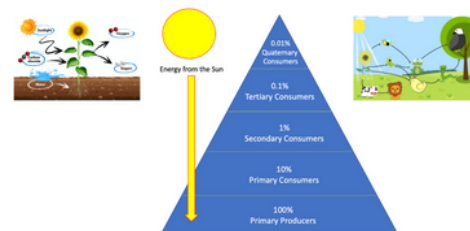
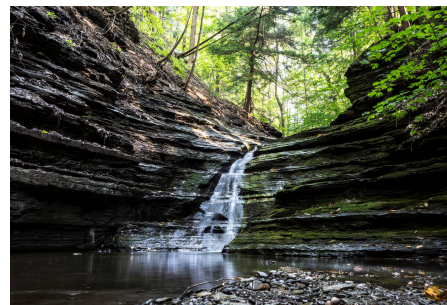
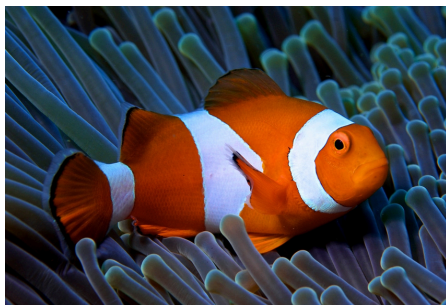


NGSS HS-LS2

Ecosystems: Interactions, Energy, and Dynamics

Full Standard BUNDLE

- ✓ Everything You Need to Teach NGSS HS-LS2
- ✓ Lessons, Activities, Labs, Projects, and more
- ✓ HS-LS2-1, LS2-2, LS2-3, LS2-4, LS2-5, LS2-6, LS2-7, LS2-8



Bundles Included

NGSS HS-LS2-1

Curriculum Bundle

Factors that Affect Carrying Capacity of Ecosystems

- ✓ 1 Lesson and 3 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-1



NGSS HS-LS2-2

Curriculum Bundle

Factors Affecting Biodiversity Populations

- ✓ 1 Lesson and 4 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-2



NGSS HS-LS2-3

Curriculum Bundle

Cycling of Matter and Energy Flow

- ✓ 1 Lesson and 5 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-3

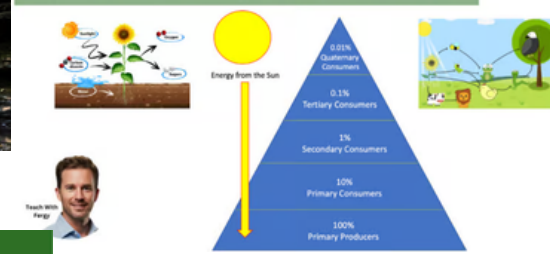


NGSS HS-LS2-4

Curriculum Bundle

Matter Cycling and Energy Flow in Ecosystems

- ✓ 1 Lesson and 5 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-4

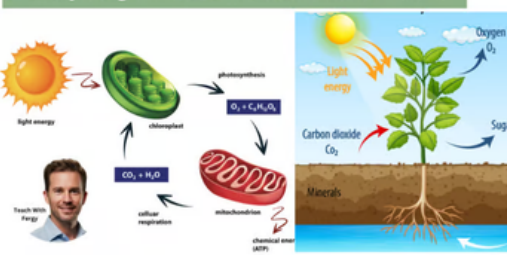


NGSS HS-LS2-5

Curriculum Bundle

Modeling Carbon Cycling: Photosynthesis and Respiration

- ✓ 2 Lessons and 5 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-5



NGSS HS-LS2-6

Curriculum Bundle

Ecosystem Stability, Change, and Interactions

- ✓ 1 Lesson and 6 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-6



NGSS HS-LS2-7

Curriculum Bundle

Human Activity and the Environment: Solutions for Biodiversity

- ✓ 2 Lessons and 6 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-7



NGSS HS-LS2-8

Curriculum Bundle

Evaluating the Role of Group Behavior in Survival & Reproduction

- ✓ 2 Lessons and 3 Activities
- ✓ Everything You Need to Teach NGSS HS-LS2-8



Everything You Need to Completely Cover NGSS HS-LS2

Complete Lessons

Activities

Labs

Projects

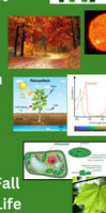
Surviving Together - The Power of Group Behavior

- Teaches: Group behaviors like flocking, schooling, herding, and cooperative hunting improve survival and reproduction by boosting protection, hunting, and resource sharing.
- No-Prep Resource with videos embedded and exit ticket



Photosynthesis

- Earth's Energy Budget
- Photosynthesis Introduction
- Pigments
- Why Plants are Green
- Light
- Chlorophyll a & b
- Carotenoids
- Why Some Leaves Change Color in the Fall
- Photosynthesis and Life



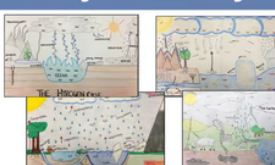
Invasive Species

- Invasive vs. Native Species
- The Effect of an Invasive Species on an Ecosystem
- The Small Asian Mongoose
- Controlling Invasive Species
- 5 Extreme Invasive Species



Google Slides and PowerPoint Versions Included
Google Classroom Ready

Water and Carbon Cycle Activity



- Hands-On Water & Carbon Cycle Models
- Grading Made Easy
- Perfect for Multiple Grades
- Real Student Examples Included



Chapter 3: Energy Flow in Ecosystems

Digital Interactive Notebook Pages

- 100% Digital and Interactive
- Perfect for your Google Classroom or Microsoft OneDrive



Device-Based Scavenger Hunt

Energy Flow in Ecosystems

Includes

- 5 Unique Locations
- Online form submission
- Answer Key

Works on all smartphones, tablets, Chromebooks and laptops

- 100% Digital
- Simulations
- Quizzes
- Videos
- Games
- Word Scramble
- and more



Volcanoes: The Benefits and Devastation - Scientific Reading Comprehension Article



Improve your students Scientific Literacy and Analysis Skills, use as an Emergency Substitute Plan or create Applicability in your classroom

Carrying Capacity Lab

The Pine Valley Challenge

Ecosystem Dynamics



BIODIVERSITY AND INVASIVE SPECIES

Lab Station Activity

- Interactive Lab Stations
- Biodiversity and Invasive Species Review
- No-Prep Setup
- Bonus Word Activities



Interactions Within Ecosystems

Lab Station Activity



PHOTOSYNTHESIS COMIC BOOK ASSIGNMENT

High School

- Students create a comic book that narrates the journey of a carbon atom through the process of photosynthesis
- Full rubric included



Human Impact on Ecosystems Assignment

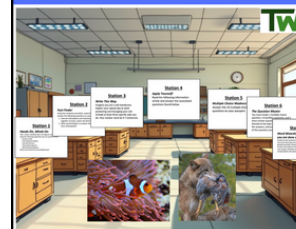
Ecology Inquiry-Based Project

- Inquiry-Based Ecosystem Project
- Customizable & Device-Friendly
- Includes Rubric & Topic Choices
- Ideal for Grades 5-9



Get your kids engaged in their

Ecosystems Interactions - Abiotic & Biotic Station Activity



The Standard is Explained and the Resources it Incorporates are Outlined

HS-LS2 Ecosystems: Interactions, Energy, and Dynamics

Note: There may be resources that overlap between the standards. Simply choose the order that best fits your classroom. Also, there are more resources here than you will most likely decide to use. I have provided extra so you can make the best decision for your students on what is best to include.

HS-LS2-1. Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. [Clarification Statement: Emphasis is on quantitative analysis and comparison of the relationships among interdependent factors including boundaries, resources, climate, and competition. Examples of mathematical comparisons could include graphs, charts, histograms, and population changes gathered from simulations or historical data sets.] [Assessment Boundary: Assessment does not include deriving mathematical equations to make comparisons.]

Resources:

- Biotic and Abiotic Population Influences – Lesson
- Carrying Capacity Lab - Ecosystem Dynamics
- Symbiotic relationships between plants and insects – Reading
- Interactions Within Ecosystems - Lab Station Activity

HS-LS2-2. Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. [Clarification Statement: Examples of mathematical representations include finding the average, determining trends, and using graphical comparisons of multiple sets of data.] [Assessment Boundary: Assessment is limited to provided data.]

Resources:

- Biodiversity - Complete SE Lesson Bundle
 - The Importance of Biodiversity – Lesson
 - Biodiversity and Invasive Species – Lab Station Activity
 - Biodiversity and Invasive Species – Digital Boom Cards
 - Biodiversity – Digital Scavenger Hunt
- Populations and Resource Availability – Station Activity

HS-LS2-3. Construct and revise an explanation of energy in aerobic and anaerobic conditions, understanding the role of aerobic and anaerobic respiration. [Assessment Boundary: Assessment does not include the respiration.]

Resources:

- The Cycling of Matter - SE Lesson Bundle
 - Cycling of Matter in Ecosystems
 - The Carbon Cycle and Water Cycle
 - The Water Cycle – Reading
 - Water Cycle and Carbon Cycle
 - Cycling of Matter in Ecosystems
- Cycling of Matter in Ecosystems – Digital

HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. [Clarification Statement: Examples of human activities can include urbanization, building dams, and dissemination of invasive species.]

Resources:

- The Importance of Biodiversity - Lesson
- Invasive Species – Lesson
- Invasive Species - Scavenger Hunt Activity
- Biodiversity and Invasive Species - Lab Station Activity
- Urban Sprawl – Reading
- Human Impact on Ecosystems Inquiry Lab Experiment
- Human Impact on Ecosystems Assignment
- Case Study - Plastic Pollution and Marine Ecosystems

HS-LS2-8. Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce. [Clarification Statement: Emphasis is on: (1) distinguishing between group and individual behavior, (2) identifying evidence supporting the outcomes of group behavior, and (3) developing logical and reasonable arguments based on evidence. Examples of group behaviors could include flocking, schooling, herding, and cooperative behaviors such as hunting, migrating, and swarming.]

Resources:

- Group Behavior and Survival - Lesson
- Physical and Behavioral Adaptations - Lesson
- Physical Adaptations – Reading
- Animal and Plant Adaptations for Reproduction - Station Activity
- Physical and Behavioral Adaptations - Lab Station Activity

HS-LS2-4. Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem. [Clarification Statement: Emphasis is on using a mathematical model of stored energy in biomass to describe the transfer of energy from one trophic level to another and that matter and energy are conserved as matter cycles and energy flows through ecosystems. Emphasis is on atoms and molecules such as carbon, oxygen, hydrogen, and nitrogen being conserved as they move through an ecosystem.] [Assessment Boundary: Assessment is limited to proportional reasoning to describe the cycling of matter and flow of energy.]

Resources:

- Energy Flow in Ecosystems – Lesson
- Matter and Energy Flow in Ecosystems - Science Word Sprint
- Energy Flow in Ecosystems - Review, Test, and Project
- Energy Flow in Ecosystems - Digital Interactive Notebook Pages
- Energy Flow in Ecosystems Lab Station Activity
- Energy Flow in Ecosystems - Device-Based Scavenger Hunt Activity

HS-LS2-5. Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere. [Clarification Statement: Examples of models could include simulations and mathematical models.] [Assessment Boundary: Assessment does not include the specific chemical steps of photosynthesis and respiration.]

Resources:

- Photosynthesis – Lesson
- Photosynthesis – Reading
- Photosynthesis Comic Book Assignment
- Photosynthesis and Cellular Respiration BINGO
- Photosynthesis and Cellular Respiration - Crossword Puzzle Activity
- Cellular Respiration – Lesson
- Cellular Respiration - Lab Station Activity

ence, and reasoning that the complex interactions in ecosystems involve the numbers and types of organisms in stable conditions, but changing over time. [Clarification Statement: Examples of changes in ecosystem could include biological or physical changes, such as moderate hunting or a seasonal change in climate, or volcanic eruption or sea level rise.]

ion Influences - Lesson
Ecosystems - Lab Station Activity
Ecosystems – Scavenger Hunt Activity
Interactions Between Species- Reading
Abiotic and Biotic - Station Activity
Human Impact and Devastation – Reading
Ecosystem Dynamics

Who is this Bundle for?

- **Teachers who teach High School Science and use the NGSS**
- **Teachers who want multiple resources at their fingertips including lessons and a variety of activities, in order to meet the standard**
- **Teachers who don't have time to develop their own resources or organize what to teach and when**