

The Sonoran Desert

Author Melissa Haile
Grade Level Kindergarten
Duration 2 class periods

National Standards

GEOGRAPHY STANDARDS
Element Two: Places and Regions
 4. The physical and human characteristics of places

Element Three: Physical Systems
 8. The characteristics and spatial distribution of ecosystems on Earth's surface.

NEXT GENERATION OF SCIENCE STANDARDS
K- From Molecules to Organisms: Structures and Processes
K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.

Common Core Standards

ELA COMMON CORE
Reading Informational Text
Key Ideas and Details
 K.RI.1 With prompting asks, answers questions about details in a text.

Writing
Vocabulary Acquisition and Use
 K.W.5a Sort common objects into categories to gain a sense of the concepts the categories represent.

Speaking and Listening
Comprehension and Collaboration
 K.W.6 Speaks audibly, expresses thoughts, feelings and ideas clearly.

Research to Build and Present Knowledge
 K.W.7 Participates in shared research & writing projects – express opinion about research subject.

MATHEMATICS COMMON CORE STANDARDS
 K.MD.3-Classify and sort objects into given categories; count the number of objects in each category and sort the categories by count

Other Arizona Standards

SOCIAL STUDIES STANDARDS
Grade K
Strand 4 Geography
Concept 1: The World in Spatial Terms
PO 4 Identify land and water on maps, illustrations, images, and globes.

Concept 3 Physical Systems
Connect with:
Science Strand 4
Concept 3 Identify plants and animals in the local environment.

SIOP Elements		
<p>Preparation Adapting content Linking to background Linking to past learning Strategies used</p>	<p>Scaffolding Modeling Guided practice Independent practice Comprehensible input</p>	<p>Grouping Option Whole class Small groups Partners Independent</p>



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Integrating Processes Reading Writing Speaking Listening	Application Hands on Meaningful Linked to objectives Promotes engagement	Assessment Individual Group Written Oral
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TESOL Standard(s)

Goal 2, Standard 2

To use English to achieve academically in all content areas: Students will use English to obtain, process, construct, and provide subject matter information in spoken and written form

- comparing and contrasting information
- persuading, arguing, negotiating, evaluating, and justifying
- listening to, speaking, reading, and writing about subject matter information
- gathering information orally and in writing
- retelling information
- selecting, connecting, and explaining information
- analyzing, synthesizing, and inferring from information
- responding to the work of peers and others
- representing information visually and interpreting information presented visually
- hypothesizing and predicting
- formulating and asking questions
- understanding and producing technical vocabulary and text features according to content area
- demonstrating knowledge through application in a variety of contexts

Arizona English Language Proficiency Standards

Stage I

Reading

Reading Comprehension

Standard 3: The student will analyze text for expression, enjoyment, and response to other related content areas. The student will demonstrate knowledge of reading comprehension by:

B-10: Locating information from a graphic organizer.

Listening & Speaking

Standard 1: The student will listen actively to the ideas of others in order to acquire knowledge. The student will demonstrate understanding of oral communications by:

B-3: responding to read-alouds by identifying main ideas/concepts and details using complete sentences.

Vocabulary

Standard 2: The student will acquire English language and vocabulary and use it in relevant contexts. The student will demonstrate knowledge of vocabulary by:

B-1: naming and sorting common objects or pictures with labels.

Writing

Standard 1: The student will express his or her thinking and ideas in a variety of writing genres. The student will express his or her thinking and ideas by using a variety of writing genres, as demonstrated by:

B-2: participating in creating expository responses through drawing or experimental writing to describe, explain, or inform.



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Overview

Children should be aware of their surroundings and where they are in the world. Understanding their own environment allows them to appreciate their space for its importance and relevance to them and the organisms that share it.

Purpose

In this lesson students will study the geographic location of the Sonoran Desert and characteristics of the desert environment including plants, and animals. The students will create a folded organizer to share their knowledge of the Sonoran Desert with others. This lesson includes strategies for diverse learners (ELLs).

Key Vocabulary

desert: a dry region with little rainfall (usually less than 10 inches of rain per year)

plants and animals: living things with special needs

dry: lacking water or moisture

hot: a high temperature exceeding normal body temperature

Materials

- Construction paper or file folders
- Crayons
- Scissors
- Internet access for video
- Desert books & pictures
- The Sonoran Desert map
- Teacher Notes and Background Information
- Folded Organizer Directions
- Sonoran Desert Sentences
- Plant and Animal Sort

Objectives

The student will be able to:

1. Identify the Sonoran Desert and tell where it is located.
2. Sort and classify plants and animals of the Sonoran Desert.

3. Write expository simple sentences pertaining to plants and animals in the Sonoran Desert.

4. Create and share a project about the Sonoran Desert.

Procedures

Prerequisite knowledge: students should have been introduced to Arizona and where it is located.

Students should have an understanding of maps and globes as well as how to locate land and water on the map and globe.

SESSION ONE:

Engage:

a. Show the students a picture of the Sonoran Desert. Ask them to describe what they see. (For ELLs give them the vocabulary cards prior to the lesson.) **(Preparation: Adapting content,**

Integrating Processes: Listening, Group Option: Whole group)

b. Inform students that they are looking at a region called the Sonoran Desert. Tell them this is where they live.

c. Give each student a map of the Sonoran Desert region and tell them to outline it with their finger.

(Application: Promotes Engagement)

d. Identify where the Sonoran Desert is located in relation to Arizona and the bodies of water near the desert region.

Explore:

e. Inform students that they will be making a folded organizer about the Sonoran Desert. Give each student a folded organizer. Using guided writing, label the front of the folded organizer *Sonoran Desert* and glue the Sonoran Desert map on the backside of the folded organizer. **(Scaffolding: Modeling & Guided practice)**

f. Discuss what makes the Sonoran Desert a unique environment (climate, plants, animals).

Review vocabulary necessary for students to share learned information with others. **(Scaffolding: Comprehensible Input)**

g. Watch a YouTube video: *Life in the Sonoran Desert* by A. Burnette. **(Group Option: Whole group)**

h. Encourage students to speak with a partner about the learned information from the video.

(Group Option: Partners, Integrating Processes: Speaking)

i. Give each student a paragraph about the Sonoran Desert. Read it to them and have them follow along



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with their finger, touching every word. Reread it with the students chorally. **(Application: Promotes Engagement)**

j. Tell students to retell what they just read to their partner. Inform them that they need to ask their partner questions: Who lives in the desert? What is temperature? Where is the Sonoran Desert?

k. Observe if students are answering in complete sentences). **(Group Option: Partners, Integrating Processes: Speaking)**

l. Students need to glue this paragraph on the backside of the folded organizer, near the map. **(Group Option: Independent, Application: Hands-on, engagement)**

SESSION TWO:

Explain:

a. Review what students had just learned about the Sonoran Desert. **(Application: Linking to Past Learning)**

b. Explain that plants and animals are living things that require certain needs to survive.

c. Watch/listen to two videos by Harry Kindergarten (YouTube): *The needs of a Plant* and *The Needs of an Animal*.

d. Tell the students that these plants and animals have made specific adaptations in order to survive in the Sonoran Desert with its high temperature and dry climate. **(Integrating Processes: Listening, Group Option: Whole group)**

e. Give each student the Plant and Animal Sort.

f. Discuss the names of all the Sonoran Desert plants and animals on the page. **(Grouping Option: Whole group, Integrating Process: Listening)**

Elaborate:

g. Instruct the students to cut out all the pictures and sort them into two specific categories: Plants and Animals). When students have completed the task, they should have all plants together and all animals together. **(Grouping Option: Individual, Application: Hands-on and Promotes engagement)**

h. Choose students to tell how they sorted and why.

i. Inform students that they will glue the pictures onto the foldable organizer (use the doors of the folded organizer) but they must keep them in their sorted categories.

j. Label each category during guided writing: Plants, Animals. Tell the students that they will point to each picture and tell about it. Explain that they will use proper English in a specific language

frame to speak about plants and animals.

(Scaffolding: Modeling, Integrating Processes: Listening, Speaking, Writing, Grouping: Whole group)

k. Model for the students using the following language frames:

"The ___ lives in the Sonoran Desert."

Allow students time to talk to their partner using the language frame to tell about various sorted plants and animals. **(Scaffolding: Modeling, Integrating Processes: Speaking, Grouping: Partners)**

Evaluate:

l. Give each student a sentence frame and have them write about the sorted pictures. Tell them to glue the sentence frames in the middle of the folded organizer. **(Integrating Processes: Writing, Assessment: Individual)**

SESSION THREE:

a. Review what was previously learned in sessions one and two. **(Preparation: Linking to past learning)**

b. Tell students that they will be creating a mural on the front side of the folded organizer that displays what they have learned about the Sonoran Desert.

(Grouping: Whole group, Integrating Process: Listening, Application: Promotes engagement)

c. Share the completed folded organizers in small groups or in partners. **(Grouping option: partner, Assessment: individual)**

Assessment

Language: Listen closely for specific language when students are in partner groups speaking with one another about learned information.

Vocabulary: Have students point to the correct vocabulary picture card when the name and definition are given orally. Mastery will be considered 75%.

Math: Check for the accurate sorting of pictures into specific categories of plants and animals.

Science/Social Studies: The folded organizer should be completed accurately and contain all of the specific information covered in the lesson. Check to make sure the mural contains specific plants and animals in the Sonoran Desert although drawings will vary among the students.



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Writing: Check to make sure students have written complete sentences using the provided sentence frame.

Students will score

- 80 points or higher on the completed folded organizer for a science and social studies grade to be considered mastery.
- 20 points out of a possible 20 points on the writing portion of the folded organizer to be considered mastery
- 20 points out of a possible 20 points on the math sorting portion of the folded organizer to be considered mastery.

Extensions

Possible extensions to this activity include:

- Writing a research report
- Making a digital story using Pixie software.
- Continued learning about specific animal adaptations, saguaro habitat, and weather.

- Make a tortoise habitat or diorama

Sources

The Sonoran Desert map from Arizona Geographic Alliance

<http://geoalliance.asu.edu/azga/>

Clip art provided copyright free from Google images.

Kindergarten, Harry. *The Needs of a Plant.*

Video/Song:

<http://youtu.be/OQT6piZOX7c>

Kindergarten, Harry. *The Needs of an Animal.*

Video/Song:

<http://youtu.be/j2fRMhYP5n8>

Burnette, A. *Life in the Sonoran Desert.*

Video:

<http://youtu.be/ec4dY2f0dpE>

