

## **Seventh and Eighth Grade Science Program The Edgartown School**

### **Seventh Grade Curriculum Overview:**

In seventh grade, the primary focus is on the life sciences (biology), however there is a sizable unit on astronomy as well, and a few shorter units on general science topics. Students will study the origins of life on earth, the characteristics of living organism, cell biology, and the major taxa of organisms including unicellular bacteria and protists; multicellular fungi, plants, and animals.

In seventh grade, students are taught experimental techniques such as developing hypotheses and drawing good conclusions from data. They will be expected to write up formal lab reports with traditional scientific language and format.

### **Eighth Grade Curriculum Overview:**

Eighth graders study a variety of topics beginning with a unit on human biology, including relevant health and medical topics. They then study genetics, followed by a unit on evolution. There is also an extensive unit on geology, which includes plate tectonics, seismology, and volcanology. They finish the year with a unit on the natural history of Martha's Vineyard, exploring the glacial formation, changing ecology, fauna and flora, and the impact of humans and development on the Island.

The eighth grade also includes some topics and projects related to technology/engineering, aligned to the Massachusetts framework for science and technology/engineering. They will be tested on these learning standards, along with the usual science standards, on the MCAS exam in the spring.

### **General:**

The Edgartown School seventh and eighth grade science curriculum is based on the Massachusetts framework, which is aligned to the Common Core State Standards, as well as the Next Generation Science Standards. For details, visit the following links:

<http://www.doe.mass.edu/frameworks/current.html>

<http://www.corestandards.org/the-standards>

<http://www.nextgenscience.org/next-generation-science-standards>

At the heart of the science curriculum rests critical skills that will help the children the most in the long run. These include how to effectively take notes and use technology to enhance their learning. They are also taught effective test-taking skills, reading and writing skills, as well as organizational skills. They are given many opportunities to collaborate with their peers and to hone their social abilities at teamwork and cooperation.

In both seventh and eighth grade, science is not merely taught as a body of knowledge, but a way of thinking and looking at the natural world, hopefully with a critical eye on how we perceive it and treat it.

Please feel free to contact me any time at school or at home.

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