Loggerhead Sea Turtle Hatching Activity

MarineLab instructor will lead a brief discussion on sea turtle nesting and introduce the idea that only 1 in 1000 sea turtles survive until maturity. Students will then participate in a modeling activity—each student will take eggs from a nest and learn threats sea turtles face throughout each life phase. At the end, the .02% survival rate will be demonstrated. The activity will end with a discussion on sea turtle protection efforts and how students can get involved.

Grade Level: 7th-10th grade

Timing: 1 hour

Concepts Covered:

- Sea turtle nesting
- Sea turtle hatching
- Sea turtle life stages
- Threats to sea turtles
- Sea turtle conservation efforts

Vocabulary: reptile, threatened, endangered, nesting, clutch, predation, incubation, hatchlings, survival rate, dessication

Sources: www.marine-ed.org/bridge/survivor.pdf, www.scientificamerican.com/article/sea-turtles-lost-years-transatlantic-journey-mapped-for-first-time

Extensions: Visit the Turtle Hospital in Marathon, FL- ask staff for details

Standards Supported:

Next Generation Sunshine State Standards

SC.5.L.17.1: Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.

SC.912.L.17.8: Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.

Ocean Literacy Principles

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

d. Ocean biology provides many unique examples of life cycles, adaptations and important relationships among organisms (symbiosis, predator-prey dynamics, and energy transfer) that do not occur on land.

Principle 6. The ocean and humans are inextricably interconnected.

d. Humans affect the ocean in a variety of ways. Laws, regulations and resource management affect what is taken out and put into the ocean. Human development and activity leads to pollution (point source, non-point source, and noise pollution), changes to ocean chemistry (ocean acidification) and physical modifications (changes to beaches, shores and rivers). In addition, humans have removed most of the large vertebrates from the ocean.

g. Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all.