



Plant Traits: Learning from Herbarium Collections 3rd Grade Classroom Program

Program Summary

Students will investigate the trait of leaf size in two species of oaks found in New Mexico. They learn about humidity and stomata on leaves and use their new understanding to explain why a species from an area with lower humidity has smaller leaves than a species from an area with higher humidity. Throughout the lesson, they will role-play as botanists working with specimens from an herbarium, learning the importance of natural history collections.

Phenomenon

Leaf size varies in oak species found in two New Mexico towns where the average humidity is different.

Next Generation Science Standards

3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.

Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Constructing Explanations And Designing Solutions Analyzing And Interpreting Data	LS3.B: Variation of Traits	Cause and Effect Structure and Function Patterns

Common Core State Standards

Math

3.D.1.1 Collect and organize data using observations, measurements, surveys, or experiments.

English Language Arts

SL.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

SL.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

Date: _____

Asombro staff: _____