



Camp SEA Lab

Science, Education & Adventure

Goals, Themes, and Standards

The major goals of Camp SEA Lab are to:

- 1) Ensure future stewardship of coastal and ocean resources.
- 2) Encourage recruitment and retention in ocean science educational pathways.
- 3) Prepare youth to make sound decisions about their careers and educational paths.
- 4) Provide youth with first hand knowledge and experience in ocean science and technology.

Themes:

A	Adaptations	HI	Human Impact
Bi	Biology	Ic	Ichthyology
Bu	Buoyancy	IS	Intertidal Studies
CE	Coastal Ecology	L	Light
C	Currents	OO	Open Ocean
DS	Deep Sea	PG	Population Genetics
E	Ecosystems	Po	Policy
GD	Genetic Diversity	Ph	Physics
G	Geology	WE	Watershed Ecology

Activity Types:

Art	Review
Environmental Policy	Scientific Modeling
Inquiry	Scientific Observation
Investigation	Simulation
Physical Activity	Technology

National Science Content Standards:

Unifying Concepts and Processes

- Ua Systems, order, and organization
- Ub Evidence, models, and explanation
- Uc Change, constancy, and measurement
- Ud Evolution and equilibrium
- Ue Form and Function

Science as Inquiry

- Ia Abilities necessary to do scientific inquiry
- Ib Understandings about scientific inquiry

Physical Science

- 2a Properties and changes of properties in matter
- 2b Motions and forces
- 2c Transfer of energy

Life Science

- 3a Structure and function in living systems
- 3b Reproduction and heredity
- 3c Regulation and behavior
- 3d Populations and ecosystems
- 3e Diversity and adaptations of organisms

Earth and Space Science

- 4a Structure of the earth system
- 4b Earth's history
- 4c Earth in the solar system

Science and Technology

- 5a Abilities of technological design
- 5b Understandings about science and technology

Science in Personal and Social Perspective

- 6a Personal health
- 6b Populations, resources, and environments
- 6c Natural hazards
- 6d Risks and benefits
- 6e Science and technology in society

History and Nature of Science

- 7a Science as a human endeavor
- 7b Nature of science
- 7c History of science

Ocean Literacy Principles:

Definition

Ocean literacy is an understanding of the oceans influence on you and your influence on the ocean.

An ocean-literate person understands:

1. the essential principles and fundamental concepts,
2. can communicate about the oceans in a meaningful way, and
3. is able to make informed and responsible decisions regarding the oceans and its resources.

Seven Essential Principles

1. Earth has one big ocean with many features.
2. The ocean and life in the ocean shape the features of Earth.
3. The ocean is a major influence on weather and climate.
4. The ocean makes Earth habitable.
5. The ocean supports a great diversity of life and ecosystems.
6. The ocean and humans are inextricably linked.
7. The ocean is largely unexplored.