

Green Eggs and Sand – Module Two: Next Generation Science Standards

Courtesy of Maryland Department of Natural Resources Aquatic Education Program

Build a Shorebird – Upper Elementary, Middle School

Next Generation Science Standards

- 4-LS1-1 – Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction
- MS-LS1-4 – Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors...affect the probability of successful reproduction in animals.
- MS-LS1-5 – Construct a scientific explanation based on evidence for how environmental and genetic factors affect the growth of organisms.

Be “Shore” About Your Shorebirds – Middle School, High School

Next Generation Science Standards - None

Eat and Go – Middle School, High School

Next Generation Science Standards:

- MS-LS1-4 – Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors...affect the probability of successful reproduction in animals.
- MS-LS1-5 – Construct a scientific explanation based on evidence for how environmental...factors affect the growth of organisms.
- MS-LS1-8 – Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior.
- MS-LS2-1 – Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystems
- MS-LS2-2 - Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
- MS-LS2-3 – Develop a model to describe the cycling of matter and energy among living and nonliving parts of an ecosystem.
- MS-LS2-4 – Construct an argument based on empirical evidence that changes to physical or biological components of an ecosystem affect populations
- MS-ESS3-3 – Apply scientific principals to design a method for monitoring and minimizing a human impact on the environment.

Red Knot Olympics – Middle School, High School

Next Generation Science Standards:

- 4-LS1-1 – Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction
- MS-LS1-4 – Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors...affect the probability of successful reproduction in animals.

Where Have You Been? – Middle School, High School

Next Generation Science Standards- None

Be “Shore” About Your Data – Middle School, High School

Next Generation Science Standards - None

Every Bird Counts – Middle School, High School

Next Generation Science Standards:

- MS-ETS1-1 – Define the criteria and constraints of a design problem with sufficient precision to ensure a successful conclusion, taking into consideration relevant scientific principles...
- MS-ETS1 – 4 – Develop a model to generate data for iterative testing and modification if a proposed...process such that an optimal design can be achieved.