

Teacher: T. Larson Grade Level(s): K-4 Length of Lesson: 1 hr-2hrs

Next Generation	Writing procedures/recipes		
Science Standards:			
Enduring Understandings:	Despite the heat, the Sonoran Desert is a biodiverse environment with organisms that have specific adaptations that allow them to survive.		
Content Objective:	Student will be able to identify animals and plants from the desert in order and use this information to create a recipe for Desert Soup		

Vocabulary	Materials		
Biodiversity	Paper/notebook		
Desert	Pencil		
Ecology	Desert Ecology Scavenger Hunt		
Organisms	Desert Cards <u>1</u> , <u>2</u> , <u>3</u> , <u>4</u> , <u>5</u> , <u>6</u>		
Animal	<u>Preposition Cards</u>		
Plants	Pot or bowl		
Species	Large stirring spoon		
Recipe	Paper bag		
	Water		
	Optional: empty seasoning bottles		
•	Desert Museum Biodiversity Coloring book		

Seasonality: Any season						
Monsoon	Autumn	Winter	Spring	Dry Summer		
July-Sept.	OctNov.	DecFeb.	MarApr.	May-June		

Engage: Ask the child(ren) any or all of the following questions to engage the child in observing the desert around them.

- What are some animals you have noticed in your neighborhood?
- What types of plants do you notice in your neighborhood? Are they the same or different?
- How many different animals do you see? How many are the same?
- Is it usually hot or cold in your neighborhood?
- Are there many insects and bugs outside? Why? Why not? Are they all the same bug, or different types?
- Do you know the names of these animals?

Have the student draw a picture of what comes to mind when they think about the desert, what organisms did they add? Is there anything we are missing? Is there more of one organism?

Explore: Take the child outside to a park or nearby nature trail. Use the following <u>Desert Ecology Scavenger Hunt</u> to help focus your discussion about the desert and guide your search.

As you explore, collect items of interest such as rocks and leaves. Ask the participant about the object. Is it alive? What does it do in the environment? How many of these animals do you see? Are they the same species or are they different?



As you search and observe the area, continue to gather artifacts from your adventure for later use.

Explain: Watch the following video about <u>backyard biodiversity</u>. After they watch the video, ask the child what is one big idea they learned?

Discuss with the participant the following ideas:

- What is biodiversity?
- How do we know an area is biodiverse?

Grab a notebook/paper and a pencil and head outside to replicate the activity from the video. What did you find? What kinds of animals did you discover? Which were more abundant? Least?

Elaborate: Read the book "Around One Cactus: Owls, Bats, and Leaping Rats" by : Anthony D. Fredericks & Jennifer Dirubbio

Before Reading: Browse through the book by looking at the pictures and reading some of the words before these questions.

• What do you think this book will be about?

During Reading:

- (after the boy walks away) Tell me about the setting of the book.
- (anywhere in the middle of the book) Pick an animal. How does it interact with its environment? After Reading
 - The author says that the desert is a busy place? What kinds of things are happening in the desert that make it busy?
 - Why are there more and more words on each page as you read through the book?
 - Which is the first page that the author starts to repeat words and ideas?
 - Where is the last page in the beginning where the author does NOT repeat ideas?
 - Do you notice how the animals become active when the boy walks away? Why do you think this is?
 - Pick 2 animals that are similar to each other. How are they similar?

Take out the Desert Picture cards(1, 2, 3, 4, 5, 6). Can you use the cards to make a story like this one? Begin with an animal card then pick another card that shows where it lives. Use <u>Preposition Cards</u> to string along a story of different cards describing how different plants and animals are connected to each other.

Evaluate: Take out your pot, stirring spoon, and bag of items. Grab a sheet of notebook paper and Write the name of your recipe at the top of the page. Start pulling items out of your bag and discuss each item.

Ask the child, what is the name of the item? Where was it found? What special characteristics allow it survive in the desert?

Write the name of the "ingredient" on your list and continue to the next item until everything in the bag is in the pot. Cover the items in water, if available, use empty spice bottles to season your soup. Discuss why every ingredient in the soup is important to the environment.

