



## Desert Stories: Seed Dispersal 2<sup>nd</sup> 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.

Lesson 1 - Students listen to a reading of Flip, Float, Fly to learn that seeds have different adaptations to help them disperse. They then use adjectives to describe and categorize seeds by their dispersal methods. Finally, students conduct an experiment to determine if animals are a good way to disperse seeds.

Lesson 2 - Students compare the shape, size and weight of yucca and honey mesquite seeds then conduct an experiment to see which seed is better shaped for wind dispersal.

Lesson 3 - Students listen to a reading of Gopher to the Rescue: A Volcano Recovery Story. They then put their knowledge from lessons 1 and 2 into practice as they design their own seed with structures that will help it disperse to an area cleared by a volcano.

### Phenomenon

How do seeds disperse in the desert?

### Next Generation Science Standards

2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Developing and Using Models  Planning and Carrying Out Investigations  Analyzing and Interpreting Data	LS2.A: Interdependent Relationships in Ecosystems  ETS1.B: Developing Possible Solutions	Structure and Function

Date: \_\_\_\_\_

Asombro staff: \_\_\_\_\_

## **Common Core State Standards**

### *English Language Arts*

- LITERACY.22-RL-1 - Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- LITERACY.22-RL-3 - Describe how characters in a story respond to major events and challenges.
- LITERACY.22-RL-7 - Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
- LITERACY.22-RI-4 - Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
- LITERACY.2-SL-2 - Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- LITERACY.22-SL-3 - Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- LITERACY.22-L-1e. - Use adjectives and adverbs, and choose between them depending on what is to be modified.

### *Math*

- MATH.CONTENT.2-OA-A1 - Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- MATH.CONTENT.2-NBT-B5 - Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- MATH.CONTENT.2-MD-D10 - Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.
- MATH.CONTENT.2-MD-A1 - Measure the length of an object by selecting and using appropriate tools such as, rulers, yardsticks, meter sticks, and measuring tapes.
- MATH.CONTENT.2-MD-A2 - Measure the length of an object twice, using length units of different lengths for the two measurements.
- MATH.CONTENT.2-MD-A4 - Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard unit.
- MATH.CONTENT.2-MD-B5 - Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- MATH.CONTENT.2-MD-D9 - Generate measurement data by measuring lengths of several objects to the nearest whole unit.