



Science Interns Module: Chihuahuan Desert Food Web and Species **5th Grade**

Overview

This four-lesson module helps students learn about (1) the movement of matter through a Chihuahuan Desert food web; 2) the conservation of the gray vireo, one of the species in the food web. They also prepare to teach three mini-stations to younger students at their school. In lesson 1, students learn about a food web in the Chihuahuan Desert through a book and several activities. In lesson 2, students focus on the important role that plants and decomposers play in a food web. In lesson 3, students focus on the gray vireo, a Species of Greatest Conservation Need (SGCN) in New Mexico. They will learn about bird transect surveys, assemble a conservation plan, and then compare their conservation plan with the one developed by the New Mexico Department of Game and Fish. Finally, in lesson 4, students are assigned their teaching station and practice teaching about Chihuahuan Desert food webs to younger students.

Phenomenon/Problem to Solve

- Matter moves among plants, animals, decomposers and the environment in a food web occurring in and around playas in the Chihuahuan Desert.
- Plants get matter they need to grow from the air, not from the soil.
- The gray vireo is a “Species of Greatest Conservation Need” in New Mexico. How can we conserve the species using science ideas, but with a limited amount of time and money?

Next Generation Science Standards

5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers and the environment.

5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water.

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.

Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Developing and using models	LS2.A: Interdependent relationships in ecosystems	Systems and system models
Constructing explanations and designing solutions	LS1.C: Organization for matter and energy flow in organisms	Energy and matter
Engaging in argument from evidence	ESS3.C: Human impacts on Earth systems (major effects of humans and how individuals & communities are doing things to help protect Earth’s environments)	Patterns
Obtaining, evaluating, and communicating information		
Analyzing and interpreting data		

Common Core State Standards

RST.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.

SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others’ ideas and expressing their own clearly.

Date: _____

Asombro staff: _____