Explore the Ocean through Art
How do we learn?
1. What does art have to do with science?

2. How is it valuable in communicating concepts in the field of oceanography?
Prince Albert I of Monaco (1848-1922)

"the two directive forces of civilization: Art and Science."
Dolphins: Frescoe from the Queen's Megaron in the east wing of the Palace of Knossos. In the Palace of King Minos, Knossos c. 1500 B.C.,
Aristotle (384-382 B.C.)
Conrad Gesner, *Icones Animalium*, 1560
Ulisse Aldrovandi, *De Piscibus*, (1522-1605)
Abraham Ortelium (1527–1598)

Theatrum Orbis Terrarum, 1570.
Leonardo Da Vinci
(1452-1519)
Illustration by Nicholaus Steno from 1669, showing "tongue stones" and their similarities with modern shark teeth.
Robert Hooke (1635-1703)

Seventeenth century illustration of ammonoid fossils (*Cornua ammonis*, or "snake stones") drawn by Robert Hooke, father of microscopy and paleontology in Britain, 1703).
Charles Wyville Thompson (1830-1882)  
Challenger Expedition

Illustration of rock lobster, *Palinostus lalandii*, from Africa, from "Report on the Scientific Results of the Voyage of the H.M.S. Challenger during the Years 1873-1876."
Charles Wyville Thompson (1830-1882)
Challenger Expedition

An illustration of a soft coral species
Ernest Haeckel (1834-1919)
Pierre Dénys de Montfort (1766 – 1820)
Ben Franklin (1706-1790)

1770
John James Audubon (1785-1851)
Charles Darwin (1809-1892)

Atoll formation

Voyage on the HMS Beagle (1831-1836)
Alfred Wegener
1924 plate tectonics
Marjorie Courtenay-Latimer (1907-2004)
Margaret Mary Smith (wife of J.L.B. Smith)
Sea Fishes

Pamanzi (Comores),
29th December 1952:
Marie Tharp (1920-2006)

“There's truth to the old cliché that a picture is worth a thousand words and that seeing is believing.”

1959
Hallucigenia
Gyotaku

Blacktip Grouper, detail

Chimera, detail

Boshu Nagase
Red Drum
Jellyfish cup
Nautilus
Mutatis mutandis (Rene Magritte)
Old Man in the Sea
Sunbathing
Mutatis and friend
Science of the Sea
Science of the Sea
OCN 201

Physics
• Sound Waves
• Tsunami
Deep sea
• Abyss

Marine pollution
• Oil spill
• Plastics
• Discarded Nets
Fisheries
• Bycatch
• Shark fining
• Overfishing
Whaling
Leviathan
(dedicated to Jim Lavoie 10/10/2008)
Max rides the wave
Abyss Deep Sea: Abyss

Abyss
The Owl, the Pussycat and the Unwanted Guests
The Owl, the Pussycat and the Unwanted Guests
Midway
Triggerfish decomposition

Marine Pollution: Fishing line
Marine Pollution: Netting

Tied to be Caught
Fisheries: Bycatch

Bycatch
Shark fining

Fisheries: Shark Fining
Fisheries: Overfishing

Saving Fishes from Drowning
Fisheries: Overfishing

No Ono
Fisheries: overfishing

Genki Sushi Samurai
Kokeshi, Hello Kitty and Hakata doll having whale sushi on the back of a Minke whale. Chunk of whale meat missing. Whale labeled with concentrations of Hg levels.
Classroom Activities

- Concept maps - food webs and other concepts
- Collages
- Draw macroscopic organism
- Draw microscopic organisms
- Projecting animal on wall and tracing
- Draw in natural setting