

Marine Science Unit 6 Plan:
Plankton and Marine Plants
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Unit Overview:

Students will learn about planktonic organisms and the role that they play in the marine and global environments. They will investigate primary productivity, and will compare and contrast algae and vascular marine plants. Students will model plankton structure and present their models to the class,

Essential Questions

- What are plankton and why are they important?
- How do we classify plankton?
- What are the types of marine algae and what is their ecological function?
- What vascular plants do we find in the marine/maritime environment, and what roles do they play?
- How do we differentiate between emergent and submergent plants?

Goals and Objectives:

I can:

- Describe the main characteristics of plankton.
- Compare and contrast phytoplankton and zooplankton, meroplankton and holoplankton.
- Differentiate between GPP (gross primary productivity) and NPP (net primary productivity).
- Discuss the role of producers in coastal and marine ecosystems.
- Model planktonic structure.
- Utilize binomial nomenclature to create names for planktonic organisms.
- Compare and contrast algae and submergent & emergent vascular plants
- Review and utilize safe lab practices.

Sunshine State Standards:

see <http://www.floridastandards.org/Courses/CourseDescriptionSearch.aspx> for descriptions of standards.

LA.910.2.2.3; MA.912.S.1.2; MA.912.S.3.2; SC.912.L.17.2; SC.912.L.17.8; SC.912.L.17.9; SC.912.L.17.16.

Essential Six Literacy Skills:

ELS 1: Text features
ELS 2: Logical reasoning
ELS 3: Word learning
ELS 4: Comprehension

ELS 5: Research
ELS 6: Speaking
ELS 7: Collaboration
ELS 8: Writing

Dates	Readings	Labs/Activities	Assessments
January 22—24, 2014	<ul style="list-style-type: none"> • “<i>Marine Plankton</i>” • “<i>Dinoflagellates and Red Tide</i>” 	<ul style="list-style-type: none"> • “Fashion A Phyto-plankton” Project 	<ul style="list-style-type: none"> • 2-col notes • Plankton practice questions • 10% Summary: “...Red Tide”
January 27—31, 2014	<ul style="list-style-type: none"> • “<i>Algae and Submerged Plants</i>” 	<ul style="list-style-type: none"> • <i>Forest of the Deep</i> • Plankton & Algae Lab 	<ul style="list-style-type: none"> • “Fashion A Phytoplankton” models, write-ups, and presentation • <i>Forest of the Deep</i> focus questions
February 3—7, 2014	<ul style="list-style-type: none"> • Review: Plankton and Marine Plants 	<ul style="list-style-type: none"> • Algae/Aquatic plant web-quest • Test review 	<ul style="list-style-type: none"> • Plankton/Algae lab write-up • Algae/aquatic plant web-quest • Test: Plankton and Marine Plants

This time-line is subject to change. Students will be updated of any changes.