

Desert Botanical Garden – Sonoran Desert Adventures Guided Field Trips

Adventure Guide – Secrets of Desert Plants			
Target Grade(s):	3rd	Time:	2 Hours
Theme: Plants have specialized internal and external structures and can respond to stimuli to increase survival.			
Desired Outcomes: Students will be able to –	<ol style="list-style-type: none"> 1. Identify the main structures of a plant (root, stem, leaf, flower, fruit). 2. Describe the function(s) of each plant structure. 3. Identify the adaptations desert plants utilize to survive in the desert. 4. Identify some plants and animals that exist in the local environment. 5. Identify the Sonoran Desert as the ecosystem in which they live. 6. Describe the characteristics of a desert environment. 		
Key Vocabulary: root, stem, leaf, stomata, photosynthesis, energy, adaptation			
Cross Cutting Concepts: Energy and Matter, Systems and System Models	Science and Engineering Practices: Asking questions and defining problems, developing and using models , constructing explanations, engaging in argument from evidence, obtaining, evaluation and communicating information		
Arizona Science Standards:	<p>3.L1U1.5 – Develop and use models to explain that plants and animals have internal and external structures that serve various functions that aid in growth, survival, behavior and reproduction.</p> <p>3.L2U1.6 – Plan and carry out investigations to demonstrate ways plants and animals react to stimuli.</p> <p>3.L2U1.7 – Develop and use system models to describe the flow of energy from the Sun to and among living organisms.</p>		

Field Trip Activities:

- Use “roots” to get a “tree” to stand
- Measure out the length of a Saguaro Cactus’ roots
- Touch and feel the stem of a cactus and a mesquite tree to compare
- Model the inside parts and functions of a stem
- Collect data on leaf size, color and texture

