Planets, the Moon, Moon Phases, Sun-Earth-Moon relationships, Shadows, Tides, Eclipses, Gravity, Space Exploration 	20%	<ul style="list-style-type: none"> • STCMS Textbook: “Space Systems Exploration”, H. Golba, Carolina, 2018 • Videos, websites, and materials needed for various investigations 	<ul style="list-style-type: none"> • Lesson quizzes • Unit Test • Investigation Assessments • Solar System Project 	<ul style="list-style-type: none"> • 3.4.7.D



Eagle P.A.C.T. Course Connections:

Students are encouraged to use problem solving skills throughout all aspects of Earth and Space explorations. Groups work collaboratively using critical thinking skills, to identify and investigate problems, interpret data, and create and communicate conclusions associated with the ever-changing earth, weather, climate and space.