



Desert Stories: Yucca & Yucca Moth Life Cycles 3rd Grade Classroom Module

Program Summary

Desert Stories consists of three, hour-long lessons delivered by staff from the Asombro Institute for Science Education in your classroom and schoolyard.

Lesson 1 - Students receive a “mystery object” (yucca seed pod) and listen to a reading of Night Life of the Yucca: The Story of a Flower and a Moth to determine what their mystery object is. They complete models of the yucca life cycle and the yucca moth life cycle and look for similarities and differences.

Lesson 2 - Students act out a skit as a reminder of the yucca and yucca moth mutualism story. They then complete a scientific investigation to discover the common number of insect holes in yucca seedpods. They measure, create graphs, and read and answer questions to better understand their results and conclusions.

Lesson 3 - Students practice skills with a second scientific investigation on yucca roots. They measure, convert feet to inches, graph, and describe their results and conclusions.

Phenomenon

How do the yucca and yucca moth interact with each other and with their environment?

Do the roots of a yucca make it better able to survive in the desert?

Next Generation Science Standards

3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Asking Questions	LS1.B: Growth and development of organisms LS4.C: Adaptation	Patterns
Developing And Using Models		Structure and Function
Planning And Carrying Out Investigations		
Analyzing And Interpreting Data		
Using Mathematics And Computational Thinking		

Common Core State Standards

- 3.MD.B.3 - Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.
- SL.3.1.B - Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- SL.3.1.C - Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
- SL.3.1.D - Explain their own ideas and understanding in light of the discussion.
- SL.3.3 - Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- L.3.1.A - Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.