

Desert Stories: Learning from Desert Animals 1st 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.

<u>Lesson 1</u> – Students learn about the New Mexico state plant and animal symbols and think about the similarities between plant and animal structures and everyday objects. After reading the book <u>Life in the Slow Lane</u> students think about how animals would build homes in the desert. They test the strength of building materials and begin designing a desert home for people based on what they learned.

<u>Lesson 2</u> – Students compare plant root lengths and investigate how plant roots keep tall plants stable in a yucca bowling game. Then they use animal feet models to dig a hole and compare the evaluate the effectiveness of each foot.

<u>Lesson 3</u> – Students think about how plants and animals protect themselves through camouflage (animals), and spines and thorns (plants). They use these ideas to add to the home design they started in the previous lessons.

Phenomenon

What would human houses look like if they were built with advice from desert plants and animals?

Next Generation Science Standards

1-LS1-1: Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

K-2 ETS1-3: Analyze data from tests of 2 objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Constructing Explanations and	LS1.and A Structure and	Structure and Function
Designing Solutions	Function	
		Scale, Proportion, and
Analyzing and Interpreting Data	LS1.D Information	Quantity
	Processing	-
Developing and Using Models		Cause and Effect
	ETS1.C Optimizing Design	
Planning and Carrying Out	Solutions	
Investigations		

Investigations			
Date:	Asombro staff:		

Common Core State Standards

English Language Arts

<u>CCSS.ELA-LITERACY.SL.1.1</u> Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

CCSS.ELA-LITERACY.W.1.8

With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

CCSS.ELA-LITERACY.L.1.5.A

Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. CCSS.ELA-LITERACY.L.1.5.B

Define words by category and by one or more key attributes (e.g., a *duck* is a bird that swims; a *tiger* is a large cat with stripes).

Math

CCSS.MATH.CONTENT.1.OA.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.¹

CCSS.MATH.CONTENT.1.MD.A.1

Order three objects by length; compare the lengths of two objects indirectly by using a third object.