

Green Eggs and Sand – Module Two

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.

Common Core State Standards - None

Environmental Literacy – None

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

Next Generation Science Standards - None

Common Core State Standards

- Language Arts
 - Grades 6-8
 - W.2 - Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
 - Grades 9-12
 - W.2 - Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

Environmental Literacy – 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.

Common Core State Standards - None

Environmental Literacy:

- 4.A.1 – Explain how organisms are linked by the transfer and transformation of matter and energy at the ecosystem level.
- 4.B.1 – Analyze the growth or decline of populations and identify a variety of responsible factors.
- 5.A.2 – Analyze the effects of human activities thar deliberately or inadvertently alter the equilibrium of natural processes.

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.

Common Core State Standards:

- Math
 - 4.OA.A.3 – Solve multistep word problems posed with whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted.
 - 7.EE.B.3 – Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form

Environmental Literacy:

- 1.A.5 – Use data...to interpret findings to form conclusions

Where Have You Been? – Middle School, High School

Next Generation Science Standards- None

Common Core State Standards - None

Environmental Literacy:

- 1.A.5 – Use data...to interpret findings to form conclusions

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

Next Generation Science Standards - None

Common Core State Standards:

- Math
 - MP6 – Attend to precision
 - HSN-Q.A.3 Choose a level of accuracy appropriate to limitations on measurements when reporting quantities

Environmental Literacy - 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.

Common Core State Standards:

- Math
 - MP. – Reason abstractly and quantitatively
 - MP4 – Model with mathematics
 - 7.EE.B.3 – Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form.
 - 7.SP.A.2 – Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) to gauge the variation in estimates or predictions.
 - HSS.MD.B.6 – Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator)

Environmental Literacy:

- 1.A.5 – Use data...to interpret findings to form conclusions