

## Curriculum at a Glance

### Science

### 7th Grade

Elementary and middle school science curricula are based upon an inquiry model. Throughout each unit of study, students will continuously build on the following skills:

- Identify testable questions, those that can be answered through scientific investigation.
- Design and conduct appropriate types of scientific investigations to answer different questions.
- Use appropriate tools and techniques to make observations and gather data.
- Use mathematical operations to analyze and interpret data.
- Identify and present relationships between variables in appropriate graphs.
- Draw conclusions and identify sources of error.
- Provide explanations to investigated problems or questions.
- Read, interpret and examine the credibility of scientific claims in different sources of information.
- Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.

Unit Name/Description	Content and/or Skills
Long Island Sound	<ul style="list-style-type: none"><li>● How abiotic factors, such as temperature, water and sunlight, affect the biotic factors of an ecosystem</li><li>● Common food webs in different Connecticut ecosystems and how populations are affected by predator-prey relationships</li><li>● How water moving across and through earth materials carries with it the products of human activities (Water cycle, salt/fresh water, watershed, &amp; septic &amp; sewage systems.).</li><li>● Observe, analyze, record physical and chemical properties of water (temperature, density, pH, dissolved oxygen, salinity, etc.).</li></ul>
Weathering & Erosion	<ul style="list-style-type: none"><li>● How glaciation, weathering, and erosion change the Earth's surface by moving earth materials from place</li></ul>

	<p>to place</p> <ul style="list-style-type: none"> <li>● Compare and contrast the major agents of erosion and deposition of sediments</li> <li>● Investigate and determine how glaciers form and affect the Earth's surface as they change over time.</li> <li>● Rock cycle (Igneous, Sedimentary, &amp; Metamorphic)</li> </ul>
<p>Plate Tectonics (Earthquakes &amp; Volcanoes)</p>	<ul style="list-style-type: none"> <li>● How volcanic activity and the folding and faulting of rock layers during the shifting of the Earth's crust affect the formation of mountains, ridges and valleys.</li> <li>● Layers of the Earth.</li> <li>● How Earth's internal energy is transferred to move tectonic plates.</li> <li>● Correlate and study common geological features/events with the location of plate boundaries.</li> <li>● Characteristics of magma &amp; formation of volcanoes</li> </ul>
<p>Weather</p>	<ul style="list-style-type: none"> <li>● How local and regional weather are affected by the amount of solar energy the area receives, pressure, density, and proximity to a large body of water.</li> <li>● Composition and structure of the Earth's atmospheric layers.</li> <li>● Heating on the movement of molecules in solids, liquids, and gases.</li> <li>● How the uneven heating of the Earth's surface causes winds and affects the seasons.</li> </ul>