Unit 3: Module 2 - Nautical Science (2)

Content Area: **Social Studies**
Course(s):
Time Period: **April**
Length: **5 blocks**
Status: **Published**

Enduring Understandings

Illustrate an understanding of maritime geography as it relates to our national resources, landforms, climate, soil, bodies of water, people, governments, military and geopolitics

Demonstrate an understanding of the significance of oceanographic study

Essential Questions

- What are the reasons for a great interest now being shown in the world's oceans?
- What are the historical events that created the great bodies of water?
- What is the continental drift theory and how is it improtant today?
- How important is the great geological phenomena's that occur today as a result of our changing Earth?
- What are the methods used to explore the ocean floor and how are they changing with time and technology?

Content

3 Earth's Oceanographic History NS2-M3C3S1 – Earth's Oceanographic History
4 Undersea Landscapes NS2-M3C4S1 – Undersea Landscapes
5 Seawater: Its Makeup and Movements
NS2-M3C5S1 – The Makeup of Seawater
NS2-M3C5S2 - Waves
NS2-M3C5S3 – Ocean Currents and Gyres
6 Life in the Seas NS2-M3C6S1 – Simple Life in the Seas
NS2-M3C6S2 – Marine Animals
NS2-M3C6S3 – Life in the Open Sea
NS2-M3C6S4 - Bioluminescence
NS2-M3C6S5 – Underwater Research

Skills

- State the four reasons for the great interest now being shown in the world's oceans

- Know those historical events that created the great bodies of water
- Know the continental drift theory
- State methods used to explore the ocean floor
- The benefits of the continental shelf
- The make-up of the continental slope
- Know the features of the deep ocean basin
- State the sediments found on the ocean floor
- Know the causes of ocean currents and gyres
- The current movement in the Pacific Ocean
- State three effects of subsurface or countercurrents
- The effects of the Moon on our tides
- The effects of tides on coastal areas
- The theory of tidal energy

Resources

http://www.njrotc.navy.mil/curriculum.html

Naval Science II Maritime History, Leadership, and Nautical Sciences for the NJROTC 3rd Edition

Standards

Reading: Informational Text
RI.9-10.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly…
RI.9-10.4. Determine the meaning of words and phrases as they are used in a text…
RI.9-10.7. Analyze various accounts of a subject told in different mediums...

Writing
W.9-10.2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately…
W.9-10.6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products…
W.9-10.8. Gather relevant information from multiple authoritative print and digital sources…

Speaking & Listening

SL.9-10.1. Initiate and participate effectively in a range of collaborative discussions…

Language
L.9-10.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
L.9-10.4. Determine or clarify the meaning of unknown and multiple-meaning words and…

L.9-10.6. Acquire and use accurately general academic and domain-specific words and phrases…
College, Career, and Civic Life (C3) – Frameworks for Social Studies State Standards**

Dimension 2. Geography
D2.Geo.2.9-12. Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their political, cultural, and economic dynamics.
D2.Geo.4.9-12. Analyze relationships and interactions within and between human and physical systems...
D2.Geo.5.9-12. Evaluate how political and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.

Next Generation Science Standards (NGSS)
HS.Space Systems
HS-ESS1-1. Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation.

HS.History of Earth
HS-ESS1-5. Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.

HS-ESS1-6. Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.

HS.Weather and Climate
HS-ESS2-4. Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.

HS.Human Sustainability
HS-ESS3-1. Construct an explanation based on evidence for how the availability of natural