



Lesson Plan and Activities

Written in accordance with the Language Arts, Social Studies, and Science Standards

Mi investigación

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COMPLEXITY

F&P Guided Reading Level P / Lexile Level 690L

TEXT TYPE

Informational Text: Science

OBJECTIVES

- ▶ Predict author's purpose and topic of the text.
- ▶ Compare and contrast information in an informational text.
- ▶ Explore relationships and interactions between organisms and the environment.
- ▶ Record information to answer questions.
- ▶ Ask and answer questions about the text.
- ▶ Use context clues to determine the meaning of unfamiliar words.



INSTRUCTIONAL FOCUS:

Staircase of Complexity / Reading Rigor

INSTRUCTIONAL FOCUS:

Balancing Informational and Literary Text



Together we foster lifelong readers

MATERIALS

- ▶ index cards
- ▶ drawing materials: pencils, paper, crayons, etc.
- ▶ bingo cards with vocabulary terms
- ▶ Diagrama de Venn
(Graphic Organizer #6)*
- ▶ construction paper
- ▶ scissors, glue, old magazines
- ▶ journal

SUMMARY

This book teaches us about how animals have adapted to life all over the Earth. From the cold Arctic region to the tropical forests, animals and plants interact to create living systems that support one another. Some adaptations in animals include the thickness of their coat, their size, their color, the shape of different body parts, and the type of houses they build. These adaptations help animals survive and thrive in different habitats.

STANDARDS

SLAR CCSS RI.5.1, RI.5.3, RI.5.4, RI.5.5, RI.5.7, RF.5.3.a, RF.5.4, W.5.2, W.5.5, W.5.6, W.5.7, W.5.8, W.5.9.b, W.5.10, SL.5.1, SL.5.2, SL.5.4, SL.5.5, L.5.2.g, L.5.3, L.5.4.a, L.5.5.c, L.5.6

SLAR TEKS 5.1.A, 5.2.A, 5.2.B, 5.9.A, 5.10.A, 5.11.C, 5.11.D, 5.11.E, 5.15, 5.18.A, 5.20.A.(iii), 5.20.A.(v), 5.20.D, 5.21, 5.22.E, 5.24.A, 5.24.D, 5.26.A, 5.26.B, 5.26.C, 5.27.A, 5.29.A

Science TEKS 5.9.A, 5.10.A-B

NGSS 5-LS2-1

VOCABULARY

INSTRUCTIONAL FOCUS:
Academic Vocabulary

abundante – en mucha cantidad / abundant
adaptarse – acomodarse o ajustarse a distintas situaciones o condiciones / to adapt
conservar – mantener, guardar / to keep, to preserve
descender – bajar / to drop
desplazarse – moverse de un lugar a otro, trasladarse / to move
disminuir – reducir o bajar la cantidad / to reduce, to diminish
escaso – en poca cantidad, limitado / limited
extenderse – ocupar un espacio o área / to occupy
extremo – punto distante o apartado / extreme point
habitar – vivir, ocupar una casa o un territorio / to live in
veloz – rápido / fast

Advanced Vocabulary

carnívoro – que come carne / carnivorous
extinguirse – desaparecer o acabarse poco a poco / to become extinct
glaciar – masa de hielo acumulada en las montañas y que se mueve lentamente / glacier
 hábitat – lugar con características apropiadas para que viva cierto tipo de plantas y animales / habitat
herbívoro – que come plantas o hierbas / herbivorous
longitud – el largo de algo / length
meseta – llanura o planicie elevada / plateau
palmeados – dedos de ciertos animales que están unidos por una membrana / webfooted
templado – clima suave que no es ni muy frío ni muy cálido / temperate

* To download the Spanish Graphic Organizers in this lesson go to: santillanausa.com/spanishliteracy



VOCABULARY DEVELOPMENT

- ▶ Introduce vocabulary by providing a description, explanation, or example of all the words presented in the vocabulary section and any additional vocabulary you may wish to discuss prior to the reading activities. Consider using pictures (from magazines, books, or the Internet), sketches, and/or pantomime to explain the meaning of each word. You may also tell a story to integrate some of the terms.
- ▶ Make sure students understand all the vocabulary needed to complete the activities (e.g., *antónimo, diferencia, diferenciarse, parecerse, semejanza*) and instruction words, such as *clasifica, compara, comparte, contrasta, describe, imagina, infiere, explica, organiza, predice, revisa*.
- ▶ Ask students to explain what each word means in their own words. Distribute index cards and have students write these headings, leaving space for their answers, on each card: *Palabra, Mi definición, Cuando pienso en la palabra me imagino*. Then, ask students to come up with a drawing to represent each word on the back of the corresponding card. Ask student pairs to test each other using these flash cards.
- ▶ Remind students that analyzing context clues will help them figure out the meaning of words. Sometimes the author provides examples, explanations, or synonyms to clarify the meaning of words. For example: *hábitat*: “*lugar donde el animal construye su casa*” (p. 36). Have students use the context clues to explain the meaning of these terms: *hemisferio norte* (p. 34), *mamífero* (p. 32), and *oasis* (p. 28).
- ▶ To expand students’ word knowledge, point out this antonym pair in the vocabulary list: *abundante – escaso*. Then have them look for antonyms of the following words in the text (answers are in parentheses): *cálido* (*friό*, p. 5); *descender* (*subir*, p. 13); *disminuir* (*aumentar*, p. 2); *veloz* (*lento*, p. 32). Also point out these antonym pairs that describe a position: *dorso* (back) and *vientre* (belly) on page 26; *sobre* (above) on page 5 and *bajo* (under) on page 6, and *superior* (top) and *inferior* (bottom) on page 26. Have students draw one of the animals presented in the book and describe it and its habitat using some of these antonyms.
- ▶ Point out words that may cause students spelling difficulties. For example: *baya* (berry) on page 33 and *vaya* (go); *caza* (hunts) on page 21 and *casa* (house) on page 12; *halla* (finds) on page 10 and *haya* (beech) on page 13; *sabana* (savannah) on page 35 and *sábana* (bed sheet); *tan bien* (as well) on page 7 and *también* (also) on page 18. Then have students write pairs of sentences with these words.
- ▶ Play a game of vocabulary bingo with students. Prepare bingo cards with the words in the vocabulary list. Students win by matching the definitions given by you to the vocabulary words on their bingo card.

► READING

PRE-READING

- ▶ Discuss with students ways in which humans, plants, and animals have adapted to different living and weather conditions. Ask: *¿Cómo nos vestimos cuando hace mucho calor o mucho frío?* (How do we dress when it is very warm or very cold?) *¿Qué cambios se notan en las plantas y en los animales en invierno y en verano?* (What changes have you noticed in plants and animals during winter and summer?) *¿Qué sucedería si no cambiáramos según el tiempo? Den dos ejemplos.* (What would happen if we did not change according to the weather? Provide two examples.)
- ▶ Have students read the title and look at the maps on pp. 34–35 to help them identify the genre. Then ask: *¿De qué creen que trata este libro?* (What do you think this book is about?) *¿Qué tipo de texto creen que es? ¿Por qué creen eso?* (What type of text do you think this is? Why do you think so?)
- ▶ Have students set a purpose for reading. Ask: *¿Qué esperan aprender al leer este libro?* (What do you expect to learn by reading this book?)

READING

- ▶ Familiarize students with the text structure. Point to the nine habitats described on pp. 34–35 and tell them they will learn how different animals have adapted to life in those nine regions of the world.
- ▶ Do a read-aloud of the introduction on p. 2 to familiarize students with the text and to model pronunciation and intonation. Then go over the map and the different habitats described on pp. 34–35. Read through the text the first time for flow. After a second reading, ask: *¿Cuántos tipos de hábitats o lugares muestra el mapa?* (How many kinds of habitats or places does the map show?) *¿Qué lugares parecen ser fríos? ¿Y cálidos? ¿Por qué creen eso?* (What places seem to be cold? And warm? Why do you think that?) *Mencionen tres diferencias entre los animales y las plantas de los distintos hábitats.* (Tell three differences between the animals and plants of the different habitats.)
- ▶ Divide the reading into nine sessions or time allocations, one for each habitat. During each session, you may wish to vary the reading arrangement: students read in pairs, independently, in small groups, do a choral reading, etc. After they finish reading each part of the text, have a group discussion to check comprehension, monitor students' progress, and clarify any questions they might have. Ask: *¿Cómo es el clima en ese lugar?* (What is the weather like in that place?) *¿Qué animales habitan en ese lugar?* (Which animals live in that place?) *¿Qué características tienen esos animales que los ayudan a adaptarse a la vida en ese hábitat?* (What characteristics do those animals have that help them adapt to the life in that particular habitat?) *¿Qué han aprendido sobre este hábitat? Resúmanlo en una oración.* (What have you learned about this habitat? Summarize it in one sentence.)
- ▶ In order to help students organize the information, distribute nine index cards to each student and have her/him complete one card for each habitat. The cards should contain the following information: *hábitat, clima, ejemplos de animales de ese hábitat, ejemplos de adaptaciones al hábitat.* Model the first card for students: *Hábitat ➔ océano Glacial Ártico; Clima ➔ muy frío, mucho viento; Ejemplos de animales ➔ búho nival, zorro ártico, morsa, oso polar; Ejemplos de adaptaciones ➔ buscar comida durante el día, pelo en las patas, capa gruesa de grasa, dedos palmeados.* Encourage students to use these cards in their discussions and activities.
- ▶ To bring the text together, you may wish to conduct a read-aloud of the *Notas del profesor* on pp. 36–37. This text summarizes the information presented in the book and introduces some science vocabulary, such as *hábitat, conservar, herbívoro, and carnívoro*. Pause frequently to monitor students' understanding and to clarify questions they might have. Encourage them to use their nine index cards for clarification and reinforcement.

INSTRUCTIONAL FOCUS:

Text-based Answers / Critical Analysis





DIFFERENTIATED INSTRUCTION

Below-level Students

- Ask students these or similar questions to check their comprehension. Allow them to answer with short phrases or incomplete sentences. Ask: *¿Cuál es un hábitat muy frío? Nombra un animal que viva ahí.* (Which is a very cold habitat? Name an animal that lives there.) *¿Cuál es un hábitat muy cálido? Nombra un animal que viva ahí.* (Which is a very warm habitat? Name an animal that lives there.)

At-level Students

- Encourage students to make inferences and predictions based on the text, using short sentences. Ask: *Da un ejemplo de un hábitat frío y de uno caliente. Compara y contrasta el clima y los animales de esos dos hábitats.* (Give an example of a cold habitat and a warm one. Compare and contrast the climate and animals of those two habitats.) *Predice qué les sucederá a los animales del Ártico si el clima de esa región se vuelve más cálido de repente. ¿Por qué crees eso?* (Predict what will happen to animals in the Arctic if the climate there suddenly gets warmer. Why do you think so?)

Above-level Students

- Encourage students to analyze and evaluate the text, using complete and elaborate answers. Ask: *¿Cómo se adaptan los animales a su hábitat? Da dos ejemplos del texto.* (How do animals adapt to their habitats? Provide two examples from the text.) *¿Cómo afecta el medio ambiente a los seres vivos? Da dos ejemplos del texto.* (How does the environment affect living things? Provide two examples from the text.)

POST-READING

- Explain to students that understanding how two things are alike (*comparar*) and how they are different (*contrastar*) helps us connect ideas together. Review some of the structures we use to compare and contrast: *más ... que, a diferencia de, tan/tanto ... como, el más/menos ... de, mayor, menor.* Then have students take out the nine index cards they prepared while they were reading and tell them they can use these cards to help them answer your questions. Ask: *Menciones tres diferencias entre las praderas y el desierto de África. Luego mencionen dos semejanzas.* (Say three things that are different between the African prairie and the desert. Then say two things that are alike.) *¿En qué se diferencian los animales de los ríos y los lagos de Canadá de los animales del océano Pacífico? ¿En qué se parecen?* (How are animals from Canada's rivers and lakes different from animals in the Pacific Ocean? How are they similar?) *¿Qué infieren al ver que los animales que viven en hábitats distintos son diferentes?* (What can you infer when you see that animals that live in different habitats are different?) *¿Creen que muchas de las diferencias entre los animales se deben al hábitat donde viven?* (Do you think many of the differences between animals are due to the habitat where they live?)
- Prepare a set of six cards for each student with these labels: *Ártico, bosque templado, desierto, océano, praderas, and selva tropical.* Then describe an animal or an adaptation and have students hold up the corresponding card.
- Have students create a Venn diagram (Graphic Organizer #6) for two of the habitats described in the text and compare and contrast the climate and animals. Encourage them to use the index cards they created during their reading. Have students present their diagrams to a classmate.

► CONNECTION WITH CONTENT AREAS: SCIENCE

INSTRUCTIONAL FOCUS:
Building Knowledge in the Content Areas



- ▶ Have students work in pairs to create a poster for one of the habitats described in the book. Distribute construction paper and allow them time to plan their poster. Students can create their own drawings, use cutouts from old magazines, look for pictures on the Internet, or use a combination of different sources. Have them add labels and headings as appropriate. Then invite students to present their finished posters to the class. Encourage students to use the science vocabulary they have learned (*adaptarse, carnívoro, hábitat, herbívoro, meseta, templado, etc.*). You may wish to exhibit the posters in the classroom. 
- ▶ Have students observe the green areas around the school or in their neighborhoods (depending on which is more suitable for observing nature) over the course of several weeks. Point out that an adult should accompany them. Ask them to keep a journal to jot down their observations of the plants and animals that live there: what they eat, how they depend on one another, etc. Students should also take note of any changes they observe in the weather, plants, and/or animals. Then, have them use their journals to decide which of the habitats described in the book resembles the habitat where they live. Invite students to share their observations and conclusions with the class. Ask them to provide examples to justify their conclusions. 
- ▶ Divide the class into small groups and have each group dramatize a different habitat. They should decide which animal or plant each of them is going to play. Have the rest of the class guess the habitat and the animals being represented.

► WRITING

INSTRUCTIONAL FOCUS:
Writing from Sources / Research Strand



Have students use their nine index cards, Venn diagram, and the book to write a four-paragraph essay comparing and contrasting two of the habitats presented in the text. You may also wish to have students consult other sources to verify the accuracy of the information and to add other data that will highlight the differences or similarities between the habitats. Remind students to cite their sources at the end of their essays. Guide students through the writing process, which will take place in steps over the course of several days. Students will develop an outline, then write a first draft. Next, have them exchange their drafts and revise and comment on each other's work. Then have students review their drafts, incorporate the revisions, and create a final draft. Encourage students to share their final work with the class or to publish their essays on the class web page, if there is one. 



Informal Assessment

You may wish to assess a student's progress as he or she completes comprehension and production activities. Suggested activities are identified with the icon.



Nombre _____

Vocabulario

A Completa las oraciones con la palabra correcta.

adaptaron

desplazan

hábitats

extiende

habita

1. El oso polar habita en el Ártico.
2. La taiga se extiende por el norte de Europa.
3. Los dingos de Australia se desplazan en manadas.
4. Los camellos se adaptaron al clima seco del desierto.
5. En la Tierra existe una gran diversidad de hábitats y de animales.

B Une cada palabra con su antónimo (opuesto).

- | | |
|--------------|-------------|
| 1. abundante | a. aumentar |
| 2. rígido | b. lento |
| 3. descender | c. blando |
| 4. veloz | d. perder |
| 5. disminuir | e. escaso |
| 6. conservar | f. subir |

C Completa las oraciones con la palabra correcta.

casa / caza

halla / haya

también / tan bien

1. La comadreja caza ranas y se las come en su madriguera, que es su casa.
2. El pájaro carpintero come gusanos que halla en el tronco de una haya.
3. Los frailecillos nadan casi tan bien como los peces. Estas aves son también conocidas por su parecido con los pingüinos.



Nombre _____

Comprensión lectora

A Une cada animal con su hábitat.

- | | |
|-----------------|--------------------------|
| 1. morsa | a. océano Pacífico |
| 2. canguro | b. río y lagos de Canadá |
| 3. hiena | c. llanuras australianas |
| 4. salmón | d. Ártico |
| 5. ballena azul | e. praderas de África |

B Contesta.

1. ¿Hay más animales en las regiones frías o en las cálidas? ¿Por qué?

Possible answer: En las regiones cálidas porque tienen más alimento.

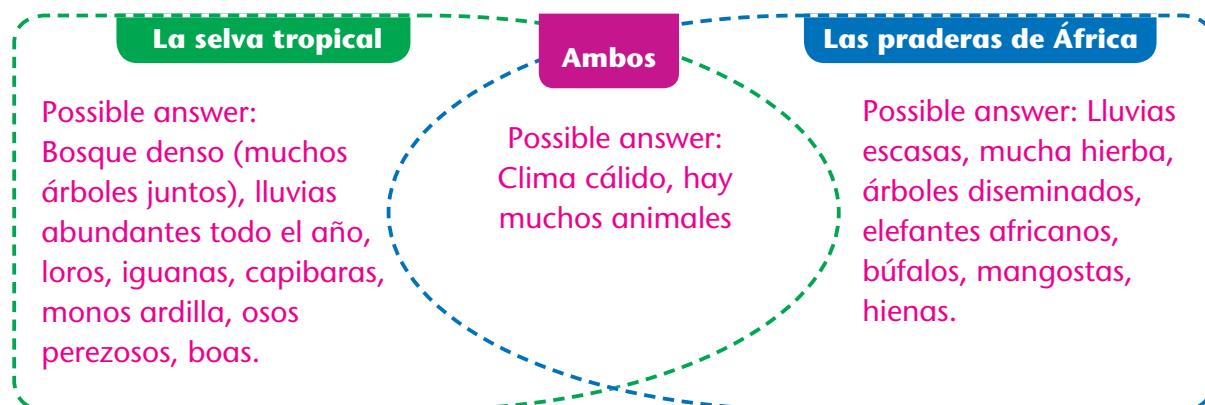
2. Menciona dos adaptaciones de los animales del desierto.

Possible answer: piel gruesa, se mueven por la noche

3. ¿Por qué abundan los animales herbívoros y también los carnívoros en las praderas de África?

Possible answer: Porque hay mucha hierba para los herbívoros y los carnívoros se alimentan de los herbívoros.

C Compara y contrasta estos dos hábitats. Describe el clima, las plantas y los animales.





Nombre _____

Vocabulario

A Completa las oraciones con la palabra correcta.

adaptaron

desplazan

hábitats

extiende

habita

1. El oso polar _____ en el Ártico.
2. La taiga se _____ por el norte de Europa.
3. Los dingos de Australia se _____ en manadas.
4. Los camellos se _____ al clima seco del desierto.
5. En la Tierra existe una gran diversidad de _____ y de animales.

B Une cada palabra con su antónimo (opuesto).

- | | |
|--------------|-------------|
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| 5. disminuir | e. escaso |
| 6. conservar | f. subir |

C Completa las oraciones con la palabra correcta.

casa / caza

halla / haya

también / tan bien

1. La comadreja _____ ranas y se las come en su madriguera, que es su _____.
2. El pájaro carpintero come gusanos que _____ en el tronco de una _____.
3. Los frailecillos nadan casi _____ como los peces. Estas aves son _____ conocidas por su parecido con los pingüinos.



Nombre _____

Comprensión lectora

A Une cada animal con su hábitat.

- | | |
|-----------------|--------------------------|
| 1. morsa | a. océano Pacífico |
| 2. canguro | b. río y lagos de Canadá |
| 3. hiena | c. llanuras australianas |
| 4. salmón | d. Ártico |
| 5. ballena azul | e. praderas de África |

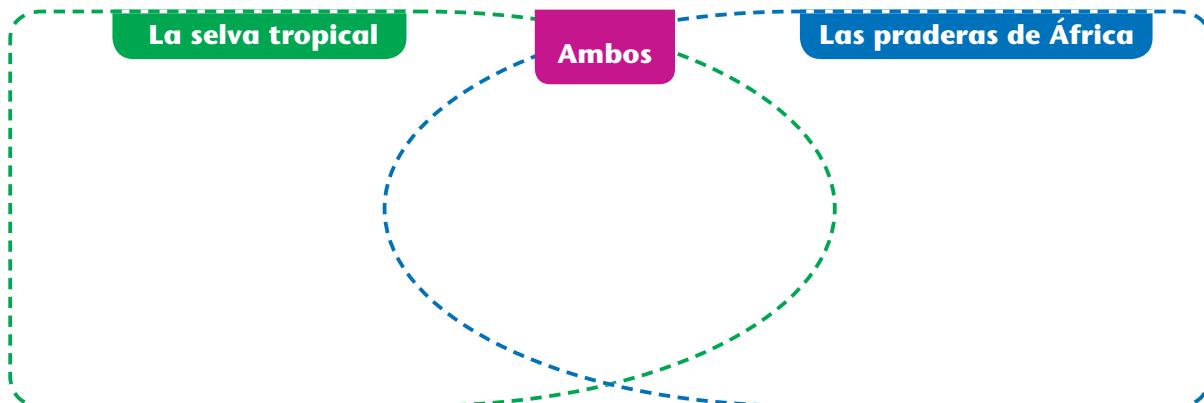
B Contesta.

1. ¿Hay más animales en las regiones frías o en las cálidas? ¿Por qué?

2. Menciona dos adaptaciones de los animales del desierto.

3. ¿Por qué abundan los animales herbívoros y también los carnívoros en las praderas de África?

C Compara y contrasta estos dos hábitats. Describe el clima, las plantas y los animales.



Mi investigación