Expert Pack: Desert Animals

Submitted by: Washoe County School District Grade: 2 Date: May 2015

Topic/Subject

Desert Animals

Texts/Resources

Book(s)

- 1. Alejandro's Gift By: Richard E. Albert
- 2. Around One Cactus Owls, Bats and Leaping Rats By: Anthony D. Fredericks
- 3. Wonders of the Desert By: Louis Sabin
- 4. A Walk in the Desert https://www.youtube.com/watch?v=xX9I58bRYsE

Article(s)

- 5. Fennec Fox http://www.enchantedlearning.com/subjects/mammals/fox/Fennecfox.shtml Infographic(s)
 - 6. http://switchzoo.com/games/habitat.swf
 - 7. http://www.abpischools.org.uk/activescience/module2/group1.html

Other Media

- 8. DK 24 Hours: Desert Around the Clock with the Animals of the Desert http://www.wegivebooks.org/books/24-hours-desert/reader (teachers will need to create a free account for this book online)
- 9. https://www.dropbox.com/s/a57npn3o5wdxy2p/JACKRABBIT.docx?dl=0 (poem)
- 10. http://www.desertusa.com/video_pages/coyote_movie.html
- 11. http://desertanimals.net/index

Each expert pack contains a variety of selections grouped to create as coherent and gradual a learning process for students as possible, generally beginning with lower levels as measured by quantitative and qualitative measures, and moving to more complex levels in the latter selections. This graduated approach helps support students' ability to read the next selection and to become 'experts' on the topic they are reading about.

Refer to annotated bibliography on the following pages for the suggested sequence of readings.

Rationale and suggested sequence for reading:

In the first activity, Switch Zoo, students explore the desert habitat on the web. The interactive website allows students to click on various elements within the desert. The site then provides information and a rationale as to whether or not that element or animal fits into the desert habitat. This activity is engaging and allows students to start exploring the animals and elements within the desert. The next resource, *Alejandro's Gift*, is an uplifting story about one man's gift to the desert and the gift he receives in return that has a powerful environmental lesson. The illustrations and plot of the story allow students to start documenting things they don't understand and things they may be wondering about desert animals. This activity helps students to begin framing a purpose for the upcoming resources. The next two resources focus student learning specifically on desert animals. Students continue exploring specific desert animals through various forms of text. The video, article, websites and following texts allow students to engage in knowledge development around a variety of desert animals. While the complexity of resources within this text set varies, the structure developed first engages students in

the topic, and then narrows their focus into specific animals. As the text set beings to wrap up, the structure allows students to direct their own learning around desert animals of their choice. The expert pack culminates with *A Walk In the Desert*, a book that describes the climate, soil, plants and animals of the North American deserts, linking the knowledge back closer to home.

The Common Core Shifts for ELA/Literacy:

- 1. Regular practice with complex text and its academic language
- 2. Reading, writing and speaking grounded in evidence from text, both literary and informational
- 3. Building knowledge through content-rich nonfiction

Though use of these expert packs will enhance student proficiency with most or all of the Common Core Standards, they focus primarily on Shift 3, and the highlighted portions of the standards below.

College and Career Readiness Anchor Standards for Reading Literary and/or Informational Texts (the darkened sections of the standards are the focus of the Expert Pack learning for students):

- 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- 2. **Determine central ideas or themes of a text** and analyze their development; summarize the key supporting details and ideas.
- 10. Read and comprehend complex literary and informational texts independently and proficiently

Annotated Bibliography

and suggested sequence for reading

[NA] http://switchzoo.com/games/habitat.swf

Author: Unknown

Genre: Interactive Website

Length: N/A

Synopsis: This interactive website allows students to choose a habitat (Desert) and click on various elements. The site then provides information to the students stating whether that element fits into the habitat and explains why or why not.

Citation:

(2015, January 1). Retrieved February 27, 2015, from http://switchzoo.com/games/habitat.swf

Cost/Access: \$0.00 http://switchzoo.com/games/habitat.swf

Recommended Student Activities: Sketch and Label Diagram

[840 L] Alejandro's Gift

Author: Richard E. Albert

Genre: Fiction

Length: 40 pages

Synopsis: This uplifting story about one man's gift to the desert and the gift he receives in return has a powerful

environmental lesson.

Citation: Albert, R. (1994). Alejandro's Gift (p. 40). San Francisco, CA: Chronicle Books.

Cost/Access: \$6.99

Recommended Student Activities: Wonderings

[1000L] DK 24 Hours: Desert Around the Clock with the Animals of the Desert

Author: DK Publishing

Genre: Non-Fiction (Animals, Science, Nature)

Length: 48 pages

Synopsis: From morning to midnight, these beautifully illustrated guides invite readers to spend a day with the animals and plants that inhabit the world's most fascinating environments.

Citation:

Haldane, E., & Star, F. (2006). *DK 24 Hours: Desert Around the Clock with the Animals of the Desert* (p. 48). New York, New York: DK Publishing.

Cost/Access: Free Online with a required account sign-up that takes a few minutes to complete. http://www.wegivebooks.org/books/24-hours-desert/reader

Recommended Student Activities: A Picture of Knowledge

[NA] The Coyote

Author: Desert.USA.com

Genre: Video

Length: 1:22 minute

Synopsis: This short video explains how coyotes hunt and adapt their diet, hunting, and breeding <u>habits to survive</u>. This video gives students a closer look at the coyote and exposes them to the website where they can explore other videos about desert animals.

Citation:

Step 4 on Checklist for Creating an Expert Pack

(n.d.). Retrieved February 27, 2015, from http://www.desertusa.com/video_pages/coyote_movie.html

Cost/Access: \$0.00 http://www.desertusa.com/video_pages/coyote_movie.html

Recommended Student Activities: Notetaker

[1280L] Around One Cactus: Owls Bats and Leaping Rats

Author: Anthony D. Fredericks

Genre: Fiction

Length: 32 pages

Synopsis: This wonderful book is natural science - in this case, about desert animals - with a flair. A boy walks up to an impressive saguaro cactus and wonders who could be living on this arid ground? As night falls, he walks away. And then the place comes alive! A haven for creatures in a waterless land. The entertaining, repetitive rhyme is an attention-grabbing read-aloud that culminates in successful learning. Field Notes at the end of the book describe the animals in detail and include an unusual fact.

Citation: Fredericks, A. (2003). *Around One Cactus: Owls, Bats and Leaping Rats* (p. 32). Nevada City, CA: Dawn Publications.

Cost/Access: \$7.95

Recommended Student Activities: Glossary Facts

[920L] Fennec Fox

Author: Enchanted Learning.com

Genre: Non Fiction Article

Length: 5 Paragraphs

Synopsis: In this short passage students learn about the Fennec Fox, where it lives, it's anatomy, diet and water, reproduction and classification. This text will give students a chance to zoom in on one particular animal, which, in turn, will give them a perspective when learning about other animals.

Citation:

Col, J. (2000, January 1). Fennec Fox. Retrieved February 27, 2015, from http://www.enchantedlearning.com/subjects/mammals/fox/Fennecfox.shtml

Cost/Access: \$0.00 http://www.enchantedlearning.com/subjects/mammals/fox/Fennecfox.shtml

Recommended Student Activities: Fennec Fox Diagram

[NA] http://www.abpischools.org.uk/activescience/module2/group1.html

Author: Unknown

Genre: Interactive Website

Length: N/A

Synopsis: Students participate in a Q & A activity using images and informative blurbs. Throughout the game, students explore different habitats (Desert) to discover where various living things live and how their locations meet their needs.

Citation:

(2015, January 1). Retrieved February 27, 2015, from

http://www.abpischools.org.uk/page/modules/human_animal_habitats/activity.cfm?age=Age Range 7-

11&subject=Science

Cost/Access: \$0.00 http://www.abpischools.org.uk/activescience/module2/group1.html

Recommended Student Activities: Students Explore the Link

[800L] Jackrabbit, Desert Voices

Author: Byrd Baylor

Genre: Poetry

Length: 12 Stanzas

Synopsis: This poem tells the story of a jackrabbit escaping from a coyote.

Citation:

Baylor, B. (2003). Jackrabbit. In *Desert Voices* (1st ed., p. 32). NA: Aladdin.

Cost/Access: \$0.00 https://www.dropbox.com/s/a57npn3o5wdxy2p/JACKRABBIT.docx?dl=0

Recommended Student Activities: Visual Representation

[580L] Wonders of the Desert

Author: Louis Sabin

Genre: Non Fiction

Length:32 pages

Synopsis: These instructive books welcome young readers into the fascinating world of Earth's creatures and explore the marvels of the nature. Habitats, eating habits, size, and how natural phenomena occur are just a few of the topics discussed in the "Learn About Nature" series. Illustrated in full-color throughout.

Step 4 on Checklist for Creating an Expert Pack

Citation: Sabin, L. (1982). Wonders of the Desert (p. 32). Mahwah, New Jersey: Troll Associates.

Cost/Access: \$0.01 and Up

Recommended Student Activities: Pop Quiz

[NA] http://desertanimals.net/index (Interactive Website)

Author: The Animal Spot

Genre: Interactive Website

Length: N/A

Synopsis: This website allows students to click on various desert animals to learn more about them. Information

includes the various types of deserts, animals, and how their habitats support their needs.

Citation:

NA. (2007, January 1). Retrieved February 27, 2015, from http://desertanimals.net/index

Cost/Access: \$0.00 http://desertanimals.net/index

Recommended Student Activities: Quiz Maker

[680L] A Walk in the Desert

Author: Rebecca L. Johnson

Genre: Non Fiction Length: 48 pages

Synopsis: Describes the climate, soil, plants and animals of the North American deserts and how they adapt and

survive

Citation: Johnson, R. (2001). A Walk in the Desert (p. 48). Minneapolis, MN: Lerner Publications Company.

Cost/Access: \$8.95 or free version at https://www.youtube.com/watch?v=xX9I58bRYsE

Recommended Student Activities: Wonderings

Supports for Struggling Students

By design, the **gradation of complexity** within each Expert Pack is a technique that provides struggling readers the opportunity to read more complex texts. Listed below are other measures of support that can be used when necessary.

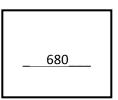
- Provide a brief student-friendly glossary of some of the academic vocabulary (tier 2) and domain vocabulary (tier 3) essential to understanding the text
- Download the Wordsmyth widget to classroom computers/tablets for students to access student-friendly definitions for unknown words. http://www.wordsmyth.net/?mode=widget
- Provide brief student friendly explanations of necessary background knowledge
- Include pictures or videos related to the topic within and in addition to the set of resources in the pack
- Select a small number of texts to read aloud with some discussion about vocabulary work and background knowledge
- Provide audio recordings of the texts being read by a strong reader (teacher, parent, etc.)
- **Chunk the text** and provide brief questions for each chunk of text to be answered *before* students go on to the next chunk of text
- Pre-reading activities that focus on the structure and graphic elements of the text
- Provide **volunteer helpers** from the school community during independent reading time.

Text Complexity Guide

A Walk in the Desert, Rebecca L. Johnson

1. Quantitative Measure

Go to http://www.lexile.com/ and enter the title of the text in the Quick Book Search in the upper right of home page. Most texts will have a Lexile measure in this database. You can also copy and paste a selection of text using the Lexile analyzer.



2-3 band	420 -820L
4-5 band	740 -1010L
6-8 band	925 - 1185L
9 -10 band	1050 – 1335L
11 – CCR	1185 - 1385

2. Qualitative Features

Consider the four dimensions of text complexity below. For each dimension*, note specific examples from the text that make it more or less complex.

The purpose of this text is to make connections with the desert and all of the animals that live there. This book provides knowledge around the desert environment, individual animals, and how the animals interact with the habitat and each other. It also separates daytime animals and nocturnal animals.

This is a non-fiction text with many photographs with captions, a map, a legend, an index, and a glossary. The text follows the desert from morning until night which helps the reader organize the information.

Meaning/Purpose

Structure

Language

This book is text heavy with many words included within the text and the captions on each page. The sentences are varied, but do include many compound and complex sentences including dependent clauses. There is rich, content vocabulary as well as Tier 2 vocabulary for the reader to decipher.

Knowledge Demands

The students should be able to access this text if the order of the text set is followed. This book contains the most information around desert animals of all the texts in the set. It begins with facts around the desert itself and then moves into facts around the animals.

3. Reader and Task Considerations

What will challenge students most in this text? What supports can be provided?

- Following the order of the text set will help students access this content rich text. After prior knowledge is gained through the other texts, students should be able to pull all of the learning together within this book.
- There is a glossary provided in this book to help students with some of the more complex vocabulary.
- Identifying complex sentence features could provide for needed additional instruction for the
- Identifying text features such as captions, maps, and legends could also give needed support.

*For more information on the qualitative dimensions of text complexity, visit

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Grade: 2 Date: May 2015

Learning Worth Remembering

<u>Cumulative Activities</u> – The following activities should be completed and updated after reading each resource in the set. The purpose of these activities is to capture knowledge building from one resource to the next, and to provide a holistic snapshot of central ideas of the content covered in the expert pack. *It is recommended that students are required* to complete one of the Cumulative Activities (Rolling Knowledge Journal or Rolling Vocabulary) for this Expert Pack.

1. Rolling Knowledge Journal

- Read each selection in the set, one at a time.
- After you read *each* resource, stop and think what the big learning was. What did you learn that was new *and important* about the topic from *this* resource? Write, draw, or list what you learned from the text about (topic).
- Then write, draw, or list how this new resource added to what you learned from the last resource(s).

Sample Student Response

Title	Write, Draw or List		
	New and important learning about the topic	How does this resource add to what I learned already?	
1. switchzoo.com	A habitat is where something naturally lives. Certain animals and plants can only grow in specific habitats. There are different habitats such as the desert and the forest. Habitats have different types of weather.		
2. Alejandro's Gift There are many types of plants and animals that live in the desert. Animals in the desert need a water source. Animals protect themselves from danger. Humans		There are many types of animals that live in the desert habitat. Desert animals have to work to find water since the desert is a dry place.	

	can modify habitats to benefit animals.	
3. DK 24 Hours: Desert Around the Clock with Desert Animals	Animals come out at different times during the day to find food and water. Cold-blooded animals warm up in the sun. Rodents come out in the cool morning, then spend the rest of the day in their cool burrows. Insects are not bothered by the heat. Some animals come out to hunt at night.	Desert animals find different ways to survive in their environment. They all have their own ways of finding food and water.
4. The Coyote	The coyote runs swiftly to catch its prey. It will change its diet and hunting strategies in order to survive. They will eat seeds, fruit and other small animals. If a coyote can't find food in its area it will move on to a new location in order to survive.	Coyotes are able to survive in the desert. If they can't find enough food to survive they will change their diet or move on to a new location. Most coyotes are healthy and can find a way to survive.
5. Around One Cactus: Owl Rats and Leaping Bats	The saguaro cactus provides food and shelter for some desert animals. An owl builds its nest inside the cactus. Birds and bats drink nectar from the cactus's flowers.	Desert animals find a way to survive in the desert by using the saguaro cactus.
6. Fennec Fox	The Fennec Fox is agile and has large ears that help it to lose excess heat and hear its prey from far away. The fox is nocturnal, it is active at night and rests during the day. The fox has many features that help it to survive in the desert.	The Fennec fox has many adaptations that allow it to survive in the desert. For example, it can lose excess heat through its ears, is agile, and its busy sweep helps it to change directions and keeps their muzzle and feet warm when it curls up to sleep.
7. abpischools.org.uk	Different animals live in different habitats. Certain animals have features that allow them to survive in the desert, while other animals can't survive in the desert. For example, a hamster can live in the desert because it doesn't need a lot of water, however a seagull can't because it needs fish from the sea to survive.	There are many animals that can survive in the desert because of their features, although not animals have the proper adaptations to survive in the desert.
8. Jackrabbit, Desert Voices	The jackrabbit's enemy is the coyote. The jackrabbit has many ways to hide from its predator. It also warns others of danger.	The coyote has to work hard to catch its prey because the jackrabbit can run and jump quickly.
9. Wonders of the Desert	There are many lizards that live in the desert such as the chuckwalla and the	The beetle has learned to protect itself from predators by spraying a foul smelling

	fringe-toed lizard. There is a toad that lives in ponds formed by the rain. The roadrunner is another desert animal that can run quickly.	odor. The toad has to lay its eggs quickly before the pond dries up in order to survive. The road runner must run fast in order to survive. It runs fast to catch prey and avoid predators.
10. desertanimals.net	The kangaroo rat is very small and eats seeds. The vulture survives by eating dead animals in the desert. Meerkats eat insects, rodents, and lizards.	The animals have all adapted to survive in the desert conditions. The kangaroo rat only goes outside when the weather is cooler. The vulture lays its eggs in a tree to protect it from predators. The meerkats look out for enemies while others in their group come out to eat.
A biome is made of all of the plants and animals living together. There is a large desert area in North America. Some of the desert animals are nocturnal. Bats also live in the desert.		All of the living things in a biome depend on each other for survival. Some animals are nocturnal, meaning they come out at night to hunt. Some are nocturnal because it is cooler. Bats are nocturnal desert animals that drink nectar from the cactus or eat flying insects.

1. Rolling Vocabulary: "Sensational Six"

- Read each resource then determine the 6 words from each text that most exemplify the central idea of the text.
- Next use your 6 words to write about the most important idea of the text. You should have as many sentences as you do words.
- Continue this activity with EACH selection in the Expert Pack.
- After reading all the selections in the Expert Pack, go back and review your words.
- Now select the "Sensational Six" words from ALL the word lists.
- Use the "Sensational Six" words to summarize the most important learning from this Expert Pack.

Title	Six Vocabulary Words & Sentences		
http://switchzoo.co	Words: arid desert, biome, compatibility, habitat, precipitation, vegetation		
m/games/habitat.sw			
<u>f</u>	Sentences:		
	1. The <u>arid</u> desert is very dry.		
	2. The desert is a dry biome .		
	3. Lizards and the tundra environment do not have compatibility.		

	4. Animals adapt to their habitats.			
	5. The precipitation in the Arctic is mostly snowfall.			
	6. There is little vegetation in the desert.			
Alejandro's Gift	Words: ample, companion, dwellers, endure, furrows, warily			
Alejuliulo's Gijt	and the state of t			
	Sentences:			
	1. The well will give the animals ample water.			
	2. Alejandro is lonely because he only has one companion.			
	3. Desert <u>dwellers</u> are people or animals who live in the desert.			
	4. Since Alejandro lived alone, he had to endure many lonely hours.			
	5. The animals drank water from the <u>furrows</u> that Alejandro built in the desert.			
	6. The animals moved <u>warily</u> because they were hot and thirsty.			
DK 24 Hours: Desert	Words: burrows, diurnal, foraging, hibernate, nocturnal, Sahara			
Around the Clock	Sentences:			
with the Animals of	Sentences.			
the Desert	1. The monitors hibernate during the winter in shallow burrows .			
	2. <u>Diurnal</u> animals hunt for their prey in the daytime.			
	3. You can see many animals foraging for food early in the day before it gets too hot.			
	4. Many animals <u>hibernate</u> in the winter when it's really cold.			
	5. The nocturnal animals sleep in the day and wake up at night to hunt their prey.			
	6. The Sahara Desert , is in Africa and is the size of Europe.			
The Coyote	Words: swiftly, prey, strategies			
	Sentences:			
	Sentences: 1. The coyote runs swiftly.			
	1. The coyote runs swiftly.			
Around One Cactus:	 The coyote runs <u>swiftly</u>. The coyote catches its <u>prey</u> easily. 			
Owl Bats and	 The coyote runs <u>swiftly</u>. The coyote catches its <u>prey</u> easily. To survive, a coyote can changes its hunting <u>strategies</u>. Words: adapt, arid, haven, observed, prey, saguaro cactus 			
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Owl Bats and	 The coyote runs <u>swiftly</u>. The coyote catches its <u>prey</u> easily. To survive, a coyote can changes its hunting <u>strategies</u>. Words: adapt, arid, haven, observed, prey, saguaro cactus 			
Owl Bats and	 The coyote runs swiftly. The coyote catches its prey easily. To survive, a coyote can changes its hunting strategies. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: 			
Owl Bats and	 The coyote runs <u>swiftly</u>. The coyote catches its <u>prey</u> easily. To survive, a coyote can changes its hunting <u>strategies</u>. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: The animals and cactus all <u>adapt</u> to the desert environment. 			
Owl Bats and	 The coyote runs <u>swiftly</u>. The coyote catches its <u>prey</u> easily. To survive, a coyote can changes its hunting <u>strategies</u>. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: The animals and cactus all <u>adapt</u> to the desert environment. It's really hard for the animals and plants to live in the <u>arid</u> environment of the 			
Owl Bats and	 The coyote runs <u>swiftly</u>. The coyote catches its <u>prey</u> easily. To survive, a coyote can changes its hunting <u>strategies</u>. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: The animals and cactus all <u>adapt</u> to the desert environment. It's really hard for the animals and plants to live in the <u>arid</u> environment of the desert 			
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Owl Bats and	 The coyote runs swiftly. The coyote catches its prey easily. To survive, a coyote can changes its hunting strategies. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: The animals and cactus all adapt to the desert environment. It's really hard for the animals and plants to live in the arid environment of the desert The cactus is a haven for the animals because it provides shelter and food. The little boy observed the giant cactus. Some animals prey at night and sleep in the day. 			
Owl Bats and Leaping Rats	 The coyote runs swiftly. The coyote catches its prey easily. To survive, a coyote can changes its hunting strategies. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: The animals and cactus all adapt to the desert environment. It's really hard for the animals and plants to live in the arid environment of the desert The cactus is a haven for the animals because it provides shelter and food. The little boy observed the giant cactus. Some animals prey at night and sleep in the day. The saguaro cactus is home to many animals. 			
Owl Bats and Leaping Rats	 The coyote runs swiftly. The coyote catches its prey easily. To survive, a coyote can changes its hunting strategies. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: The animals and cactus all adapt to the desert environment. It's really hard for the animals and plants to live in the arid environment of the desert The cactus is a haven for the animals because it provides shelter and food. The little boy observed the giant cactus. Some animals prey at night and sleep in the day. The saguaro cactus is home to many animals. Words: agile, den, mammal, muzzle, prey, sole 			
Owl Bats and Leaping Rats	 The coyote runs swiftly. The coyote catches its prey easily. To survive, a coyote can changes its hunting strategies. Words: adapt, arid, haven, observed, prey, saguaro cactus Sentences: The animals and cactus all adapt to the desert environment. It's really hard for the animals and plants to live in the arid environment of the desert The cactus is a haven for the animals because it provides shelter and food. The little boy observed the giant cactus. Some animals prey at night and sleep in the day. The saguaro cactus is home to many animals. Words: agile, den, mammal, muzzle, prey, sole Sentences: 			

	3. A fox is a mammal , which means they feed milk to their babies and have fur.		
	4. A fox's muzzle is narrow and pointed.		
	5. Being able to move easily helps the fox to hunt its prey .		
	6. The <u>sole</u> of a fox's foot helps to protect them from the hot desert sand.		
http://www.abpisch	Words: insects, habitat, reason, sea, suitable, tunnels		
ools.org.uk/activesci ence/module2/grou	Sentences:		
p1.html	1. Some animals survive in the desert by eating insects and small animals.		
	2. A habitat is a place where a plant or animal naturally grows.		
	3. One reason a giraffe can't live in the desert is because it needs water.		
	4. A seagull cannot live in the desert because it needs the sea to catch fish.		
	5. The desert is a suitable place for a hamster to live because they don't need a lot of		
	water to survive.		
	6. Hamsters like to dig <u>tunnels</u> in the sand.		
Jackrabbit, Desert	Words: enemy, lightning, sail, warning		
Voices			
	Sentences:		
	1. The rabbit's enemy is the coyote.		
	The rabbit can move with lightning speed through the desert.		
	3. The jackrabbit can <u>sail</u> through the desert away from its predator.		
	4. The rabbit gave out a warning to the other rabbits nearby.		
Wonders of the	Words: appear, desert, enemy, harsh, nectar, poisonous		
Desert	Sentences:		
	Sentences.		
	1. Some animals appear when night falls.		
	2. The <u>desert</u> is a dry place where some plants and animals live.		
	3. The hawk is an enemy of the rat.		
	1. The descrit can be a bound equiveryment		
	4. The desert can be a <u>harsh</u> environment.		
	5. The hummingbird will get <u>nectar</u> from the flower.		
	<u> </u>		
http://desertanimals	5. The hummingbird will get <u>nectar</u> from the flower.		
http://desertanimals .net/index	 5. The hummingbird will get <u>nectar</u> from the flower. 6. Be careful, that spider is <u>poisonous</u>! 		
	 5. The hummingbird will get nectar from the flower. 6. Be careful, that spider is poisonous! Words: harsh, survive, endangered, adaptations, receive, extreme Sentences: 		
	 5. The hummingbird will get nectar from the flower. 6. Be careful, that spider is poisonous! Words: harsh, survive, endangered, adaptations, receive, extreme 		
	 5. The hummingbird will get nectar from the flower. 6. Be careful, that spider is poisonous! Words: harsh, survive, endangered, adaptations, receive, extreme Sentences: 1. The desert is a harsh environment with little rain. 		
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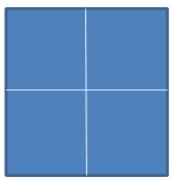
	1. The desert is a type of biome found on Earth.		
	2. The <u>climate</u> of a desert is dry and can be cold or hot.		
	3. The Gila Woodpecker <u>nested</u> itself in a hole in the cactus.		
	4. The flower makes pollen so that it can make a new plant.		
	5. The rabbit protects itself from its enemy by hiding in a hole.		
	6. The spines of a cactus protect it from animals that might eat it.		
Sensational Six	adapt, habitat, harsh, nocturnal, predator, prey		
Summary:	The <u>arid</u> desert is a very <u>harsh</u> and dry <u>biome</u> that can be hot or cold. Desert <u>dwellers</u>		
	adapt to their environment in many interesting ways. The desert owl survives by		
	drinking water from the cactus and the sole of a foxes' foot help protect it from the hot		
	desert sand. The desert can have extreme heat during the day, so animals adapt their		
	hunting habits. For example, Diurnal animals hunt for their prey in the daytime, foraging		
	for food early in the day before it gets too hot. Nocturnal animals sleep in the day and		
	wake up at night to hunt their prey.		

Learning Worth Remembering

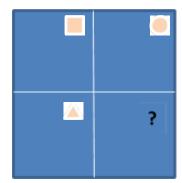
<u>Singular Activities</u> – the following activities can be assigned for each resource in the set. The purpose of these activities is to check for understanding, capture knowledge gained, and provide variety of ways for students to interact with each individual resource. Students may complete some or none of the suggested singular activities for each text. Singular activities should be assigned at the discretion of the teacher.

1. A Picture of Knowledge (DK 24 Hours Deserts)

• Take a piece of paper and fold it two times: once across and once top to bottom so that it is divided into 4 quadrants.



• Draw these shapes in the corner of each quadrant.



- 1. Square
- 2. Triangle
- 3. Circle
- 4. Question Mark

Write!

Square: What one thing did you read that was interesting to you?

Triangle: What one thing did you read that taught you something new?

Circle: What did you read that made you want to learn more?

Question Mark: What is still confusing to you? What do you still wonder about?

• Find at least one classmate who has read [selection] and talk to each other about what you put in each quadrant.

2. Quiz Maker (desertanimals.net/index)

- Make a list of # questions that would make sure another student understood the information.
- Your classmates should be able to find the answer to the question from the resource.
- Include answers for each question.
- Include the where you can find the answer in the resource.

Question	Answer

3.	Wonderings	(Recommended	for Ale	iandro's	Gift. A	Walk in	the Desert)
•	VV OHACHINGS	Inccommend	101 /1/0	Juliulos	0110,7	vvain iii	LIIC DCSCILI

On the left, track things you don't understand from the text as you read.

On the right side, list some things you still wonder (or wonder now) about this topic.

I'm a little confused about:	This made me wonder:

4. **Pop Quiz** (Recommended for *Wonders of the Desert*)

Answer the following questions.

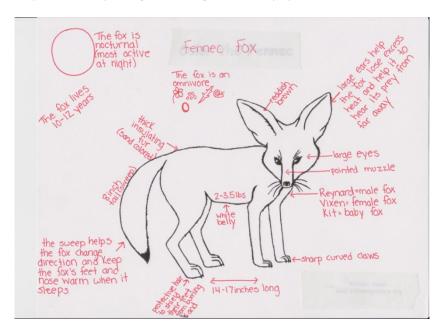
Question	Possible Answer
1. What does a gecko lizard after the sun sets?	The gecko lizard flicks out its sticky tongue to catch
	insects.
2. How can a lizard protect itself in the desert?	It can squeeze into a narrow space or dig into the sand.
3. Describe two insects that live in the desert.	A black pinnacle beetle stands upside down and shoots
	out a bad smelling odor. A honey pot ant lives on
	nectar from desert flowers.
4. What animal has an enemy? Describe the animal	The jackrabbit has an enemy. Its enemy is the coyote.
and its enemy.	

5. Fennec Fox Diagram (Recommended for Fennec Fox Passage from Enchanted Learning)

After reading the passage, students get a blank Fennec Fox diagram. They label the parts of fox and justify how the features of the fox help it to survive in its habitat. Students are encouraged to draw in additional elements of the desert, or features of the Fennec Fox, that help them to demonstrate their comprehension of the passage.

*Encourage students to use vocabulary from the passage on their diagram.

http://www.exploringnature.org/db/detail.php?dbID=18&detID=1284 (link to Fennec Fox diagram)



6. Visual Representation (Recommended for *Jackrabbit*)

After reading the poem, students can create a picture to represent all of the action shown in the poem. They should add other details described in the poem as well. For example, they can show the rabbit hiding, running, jumping, and warning others of the coyote. They can show the coyote moving from bush to bush. They can add other details such as the desert environment or the way the rabbit's ears are laid back.

7. Glossary Facts (Recommended for Around One Cactus: Owl Rats and Leaping Bats)

After reading the book, choose 5 animals from the glossary and write one fact for each.

Animal	Fact

After execting very ideal desert behitet	ckatch and label valve babitat	Do curo to includo, vogototion	n rocinitation

After creating your ideal desert habitat, sketch and label your habitat. Be sure to include: vegetation, precipitation, biome, animal, and compatibility percentage.

9. **Notetaker** (Recommended for The Coyote video)

8. **Sketch and Label Diagram (**Recommended for Switchzoo.com)

Students will choose two other videos to watch on the website in addition to The Coyote. While watching, students will take notes about each animal, writing at least two facts about each animal.

Coyote	Animal of Choice	Animal of Choice

Expert Pack: Desert Animals

Submitted by: Washoe County School District

Grade: 2 Date: May 2015

Expert Pack Glossary

http://switchzoo.com/games/habitat.swf

Word	Student-Friendly Definition
habitat	The place or type of place where a plant or animal naturally or normally
	lives or grows. The pond is a habitat for a frog.
compatibility	Compatibility means to be able to exist together without trouble or conflict.
	The rabbit and the mouse have compatibility and can live together in peace.
vegetation	Vegetation means plants in general or plants that cover a particular area.
	The vegetation was thick in the forest.
precipitation	Precipitation is water that falls to the ground as rain or snow. Deserts do
	not receive much precipitation.
biome	A biome is a large region of Earth that has a certain climate and certain
	types of living things. Some examples of biomes include tundra's, forests,
	grasslands, and deserts.

Alejandro's Gift

Word	Student-Friendly Definition
adobe	Adobe is a type of brick made of a mixture of mud and straw that is dried
	by the sun. The house was built out of adobe.
refresh	Refresh means to make (someone) have more energy and feel less tired or
	less hot. A nice nap will refresh you.
tending	Tending means to give your attention to and take care of something or
	someone. The woman was tending her flower garden.
scampered	Scampered means to run or move quickly. The jackrabbit scampered into
	the brush.
mesquite bush	A mesquite bush is a small tree or bush native to the southwestern United
	States and Mexico. Mesquite bushes are often found in dry hot areas.
saguaro	A saguaro is an absorbent species of cactus. The saguaro had grown tall.
confident	Confident means having a feeling or belief that you can do something well
	or succeed at something. The boy was confident he could make the winning
	goal.
sheltered	Sheltered means to provide protection. The roof on the house sheltered the
	family from the terrible rain storm.

Step 6 on Checklist for Creating an Expert Pack

companion	A companion is a person or animal you spend time with or enjoy being with.
	My dog makes a great companion.
endure	To endure means to continue to exist in the same state or condition. <i>The</i>
	lizard has to endure the hot, desert days.
warily	Warily means not having trust in someone or something that could be
	dangerous or cause trouble. The cat looked at the dog warily.
furrows	Furrows are long and narrow cuts in the ground. The rainwater flowed
	through the furrows in the dirt.
ample	Ample means having or providing enough of what is needed. We have
	ample food to last us while we are camping.
dwellers	Dwellers are people or animals that live in a particular place. Bats are cave
	dwellers and make their homes in dark caves.
drudgery	Drudgery means boring, difficult, or unpleasant work. The girl complained
	of the drudgery of her homework.

DK 24 Hours: Desert Around the Clock with the Animals of the Desert

Word	Student-Friendly Definition
Sahara Desert	The Sahara Desert is the world's largest desert (3,500,000 square miles) in
	northern Africa. We rode on a camel through the Sahara Desert.
foraging	Foraging means to eat growing grass or other plants or to search for
	something. The fox went foraging through the woods in search of a snack.
burrow	Burrow is a hole or tunnel in the ground that an animal (such as a rabbit or
	fox) makes to live in or for safety. The mouse ran to its burrow when the
	snake slithered by.
hibernate	To hibernate is to spend the winter sleeping or resting. The bear will
	hibernate all winter.
diurnal	Diurnal is to be active mainly during the day. The hawk is diurnal because it
	needs light to see it prey on the ground.
nocturnal	Nocturnal is to be active mainly during the night. The nocturnal bat flies
	around at night.
drought	A drought is a long period of time during which there is very little or no
	rain. We need to save water while we are in this drought.
migrant	Migrant describes a bird or animal that moves from one area to another at
	different times of the year. The migrant flock of birds flies south for the
	winter.

The Coyote

Word	Student-Friendly Definition	
swiftly	Swiftly means moving very fast. The girl completed her work swiftly so she	
	could go to recess.	

prey	Prey is an animal that is hunted or killed by another animal for food. <i>The mouse hides to avoid being the snake's prey.</i>
strategies	Strategies are careful plans or methods for achieving a particular goal. The boy has a great strategy for solving his math problem.

Around One Cactus

Word	Student-Friendly Definition
majesty	Majesty means a great and impressively beautiful quality. <i>The students'</i>
	writing was majesty.
waterless	Waterless means to have no water. The remote desert was waterless.
lofty	Lofty means to be tall, or high off the ground. The cactus was lofty.
incredible	Incredible means hard to believe. The ending of that story was incredible!
noble	Noble means to belong to a high social class. The prince and princess are noble individuals.
search	Search means to look for something. The fennec fox was searching for food in the desert.
stinging	Stinging means to have a sharp pain. The cut on my leg was stinging.
topic	A topic is a subject. <i>The topic of our research will be desert animals.</i>
unseen	Unseen is to not be seen. The coyote has been unseen for several months.
survivors	Survivors are people or animals who live after an event where others have died.
environment	An environment is the surrounding things, conditions, or influences. <i>The desert is a very active environment in the evening.</i>
river	A rive is a natural stream of water of fairly large size flowing in a definite course. The Truckee River runs through our town.
origin	Origin means something from which anything arises or is derived. We will follow the river to its origin.
relationship	A relationship is a connection, association, or involvement. The fox and a gerbil do not have a good relationship.
border	A border is the part or edge of a surface or area that forms its outer boundary. The Sierra Mountains form a boarder around the valley.
behold	Behold means to look at or observe. I will behold the rattlesnake.
undesirable	Undesirable mean not desirable or attractive. In my mind, the desert is an undesirable place to live.
disgraceful	Disgraceful means shameful or dishonorable. The boy was acting disgraceful.
dew	Dew is moisture condensed from the atmosphere, especially at night, anddeposit ed in the form of small drops upon any cool surface. There was dew on the flower petals this morning.

shifting	Shifting means to
	to put (something) aside and replace it by another or others; change or
	exchange. The sand was shifting around on the desert flood.
preserve	Preserver means to to keep alive or in existence. I hope we can preserve
	the deserts natural habitat.
gripping	Gripping means to hold the attention or interest intensely. The foxes hunt
	was gripping.
adapt	Adapt means to change your behavior so that it is easier to live in a
	particular place or situation. The animals in the desert adapt to the dry
	conditions.
arid	Arid means very dry or having very little rain or water. The arid desert
	gets very little rain.
haven	Haven is a place where you are protected from danger or trouble. The
	owl finds a haven in the cactus.
saguaro cactus	The saguaro cactus is a giant cactus that can grow to 66 feet (20 m) in
	height and whose branches are shaped like candelabra, native to Mexico
	and the southwestern US. The saguaro cactus has reddish-purple fruit can
	be used for food and drink.
observe	To observe means to watch and sometimes also listen to (someone or
	something) carefully. The frog carefully observed the insect before eating
	it.
prey	Prey is an animal that is hunted or killed by another animal for food. The
	hawk will quickly swoop down to catch its prey.

Fennec Fox

Word	Student-Friendly Definition
agile	Agile means being able to move quickly and easily. The fox is agile,
	therefore it can catch its prey easily.
excess	Excess means an amount that is more than the usual or necessary
	amount. There is rarely excess water in the desert.
enable	Enable means to make (someone or something) able to do or to be
	something. The fur on the fox's feet enable it to walk on the hot desert
	sand.
prey	Prey is an animal that is hunted or killed by another animal for food. The
	fox's prey can be a lizard.
social	Social means to cause to be social or fit to live with others. Foxes are
	social with other foxes.
individual	Individual means single, separate, or distinct. An individual fox may be
	found in its den eating stored food.
span	Span is a length of time. The lifespan of the Fennec Fox is 10-12 years.

anatomy	Anatomy is the science that studies the parts and structures of plants or animals. The anatomy of the fox helps it to survive in the desert.
weigh	Weigh means to measure how heavy a person or thing is by using a scale. If you were to weigh a fox it would probably weigh 2-3.5 pounds.
mammal	A mammal is a type of animal that feeds milk to its young and that usually has hair or fur covering most of its skin. A fox is a mammal because it has fur.
territory	A territory is a region that is marked and defended by a particular type of animal. A fox's territory is in the desert.
insulating	Insulating means to add a material or substance to (something) in order to stop heat, electricity, or sound from going into or out of it. The fur is insulating the fox from the extreme temperatures.
sole	A sole is the bottom of something that comes in contact with the ground. The sole of the fox's foot protects it from the hot sand.
muzzle	A muzzle is the usually long nose and mouth of an animal. The Fennec Fox has a pointed muzzle.
material	Material is anything used for building or making something else. <i>The fox stores material from plants in its den</i> .
rodent	A rodent is a small animal (such as a mouse, rat, squirrel, or beaver) that has sharp front teeth. Desert animals may find different a rodent to eat in the desert.
underground	Underground means to be located, living, or taking place beneath the earth's surface. Hamsters build underground tunnels in the desert.
den	A den is the home of some kinds of wild animals. <i>The fox stores excess food in its den.</i>
gestation	Gestation is the time when a person or animal is developing inside its mother before it is born. <i>Animals have different gestation periods.</i>
classification	Classification is an order or group in which something is classified. <i>The classification of a fox is mammal.</i>
order	Order means a related group of living things. The order of a fox is carnivora.

http://www.abpischools.org.uk/activescience/module2/group1.html

Word	Student-Friendly Definition
habitat	Habitat means the place or type of place where a plant or animal naturally or normally lives or grows. <i>Animals have different adaptations that allow them to survive in their habitat.</i>
features	Features are interesting or important parts, qualities, abilities, etc. The feature of a fox that helps it to hear its prey is its large ears.
reason	Reasons are a statement or fact that explains why something is the way it is, why someone does, thinks, or says something, or why someone behaves a certain way. One reason a seagull can't survive in the desert is

	that it needs fish in its diet.
suitable	Suitable means having the qualities that are right, needed, or appropriate for something. She wore clothes that were suitable for church.
fairly	Fairly means to some degree or extent. I cleaned my room fairly well.
tunnels	Tunnels are passages that go under the ground or through a hill. The ants dug many tunnels in the dirt.
insects	Insects are small animals that have six legs and bodies formed of three parts and that may have wings. <i>The insects were flying around the fruit.</i>
sea	The sea is the salt water that covers much of the Earth's surface. <i>The ship sailed across the sea</i> .

Jackrabbit, Desert Voices

Word	Student-Friendly Definition
clump	A clump is a group of things or people that are close together. I found a clump of fur on the ground.
rustle	Rustle means to make a soft, light sound. I heard a rustle near the bush.
doubling	Doubling means to go back or reverse your direction. She started doubling back after she lost her phone.
enemy	An enemy is something or someone that harms something or someone else. The bird is an enemy of the worm.
gully	A gully is a deep ditch made by running water. The children explored the deep gully they found in the field.
instant	Instant means that something is happening right away. The bell will be ringing in an instant.
lightning	Lightning is something done very quickly. The boy made his bed in lightning speed so he could get outside to play.
sail	Sail means to move smoothly or rapidly. <i>The rabbit can sail quickly into its hole.</i>
warning	A warning is something that tells danger is coming. The fire drill gave a warning to the students to leave the building.

Wonders of the Desert

Word	Student-Friendly Definition
harsh	Harsh means unpleasant and difficult to accept or experience. <i>This winter was harsh.</i>
colony	A colony is a group of plants or animals living or growing in one place. There was a colony of ants living on our porch.
stinger	A stinger is a pointed part on an insect and animal that is used to sting someone. The bumblebee has a stinger.
poisonous	Poisonous means capable of putting poison into another animal's body by biting it. <i>The poisonous snake bit the rabbit.</i>
pouches	Pouches are a pocket of skin inside the mouths of some animals (such as squirrels and hamsters) that is used to carry food. The squirrel filled its pouches with acorns.
oasis	An oasis is an area in a desert where there is water and plants. There were green flowers growing near the oasis.
nomads	Nomads are members of a group of people who move from place to place instead of living in one place all the time. The fox was a nomad because it needed to find food.
burrow	Burrow means to make a hole or a tunnel. The mouse began to burrow into the dirt to make a new home.
drive	Drive means to push along by force. The snake will drive the mouse out of its home.
enemy	An enemy is something that harms or weakens something else. <i>The snake</i> is an enemy to the mouse.
nectar	Nectar is a sweet liquid made by flowers. The hummingbird drank the nectar from the flower.
stir	Stir means to move around slightly. The baby began to stir after a long nap in the crib.

http://desertanimals.net/index

Word	Student-Friendly Definition
adaptations	An adaptation is a change where an animal becomes used to its environment. The hummingbird's beak is an adaptation that helps it drink nectar from flowers.
endangered	Endangered means to be seriously at risk of extinction. The whale is endangered so we must protect its habitat.
harsh	Harsh means to be rough or not pleasing. The desert can be harsh since it receives little rain.
receive	Receive means to get something. The girl will receive gifts on her

	birthday.
region	A region is a large area or space. We live in the western region of our country.
survive	Survive means to continue to live. Small fish learn to survive while living in the ocean with sharks.

A Walk in the Desert

Word	Student-Friendly Definition
biome	A biome is a large area where many living things live such as a grassland
	or desert. The desert biome is home to different kinds of plants.
climate	A climate is an area's usual pattern of weather over a long period of time.
	A desert has a dry climate with little rain.
nocturnal	Nocturnal means to be active at night. The coyote is nocturnal and hunts
	at night.
pollination	Pollination is a process where pollen is spread from one plant to another.
	Bees help flowers with pollination as they collect nectar.
predator	A predator is an animal that hunts and eats other animals. Small desert
	animals must hide from the predators that also live in the desert.
prey	Prey are animals that are hunted and eaten by other animals. The small
	mouse became the snake's prey.