



Humanities and the Sunshine State

What Sustains Us?

Florida Ecosystems in an Era of Rapid Change

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ACTION PLAN TEMPLATE

Teacher(s): Lanete Kaiser, Calvary Chapel Academy, Brevard County
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Grade(s): 7

Subject(s): Science

Title of Lesson: Web of Life

Learning Objectives: Students will understand that all organisms on Earth interact and depend upon each other and their environment to satisfy their basic needs.

Standards Addressed: SC.7.N.3.2 Identify the benefits of a scientific model
SC.7.L.17.1 Explain and illustrate the roles of/and relationships among producers, consumers and decomposers in the process of energy transfer in a food web
SC.7.L.17.3 Students will identify the limiting factors in an ecosystem and their effect on a food web

- Lesson Outline:
- Create plant and animal cards relating to a specific ecosystem.
 - Distribute cards to students. Each student gets 1 card. Give the end of a ball of yarn to a plant.
 - Students will pass the yarn to an organism that interacts with it. There will be some overlap.
 - Continue to pass the yarn until all organisms are linked in the food web.
 - Original plant tugs the yarn, each student that feels the tug will tug back.
 - Choose one organism to drop out of the web. (Students will need to adjust to get rid of ^{over-}slack.) Tug again, feel the changes.
 - Discuss/Brainstorm What? Why? How?

Systems thinking connection (learning habits and/or tools used):

- Model connection of each organism to a food web and then expand to include ecosystem and humanities.
- Could create system ~~and~~ chart

Learning Strategies:

Visual - model
kinesthetic - yarn / hugging
multi sensory - sight / sound / touch
brainstorming - critical thinking

Science Concept(s):

Ecosystems, dependence, interdependence

Humanities Concept(s):

For further consideration add humans and their "conquest" of the natural ecosystem. What happens if they inadvertently kill off a species or pollute the ecosystem - can brainstorm, discuss, write about it.

Student Assessment Strategies:

- Student can create (paper) web of another system
- write about the relationships between parts
- write about what would happen if humans were added to the equation?

Benefit to my students:

- Visualize using a model to what happens when one element is removed from food web.

Resources and Materials (supplies needed for activities):

- 200 ft of yarn
- pictures or signs of animals and plants from an ecosystem
- paper, pencils
- chart paper
- white board