

ALTERNATIVE LESSON PLANS FOR DISTANCE LEARNING

These alternative lesson plans condense what is taught and suggest ways to support students learning at home. We acknowledge that every situation is unique and strive to provide plans that can be used online or as printed packets. Focus on fewer scientific principles. Use print and audio readings. Share the videos that you can. Discuss if you can.

UNIT TITLE	LS1
DRIVING QUESTION	What can cause populations to change?

Lesson 1 (3 days)	<i>What Can Cause Populations to Change?</i>
Activity 1.1	Interactions in Our World
Reading 1	<i>Bacteria, Chimps, Peanuts, and Dolphins</i>
Activity 1.2	Field Study (you could provide a virtual experience from a video)
Extension Activity 1.2	What Can Cause Populations to Change?
Reading 2	<i>Wildlife Biologists at Work</i>

Lesson 2 (1 day)	<i>What Could Be Causing the Trout Population to Change?</i>
Activity 2.1	Introducing the Trout Mystery Share Use PI: Map of Great Lakes Area, PI: Trout Population Data
Reading 2	What Caused These Population Changes?

Lesson 3 (3 days)	<i>Why Do Living Things Need Food?</i>
Activity 3.1	What Do Organisms Use Food For? Post discussion questions if you are able to monitor student responses.
Activity 3.2	Investigating What Is in Food (use food labels kids have in their homes)
Reading 1	<i>Energizing Me</i>
Activity 3.4	Writing a Scientific Explanation

Lesson 4 (2 days)	<i>Where Do Living Things Get the Food They Need?</i>
Activity 4.2	Do Plants Need Food?
Reading 1	<i>Hydroponics</i>
Extension Activity 4.2	What Do Trout Eat?

Lesson 5 (1-2 days)	<i>Trout: Predator or Prey?</i>
Reading 1	<i>Where Have All the Puffin Gone?</i>
Activity 5.2	Changes in a Food Web
Reading 2	<i>Fisherman's Journal</i>

Lesson 6 (2 days)	<i>Why Should We Care about an Invader?</i>
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Lesson 7 (2-3 days)	<i>Could the Sea Lamprey Have a Major Impact as a Predator?</i> OPTIONAL but engaging for students at home
Activity 7.1	Use Dissection Alternative suggestions for virtual dissection TE pg 179
Reading 1	<i>Sea Lamprey and Lake Trout</i>

Lesson 8 (1 day)	<i>Could the Sea Lamprey Have a Major Impact as a Predator?</i> OPTIONAL but engaging for students at home
Reading 1	<i>Plant Structures</i>

Lesson 9 (2 days)	<i>How Can an Invader Affect an Ecosystem?</i>
Activity 9.2	Can All Three Populations Survive
Reading 1	<i>A Stable Ecosystem in the Park</i>
Reading 2	<i>An Invader in Yellowstone National Park</i>

Lesson 10 (1 day)	<i>How Does the Sea Lamprey Affect the Trout?</i>
Activity 10.1	How Does the Sea Lamprey Affect the Trout?
Reading 1	<i>Your Space or My Space?</i>

Lesson 11 (1 day)	<i>Are There Other Things that Affect Populations?</i>
Reading 1	<i>When More Is Too Much</i>

Lesson 12 (1 day)	<i>Are Abiotic Factors Affecting the Trout?</i>
Activity 12.1	Analyzing Dioxin Data
Reading 1	<i>Return of the Green Goo</i>

SUMMATIVE ASSESSMENT: Students should be able to write a scientific explanation for the Driving Question: What Can Cause Populations to Change?