

The Sonoran Desert

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Grade Level K
Duration 2 class periods

National Standards

GEOGRAPHY

Element 2:

Places and Regions

4. The physical and human characteristics of places

Element 3: Physical Systems

8. The characteristics and spatial distribution of ecosystems on Earth's surface.

AZ Standards

ELA

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.L.5 With guidance and support from adults, explore word relationships and nuances in word meaning.

a. Sort common objects into categories to gain a sense of the concepts the categories represent.

Speaking and Listening

Comprehension and Collaboration

K.SL.6 Speaks audibly, expresses thoughts, feelings and ideas clearly.

Research to Build and Present Knowledge

K.W.7 With guidance and support from adults, participate in shared research and writing projects

MATHEMATICS

Measurement and Data

K.MD.B.3 Classify and sort objects into given categories; count the number of objects in each category and sort the categories by count.

Arizona Social Science Standards

GEOGRAPHY

The use of geographic representations and tools help individuals understand their world.

K.G1.1 Use, explore, and construct maps, graphs and other geographical representations to support content focus.
 K.G1.2 Explore locations in stories shared.

SIOP Elements

Preparation

Adapting content

Linking to background

Linking to past learning

Strategies used

Scaffolding

Modeling

Guided practice

Independent practice

Comprehensible input

Grouping Option

Whole class

Small groups

Partners

Independent

Integrating Processes

Reading

Writing

Speaking

Listening

Application

Hands on

Meaningful

Linked to objectives

Promotes engagement

Assessment

Individual

Group

Written

Oral



Arizona English Language Proficiency Standards

Kindergarten

Basic

Listening and Reading

Standard 1 By the end of each language proficiency level, an English learner can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

B-2: identify key details from read-alouds, picture books, and/or oral presentations.

B-3: retell familiar text

Standard 2 By the end of each language proficiency level, an English learner can determine the meaning of words and phrases in oral presentations and literary and informational text.

B-1: answer questions to help determine the meaning of some words and phrases in simple oral presentations and read-alouds about familiar topics, experiences, or events.

Speaking and Writing

Standard 3 By the end of each language proficiency level, an English learner can speak and write about grade appropriate complex literary and informational texts and topics.

B-1 tell or dictate simple messages about a variety of topics, experiences, or events.

B-2: add appropriate drawings or other visual displays to provide additional detail to a variety of topics, experiences, or events.

B-3: compose short words and phrases using appropriate conventions about a variety of topics, experiences, or events.

B-4: produce writing with appropriate organization using graphic organizers and sentence frames about a variety of topics, experiences, or events.

Overview

Children should be aware of their surroundings and where they are in the world. Understanding their own environment allows them to appreciate 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

- Card stock
- Crayons
- Scissors
- Glue
- Internet
- Desert books & pictures
- The Sonoran Desert map
- Teacher Notes and Background Information and Folded Organizer Directions
- Plant and Animal Sort
- Sonoran Desert Sentences
- Sonoran Desert Paragraphs
- Folded Organizer Scoring Guide

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

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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 worked with maps before. Prior to class: pre-fold the card stock into thirds for the organizers.

SESSION ONE

Engage:

- a. Project a picture of the Sonoran Desert. Ask students 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 of the world called the Sonoran Desert. Tell them part of this desert is found in Arizona.
- c. Project and distribute the Sonoran Desert map to students. Tell them to outline it with their finger as you outline it while being projected. **(Application: Promotes Engagement, Scaffolding: Modeling)**
- d. Now identify where the Sonoran Desert is located in relation to Arizona and the bodies of water near the desert region. Have students point to these locations on their maps.

Explore:

- e. Inform students that they will be making a folded organizer about the Sonoran Desert. Give each student a pre-folded organizer. Model how to 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. Project the Vocabulary Cards and review the four key words for this lesson. Post the Vocabulary Cards on the word wall. Discuss what makes the Sonoran Desert a unique environment (climate, plants, animals). **(Scaffolding: Comprehensible Input)**
- g. Watch the YouTube videos: Mammals and Biomes of the Sonoran Desert (10 min)
<https://www.youtube.com/watch?v=BpnDRo3wnKg>
Sonoran Desert Plants (7 min)
<https://www.youtube.com/watch?v=mwIitKd9GNQ>
Encourage students to speak with a partner about the learned information from the video. **(Group Option: Partners, Integrating Processes: Speaking)**

h. Give each student Sonoran Desert Paragraph. Read it to them and have them follow along with their fingers, touching every word. Reread it with the students chorally. **(Application: Promotes Engagement)**

- i. 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?
- j. Observe if students are answering in complete sentences). **(Group Option: Partners, Integrating Processes: Speaking)**
- k. 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 learned about the Sonoran Desert from the videos and other earlier activities. **(Application: Linking to Past Learning)**
- b. Explain that plants and animals are living things that require certain needs to survive. Watch videos by Harry Kindergarten: *The needs of a Plant* (1 min)
<https://www.youtube.com/watch?v=dUBIQ1fTRzlan>
The Needs of an Animal (1 min)
https://www.youtube.com/watch?v=k4UDf3tF_O4
- c. Distribute the Plant and Animal Sort. Discuss the names of the Sonoran Desert plants and animals on the page. **(Grouping Option: Whole group, Integrating Process: Listening)**

Elaborate:

- d. Instruct the students to cut out all the pictures and sort them into two specific categories: Plants and Animals. Choose students to tell how they sorted and why. **(Grouping Option: Individual, Application: Hands-on and Promotes engagement)**
- e. Model how to glue the pictures onto the foldable organizer but they must keep them in their sorted categories: Plants, Animals. Have students work in pairs and point to each picture and tell about it. **(Scaffolding: Modeling, Integrating Processes: Listening, Speaking, Writing, Grouping: Partners)**
- f. Display the sentence frame: "*The ___ lives in the Sonoran Desert.*" Allow students time to talk to their partner using the sentence frame to tell about the various plants and animals. **(Scaffolding: Modeling, Integrating Processes: Speaking, Grouping: Partners)**



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Evaluate:

I. Distribute the Sonoran Desert Sentences to each student. Tell them to fill in the blank with one of the plants or animals from their sorting activity. Then 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

ELA

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

Mathematics, ELA, and Geography

Students will score

- 80 points or higher on the completed folded organizer for a geography grade to be considered mastery.
- 20 points out of a possible 20 points on the completed sentence frames 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:

- Read a variety of picture books on the Sonoran Desert and add to the plants and animals identified as living in this environment.
- Making a digital story using Pixie software.
- Learn about specific plant and animal adaptations.
- Make a desert animal and plant diorama

Sources

The Sonoran Desert map from Arizona Geographic Alliance
https://geoalliance.asu.edu/sites/default/files/maps/Sonoran_Desert.pdf

Clip art provided copyright free from Google images.

Kindergarten, Harry. *The Needs of a Plant*.
Video/Song (1 min)

<https://www.youtube.com/watch?v=dUBIQ1fTRzI>

Kindergarten, Harry. *The Needs of an Animal*.
Video/Song (1 min)

https://www.youtube.com/watch?v=k4UDf3tF_O4

Mammals and Biomes of the Sonoran Desert (10 min)

<https://www.youtube.com/watch?v=BpnDRo3wnKg>

Sonoran Desert Plants (7 min)

<https://www.youtube.com/watch?v=mwIitKd9GNQ>

