

Unit 7: Ecology

Content Area: **Template**

Course(s):

Time Period:

Length:

Status: **Published**

State Mandated Topics Addressed in this Unit

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|---|-----|
| N/A | N/A |

Ecology (~2 weeks)

Learning Objectives

- Abiotic Cycles, Trophic Levels, Energy Pyramid
- Biosphere Organization and Biomes
- Communities
- Defensive Mechanisms of Prey vs. Coevolution
- Density Dependent/Independent Factors
- Exponential and Logistic Growth Patterns vs. Carrying Capacity
- Geochemical Cycles
- Keystone and Dominant Species
- Niche
- Organismal Behavioral (Learning) and Communication with Ecosystems
- Predator-Prey Dynamics
- Primary and Secondary Succession
- r and k Reproductive Strategies
- Symbiosis and Species Interactions
- Trophic Structure and Food Webs

Essential Skills

- 2.A.1
- 2.C.1
- 2.C.2

- 2.D.1
- 2.D.3
- 2.E.1
- 2.E.2
- 2.E.3
- 3.E.1
- 4.A.5
- 4.A.6
- 4.B.2
- 4.B.3
- 4.B.4
- 4.C.3
- 4.C.4
- Big Idea 2
- Big Idea 3
- Big Idea 4
- Science Practices 1
- Science Practices 2
- Science Practices 3
- Science Practices 4
- Science Practices 5
- Science Practices 6
- Science Practices 7

Standards

Instructional Tasks/Activities

Please note: Some activities, labs, and/or projects are subject to change, activity with numbers in parentheses indicates AP Biology required lab.

- Animal Interaction Station Activity
- Energy Dynamics Inquiry Lab (10)
- Keystone PSA Activity
- Oh Deer Activity

Assessment Procedure

- Classroom Total Participation Technique
- Classwork
- DBQ
- Essay
- Exit Ticket/Entrance Ticket/Do Now
- Journal / Student Reflection
- Kahoot
- Other named in lesson
- Peer Review
- Performance
- Problem Correction
- Project
- Quiz
- Rubric
- Teacher Collected Data
- Test
- Worksheet

Recommended Technology Activities

- Appropriate Content Specific Online Resource
- Chromebook
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Gimkit
- GoGuardian
- Google Classroom
- Google Docs
- Google Forms
- Google Slides
- Kahoot
- MagicSchool AI
- Other- Specified in Lesson
- Quiziz
- Screencastify

Accommodations & Modifications & Differentiation

Accommodations and Modifications should be used to meet individual needs. Their IEP and 504 plans should

be used in addition to the following suggestions.

Gifted and Talented

- Compare & Contrast
- Conferencing
- Debates
- Jigsaw
- Peer Partner Learning
- Problem Solving
- Structured Controversy
- Think, Pair, Share
- Tutorial Groups

Instruction/Materials

- alter format of materials (type/highlight, etc.)
- color code materials
- eliminate answers
- extended time
- extended time
- large print
- modified quiz
- modified test
- Modify Assignments as Needed
- Modify/Repeat/Model directions
- necessary assignments only
- Other (specify in plans)
- other- named in lesson
- provide assistance and cues for transitions
- provide daily assignment list
- read class materials orally
- reduce work load
- shorten assignments
- study guide/outline
- utilize multi-sensory modes to reinforce instruction

Environment

- alter physical room environment
- assign peer tutors/work buddies/note takers
- assign preferential seating
- individualized instruction/small group
- modify student schedule (Describe)
- other- please specify in plans
- provide desktop list/formula

Honors Modifications

Resources

- Resource 1
- Resource 2
- Resource 3
- Resource 4
- Resource 5