SALT MARSH

Alabama Course of Study:
5th:
9.) Describe the relationship of populations within a habitat to various communities and ecosystems.
• Describing the relationship between food chains and food webs
• Describing symbiotic relationships

6th:

2.) Describe factors that cause changes to Earth's surface over time.
Examples: earthquakes, volcanoes, weathering, erosion, glacial erosion or scouring, deposition, water flow, tornadoes, hurricanes, farming and conservation, mining and reclamation, deforestation and reforestation, waste disposal, global climate changes, greenhouse gases
• Comparing constructive and destructive natural processes and their effects on land formations
- destructive-erosion by wind, water, and ice

7.) Describe Earth's biomes.

9.) Identify the moon's phases.
• Describing lunar and solar eclipses
• Relating effects of the moon's positions on oceanic tides

7th:
1.) Describe characteristics common to living things, including growth and development, reproduction, cellular organization, use of energy, exchange of gases, and response to the environment.
• Predicting how an organism's behavior impacts the environment

4.) Describe organisms in the six-kingdom classification system by their characteristics.
• Recognizing genus and species as components of a scientific name
• Identifying contributions of Aristotle and Linnaeus to the early history of taxonomy

5.) Identify major differences between plants and animals, including internal structures, external structures, methods of locomotion, methods of reproduction, and stages of development.
• Describing the processes of photosynthesis and cellular respiration

7.) Describe biotic and abiotic factors in the environment.

9-12th:
Marine Biology:
2.) Differentiate among freshwater, brackish water, and saltwater.

4.) Recognize interactions between the atmosphere and the ocean.
• Describing how waves, ocean currents, and tides are generated

6.) Describe components of major marine ecosystems, including estuaries, coral reefs, benthic communities, and open-ocean communities.

7.) Identify patterns and interrelationships among producers, consumers, scavengers, and decomposers in a marine ecosystem.

11.) Describe positive and negative effects of human influence on marine environments. Examples:
- positive-reef restoration, protection of endangered species;
- negative-pollution, overfishing

Environmental:
7.) Identify reasons coastal waters serve as an important resource.

8.) Identify major contaminants in water resulting from natural phenomena, homes, industry, and agriculture.
• Describing the eutrophication of water by industrial effluents and agricultural runoffs
• Classifying sources of water pollution as point and nonpoint

Geology:
9.) Describe the movement and storage of water in terms of watersheds, rainfall, surface runoff, aquifers, and surface water reservoirs.
• Identifying major regional and national watersheds

OCEAN LITERACY: ESSENTIAL PRINCIPLES AND FUNDAMENTAL CONCEPTS:

1 The Earth has one big ocean with many features.

g The ocean is connected to major lakes, watersheds and waterways because all major watersheds on Earth drain to the ocean.

5 The ocean supports a great diversity of life and ecosystems.

i Estuaries provide important and productive nursery areas for many marine and aquatic species