

Edmore Public School
706 Main St, Edmore, ND 58330

Biology Lesson Plan

Dates:

February 19 - 23, 2024

Time and Period:

2:32 - 3:25 PM, Seventh Period

Performance Standard:

HS-LS4-4

Analyze the change in proportion of organisms with and without specific adaptations using Hardy-Weinberg equilibrium or another mathematical tool.

HS-LS4-3

Use mathematical models to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.

HS-LS4-2

Construct an explanation based on evidence that the process of biological evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.

HS-LS24-1

Apply multiple lines of empirical evidence to support the biological evolution of a specific or an unknown species (i.e., BLAST sequencing, anatomical structure).

HS-LS2-8

Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.

Monday, February 19

Topic	PROJECT: The Island Biogeography
Objectives	Use representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
Bell Ringer	Define <i>Biodiversity</i>
Procedure / Instructional Delivery	Guided Practice, Use of Simulation, Scaffolding

Assessment	PROJECT: The Island Biogeography (pp. 1 and 2 completion)
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Tuesday, February 20	
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Topic	PROJECT: The Island Biogeography
Objectives	Use representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
Bell Ringer	Explain this statement in your own words: The population will reach a stable point when the immigration rate matches the extinction rate.
Procedure / Instructional Delivery	Guided Practice, Use of Simulation, Scaffolding
Assessment	PROJECT: The Island Biogeography (pp. 1 and 2 completion)

Wednesday, February 21	
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Topic	PROJECT: The Island Biogeography (Creation of Slide Presentation)
Objectives	Use representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
Bell Ringer	Explain this statement in your own words: As the distance between an island and the mainland increases the number of species it can support decreases.
Procedure / Instructional Delivery	Guided Practice, Use of Simulation, Scaffolding
Assessment	PROJECT: The Island Biogeography (Creation of Slide Presentation)

Thursday, February 22	
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Topic	PROJECT: The Island Biogeography (Work Period for Slide Presentation)
Objectives	Use representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
Bell Ringer	Use the graph to describe the species-area relationship.
Procedure / Instructional Delivery	Guided Practice, Use of Simulation, Scaffolding

Assessment	PROJECT: The Island Biogeography (Creation of Slide Presentation)
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Friday, February 23

Topic	PROJECT: The Island Biogeography (Completion of Slide Presentation)
Objectives	Use representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
Bell Ringer	Why is the species area concept important?
Procedure / Instructional Delivery	Guided Practice, Use of Simulation, Scaffolding
Assessment	PROJECT: The Island Biogeography (Completion of Slide Presentation)