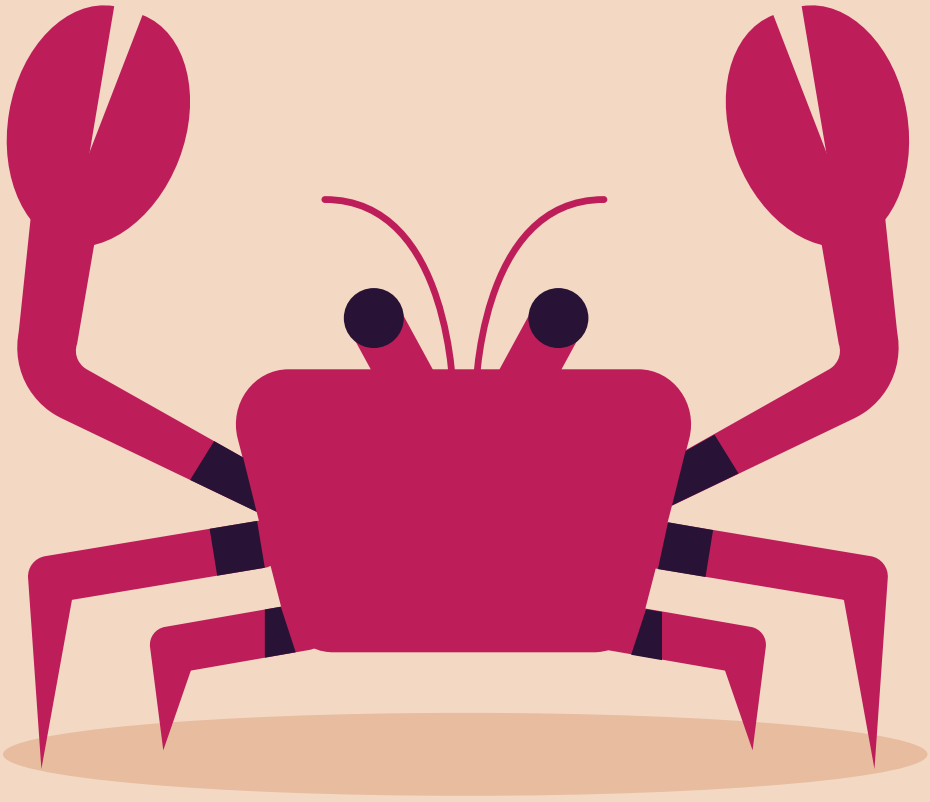
Amplify. TEXAS
ELEMENTARY LITERACY PROGRAM

ENGLISH



Grade 1

Knowledge 7 | Teacher Guide

Animals and Habitats: The World We Share

Grade 1 | Knowledge 7

Animals and Habitats:
The World We Share

Teacher Guide

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Given the timeline for development, errors are to be expected. If you find an error, please email us at **texashomelearning@tea.texas.gov.**

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Grade 1 | Knowledge 7

Contents

ANIMALS AND HABITATS: THE WORLD WE SHARE

Grade 1 | Knowledge 7

Introduction

This introduction includes the necessary background information to be used in teaching the *Animals and Habitats: The World We Share* domain. The Teacher Guide for *Animals and Habitats: The World We Share* contains nine daily lessons, each of which is composed of two distinct parts, so that the lesson may be divided into smaller chunks of time and presented at different intervals during the day. The entire lesson will require a total of sixty minutes.

This domain includes a Pausing Point following Lesson 4. At the end of the domain, a Domain Review, a Domain Assessment, and Culminating Activities are included to allow time to review, reinforce, assess, and remediate content knowledge. You should spend no more than fifteen days total on this domain.

DOMAIN COMPONENTS

Along with this Teacher Guide, you will need:

- Flip Book for *Animals and Habitats: The World We Share*
- Image Cards for *Animals and Habitats: The World We Share*
- Activity Book for *Animals and Habitats: The World We Shares*
- Digital Components for *Animals and Habitats: The World We Share*

Additional resources that you may wish to integrate into your classroom instruction are:

- Trade Book Guide for *Wonderful Nature, Wonderful You* by Karin Ireland
- Read-Aloud Videos for *Animals and Habitats: The World We Share*

All domain components materials can also be found on the program's digital components site.

WHY ANIMALS AND HABITATS ARE IMPORTANT

This domain will introduce students to the wonder of the natural world, focusing on the interconnectedness of all living things with their physical environment and with one another. Students will learn what a habitat is and will also learn to identify specific types of habitats and their related characteristics. They will learn to recognize different plants and animals as being indigenous to specific habitats and will begin to develop an understanding of several fundamental principles of nature. They will learn, for example, that animals and plants typically live in those habitats to which they are best suited, often developing unique characteristics or features that enable them to specifically adapt to the climate and conditions of a given environment. They will also be introduced to simple classifications of animals according to the types of food they eat and will begin to understand the notion of a food chain.

In later grades, students will build upon the knowledge of habitats and animals that they will have gained from listening to and discussing the Read-Alouds in this domain. The concepts and factual information that they learn now will serve as the basis for later, in-depth understanding of increasingly detailed and sophisticated biological taxonomies, the interdependence of all of nature and its fragile balance, and an appreciation of the role that human beings must assume to protect the world in which they live.

This unit also provides opportunities for students to build content knowledge and draw connections to the science and social studies subject areas, but it does not explicitly teach the Texas Essential Knowledge and Skills standards for Science or Social Studies. At times throughout the unit, you may wish to build on class discussions to support students in making cross-curricular connections to the strands of Organisms and Environments, and Scientific Investigation and Reasoning from the science discipline, as well as to the strand of Geography from the social studies discipline.

WHAT STUDENTS HAVE ALREADY LEARNED

The following domains, and the specific core content that was targeted in those domains, are particularly relevant to the Read-Alouds students will hear in *Animals and Habitats: The World We Share*. This background knowledge will greatly enhance students' understanding of the Read-Alouds they are about to enjoy:

Plants: How Do They Grow? (Kindergarten)

Farms: From the Ground Up (Kindergarten)

Seasons and Weather: As the Earth Turns (Kindergarten)

Taking Care of the Earth (Kindergarten)

CORE VOCABULARY FOR ANIMALS AND HABITATS: THE WORLD WE SHARE

The following list contains all of the core vocabulary words in *Animals and Habitats: The World We Share* in the forms in which they appear in the Read-Alouds. Boldfaced words in the list have an associated Word Work activity. The inclusion of the words on this list does not mean that students are immediately expected to be able to use all of these words on their own. However, through repeated exposure throughout all of the lessons, they should acquire a good understanding of most of these words and begin to use some of them in conversation.

Lesson 1 habitat **shelter** survive	**Lesson 4** coexist **hardy** predators prey	**Lesson 7** amphibious **float** freshwater gills waterproof
Lesson 2 **adapted** blubber burrow exposed tundra	**Lesson 5** climate species **store** temperate territory	**Lesson 8** plankton regeneration **shallow** slopes valleys
Lesson 3 **camouflage** carnivore herbivores omnivore scavengers	**Lesson 6** **canopy** colonies humid stalk	**Lesson 9** **destroy** endanger endangered species extinction

CORE CONTENT OBJECTIVES ADDRESSED IN THIS DOMAIN

Students will:

- Explain what a habitat is
- Explain why living things live in habitats to which they are particularly suited
- Identify characteristics of the Arctic tundra habitat
- Identify characteristics of the Arctic Ocean habitat
- Explain how Arctic animals have adapted to Arctic habitats
- Identify characteristics of the desert habitat
- Explain how desert animals have adapted to the desert habitat
- Classify animals based on the types of foods they eat (herbivore, carnivore, omnivore)
- Identify characteristics of the grassland habitat
- Explain how grassland animals have adapted to the grassland habitat
- Identify characteristics of the temperate deciduous forest habitat
- Explain how temperate deciduous forest animals have adapted to the temperate deciduous forest habitat
- Identify characteristics of the tropical rainforest habitat
- Explain how tropical rainforest animals have adapted to the tropical rainforest habitat
- Identify characteristics of the freshwater habitat
- Explain that salt water covers most of the earth and is found in oceans
- Describe the landscape of the ocean floor
- Describe ocean life as diverse
- Explain why and how habitat destruction can cause extinction
- Explain why the bald eagle is no longer an endangered species

WRITING

In this domain, students will explore informational writing. Students will keep a habitat journal throughout the domain. They will add a journal entry for every habitat they learn about, which includes writing sentences and drawing pictures. In addition, students will create an idea web graphic organizer about endangered species.

The following activities may be added to students' writing portfolios to showcase student writing within and across domains:

- Habitat Journal (Lessons 2–8)
- Endangered Species Idea Web (Lesson 9)
- any additional writing completed during the Pausing Point, Domain Review, or Culminating Activities

LESSON

1

ANIMALS AND HABITATS: THE WORLD WE SHARE

What Is a Habitat?

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will distinguish between living and nonliving things.

TEKS 1.1.A; TEKS 1.1.C

Reading

Students will explain what a habitat is.

TEKS 1.6.G; TEKS 1.9.D.ii

Language

Students will demonstrate understanding of the Tier 2 word *shelter*.

TEKS 1.3.B

Speaking and Listening

Students will identify characteristics of a particular habitat.

TEKS 1.1.C; TEKS 1.7.B; TEKS 1.7.E

FORMATIVE ASSESSMENT

Activity Page 1.1

Explore Your Habitat Students will record observations about food and shelter in the habitat surrounding their school.

TEKS 1.1.C; TEKS 1.7.B

TEKS 1.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 1.1.C** Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.9.D.ii** Recognize characteristics of informational text including features and simple graphics to locate or gain information; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.7.B** Write brief comments on literary or informational texts; **TEKS 1.7.E** Interact with sources in meaningful ways such as illustrating or writing.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Core Connections	Whole Group/ Partner	10 min.	❑ Living/Nonliving T-chart (Digital Components) ❑ Flip Book: 1A-1 ❑ images of living, nonliving things ❑ tape
Essential Background Information or Terms			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❑ Flip Book: 1A-1–1A-9
"What Is a Habitat?"			
Comprehension Questions			
Word Work: *Shelter*			
This is a good opportunity to take a break.			
Application (20 min.)			
Explore Your Habitat	Whole Group/ Independent	20 min.	❑ Food/Shelter T-chart (Digital Components) ❑ Activity Page 1.1 ❑ board/chart paper (optional)
Take-Home Material			
Family Letter			❑ Activity Page 1.2

ADVANCE PREPARATION

Introducing the Read-Aloud

- Create a T-chart with the column labels "Living" and "Nonliving." Alternatively, you may access a digital version in the digital components for the domain.
- Gather images of living and nonliving things to be sorted by students. Gather enough images for each student pair to each have at least one image.

Application

- Create a T-chart with the column labels "Food" and "Shelter." Alternatively, you may access a digital version in the digital components for the domain.

Note to Teacher

If the weather is not conducive for exploring your habitat for the Application part of this lesson, you may choose to read a domain-related trade book as a substitute. You may wish to explore your habitat at a later date with more favorable weather.

Universal Access

- You may wish to gather images of a variety of habitats to share with students.

CORE VOCABULARY

habitat, n. a place where an animal or plant lives that has food, water, and shelter
Example: The forest is a deer's natural habitat.
Variation(s): habitats

shelter, n. something that protects from weather or danger
Example: During the thunderstorm, we sat in the car for shelter so we wouldn't get wet.
Variation(s): shelters

survive, v. to stay alive
Example: Humans need food and water to survive.
Variation(s): survives, survived, surviving

Vocabulary Chart for "What Is a Habitat?"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	habitat *(hábitat)*	survive *(sobrevivir)* shelter	
Multiple Meaning			
Sayings and Phrases	believe it or not hold on to your (whiskers)		

Lesson 1: What Is a Habitat?

Introducing the Read-Aloud

10M

Speaking and Listening: Students will distinguish between living and nonliving things.

TEKS 1.1.A; TEKS 1.1.C

CORE CONNECTIONS

- Ask students to explain how they know if something is living or nonliving. *(Answers may vary.)*
- Explain that all living things need food and water. People, plants, and animals are all living things because they all need food and water to stay alive.
- Explain that most living things also grow and change during their lives and do not always look exactly the same. Living things can also reproduce, or make new living things that look like them.
- Explain that nonliving things do not need food or water because they are not alive.

Check for Understanding

Vocabulary: What does it mean if something is living? *(It needs food and water to stay alive.)* What does it mean if something is nonliving? *(It does not need food and water to stay alive.)*

- Direct students' attention to the Living/Nonliving T-chart you prepared in advance. Read the column headers and explain that together you will sort items into the categories.
- Pair students and pass out the images of living and nonliving things you prepared in advance.

TEKS 1.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 1.1.C** Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language.

- Ask student pairs to discuss their image. Explain that students should be prepared to describe their image, identify it as living or nonliving, and explain why they would place it in that category.
- Have student pairs present their images to the class and discuss them. Have them place the images in the appropriate column on the T-chart.
- When all images have been sorted, review the images in each category.

ESSENTIAL BACKGROUND INFORMATION OR TERMS

- Explain that living things generally live in a place that is just right for them. Explain that "just right" means perfect or a good fit.

Show Image 1A-1: Rattenborough the explorer

- Point to the rat in the picture and explain that an explorer rat named Rattenborough will introduce them to many different animals and plants and the places where they live.

ENGLISH LANGUAGE LEARNERS

Speaking and Listening

Presenting

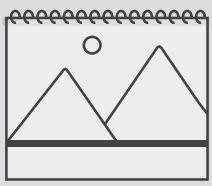
Beginning
Have students use phrases and familiar vocabulary to describe their image and explain why it belongs in a particular category.

Intermediate
Have students describe their image and explain why it belongs in a particular category using short sentences.

Advanced/ Advanced High
Have students describe their image and explain why it belongs in a particular category using longer, more detailed sentences.

ELPS 3.H; ELPS 3.J

Flip Book 1A-1



Lesson 1: What Is a Habitat?

Read-Aloud

30M

Reading: Students will explain what a habitat is.

TEKS 1.6.G; TEKS 1.9.D.ii

Language: Students will demonstrate understanding of the Tier 2 word *shelter*.

TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully and look at the pictures to find out more about why plants and animals live where they do.

"WHAT IS A HABITAT?" (15 MIN.)

Show Image 1A-1: Rattenborough the explorer

Greetings, fellow adventurers. You are here to learn something new and, believe it or not, I'm here to teach it to you. I know you may be wondering what you could possibly learn from a rat climbing out of a dumpster, but I am Rattenborough, the famous rat adventurer.

I travel the world looking at plants and animals and all the different places they call home. I'm going to take you on a special adventure all around the world. You're going to learn about some amazing and incredible places and animals. And we're going to start our exciting journey right here! I know, I know—it doesn't look like much, but it's special to me, and it has everything I need.

Show Image 1A-2: Alleyway

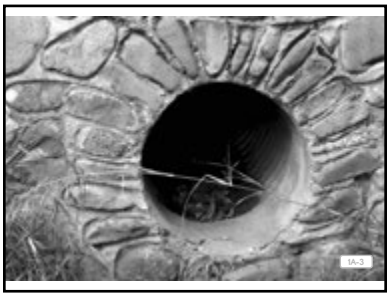
Welcome to my home. This is the alleyway where I live. Take a look around. What do you see? *[Ask students to name what they see in the picture.]* There are trash cans; litter; boxes; drains and dripping pipes; old buildings and gutters. It's a perfect home for a rat. It has everything I need to live.

TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; **TEKS 1.9.D.ii** Recognize characteristics of informational text including features and simple graphics to locate or gain information; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.

All living things need food and water to **survive**. Survive *means to stay alive.* Animals, like me, also need **shelter**. *A shelter is something that protects from weather or danger. A house or an apartment can be a shelter; a tree can also be a shelter.* So, animals need food, water, and shelter to stay alive. My food comes from these trash cans and the litter on the street; my water comes from the gutters, drains, and pipes; and my family and I have a shelter down under some steps nearby. All of these things make up my **habitat**. A habitat is a place where an animal or plant lives that has food, water, and shelter. It's true that my home the alleyway is not considered a natural habitat, like a forest or a pond; but with so many humans using up so much of the earth's natural resources, some animals have been forced to survive in human-made habitats.

What are the three things animals need to survive? *[Pause for students to reply, naming food, water, and shelter.]* If a place lacks any of these three things, then it's not a good habitat.

Animals and plants usually live in habitats that are just right for them. Just as people can't live underwater or in the air, plants and animals can't all live in the same sorts of places. You don't hear about elephants living near the North Pole on all that ice, and you definitely don't hear about polar bears living in the desert! Pumpkins don't grow in the sea, and fish don't live in trees.



Show Image 1A-3: Friendly climate for rats
I can tell you firsthand that rats can't live just anywhere in the world. I don't like the weather to be too cold, and I need to live in a place where food is easy to find! That's why I like my cozy little shelter under the steps: it is warm enough for my family and me, there is always plenty of water, and there is always a good supply of food in the trash.

Show Image 1A-4: Park
Let's look around. You might have a park like this somewhere near your neighborhood. *Here the word* park *means a public area of land that is used for recreation and exercise.* People like to spend time playing and relaxing in this park.

Challenge

Explain that *firsthand* means based on personal experience. Rattenborough explains that he knows firsthand that rats can't live just anywhere. Ask students to explain what Rattenborough means.

Support

The word *park* can also mean to leave a car, truck, or other vehicle in a certain place.

But it's a habitat for many other things, too! The grass, trees, flowers, and bushes in this park need food and water to live. *Have you ever seen a park? What kinds of plants live in the park habitat in your neighborhood?*

Show Image 1A-5: Park animals

The animals that live in the park share it as a habitat. That includes the birds that fly around looking for crumbs to eat; the squirrels, owls, and chipmunks that live in those trees; the bees, fireflies, and mosquitoes buzzing about; the raccoons and opossums that come out at night; and even the frogs and fish in the pond nearby.

Check for Understanding

Evaluate an Idea: Where do you think these animals might find food, water, and shelter in the park habitat? *(Answers may vary, but may include: food—food left behind by people, plants, tree; water—puddles, a pond, a stream or creek; shelter—trees, in the ground.)*

Show Image 1A-6: Arctic landscape

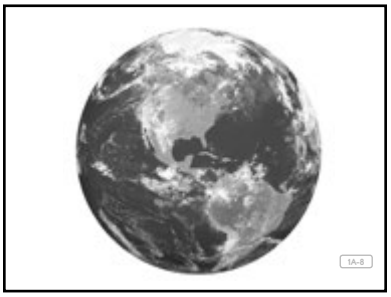
What do you see in this picture?

This is a picture of a place called the Arctic. Do you think you could live easily in the Arctic, with its very cold temperatures and snow-covered ground? Not many things can live there, but later I'm going to show you some incredible plants and animals that do live in the Arctic.

Show Image 1A-7: Several places where people have made habitats

What do you see in this picture?

Most animals have to live in habitats that are specific to them. But you human beings are very clever: you can build habitats for yourselves! If you want to live in the desert, where there isn't much water with which to grow food or to drink, you can build a pipeline to bring you water for watering crops or for drinking. You can have food transported to the desert by road or rail because it would be difficult to grow food in the desert, and you can build houses for shelter so you don't have to sleep in the sand. In fact, people like you have been able to live in extremely hot, cold, and dry places.



Show Image 1A-8: Earth

We're going on an adventure that will take us all over our amazing planet Earth. Over the next several weeks, I'm going to show you some fascinating animal and plant habitats that might be quite different from yours. You'll see some wonderful and unusual places where things can live.

Show Image 1A-9: Rattenborough packing his gear

I can't wait to show you all these interesting places, but first I have a lot to pack. Because we're going all over the world, I'm going to need a backpack full of gear. So hold on to your whiskers—I mean hats—and get ready for a marvelous adventure!

COMPREHENSION QUESTIONS (10 MIN.)

Check for Understanding

Vocabulary: What is a habitat? [Ask students to think about the text and the pictures to help them answer.] *(a place where an animal or plant lives that has food, water, and shelter)*

1. **Literal.** Describe Rattenborough's habitat. *(lives under steps in an alley; gets food from the trash cans; gets water from the drains and pipes)*
2. **Inferential.** Would Rattenborough be able to live in his habitat without food, water, or shelter? Why or why not? *(No, he needs food, water, and shelter to survive because he is a living creature.)*
3. **Inferential.** Why can't all plants and animals live in every place on Earth? *(They have to live in a place that provides the kind of food, water, and shelter that they need to stay alive. Animals and plants live in a place that is just right for them.)*
4. **Evaluative.** Describe your habitat. Where do you find food, water, and shelter in your habitat? *(Answers may vary.)*

ENGLISH LANGUAGE LEARNERS

Language

Selecting Language Resources

Beginning
Have students verbally share key words to describe their habitat.

Intermediate
Have students verbally craft a complete sentence to describe their habitat.

Advanced/ Advanced High
Have students verbally craft a detailed sentence to describe their habitat.

ELPS 1.A; ELPS 1.E; ELPS 3.H

Check for Understanding

Think-Pair-Share: How is your habitat the same and/or different from Rattenborough's habitat? *(Answers may vary, but should include discussion of food, water, and shelter.)*

WORD WORK: SHELTER (5 MIN.)

1. In the Read-Aloud you heard that "animals need food, water, and shelter to stay alive."
2. Say the word *shelter* with me.
3. A shelter is something that protects from weather or danger.
4. The two friends looked for shelter when it began to rain.
5. What other kinds of things could you use as a shelter? Try to use the word *shelter* when you talk about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "A _____ could be used as a shelter."]
6. What's the word we've been talking about?

Use a Making Choices activity as a follow-up. I am going to name a few items and you should decide if it could be a shelter or not. If you think it could be a shelter, say, "That's a shelter." If you don't think it could be a shelter, say, "That's not a shelter."

- a house *(That's a shelter.)*
- a pencil *(That's not a shelter.)*
- school *(That's a shelter.)*
- a cave *(That's a shelter.)*
- a chair *(That's not a shelter.)*

Lesson 1: What Is a Habitat?

Application

20M

Speaking and Listening: Students will identify characteristics of a particular habitat.

TEKS 1.1.C; TEKS 1.7.B; TEKS 1.7.E

EXPLORE YOUR HABITAT

Activity Page 1.1

- Explain that together, you will explore the habitat surrounding your school.

Check for Understanding

Vocabulary: What is a habitat? *(a place where a plant or animal lives that has food, water, and shelter)*

- Once outside, point out animals and plants living in the habitat. [Places to look include holes and cracks in pavement, along fences and walls, and around buildings.]
- Compare and contrast all the different types of plants you see, including trees, weeds, grasses, flowers, bushes, etc.
- Have students identify things that animals might eat and things that might be shelters for animals.
- Back in the classroom, have students turn to Activity Page 1.1. Explain that the left column says "Food" and the right column says "Shelter."
- Have them make a list on the activity page using words and pictures for what they observed related to food and shelter.
- Ask students to share what they observed. You may wish to record their observations in a class list on the board or chart paper.
- Have students write a sentence on the back of the activity page explaining whether or not the area around their school is a good habitat for plants and animals and why they think it is or isn't. *(Answers may vary.)*

ENGLISH LANGUAGE LEARNERS

Language

Selecting Language Resources

Beginning
Have students verbally share key words to describe what they observed.

Intermediate
Have students verbally craft a complete sentence to describe what they observed.

Advanced/ Advanced High
Have students verbally craft a detailed sentence to describe what they observed.

ELPS 1.A; ELPS 1.E; ELPS 3.H

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.7.B** Write brief comments on literary or informational texts; **TEKS 1.7.E** Interact with sources in meaningful ways such as illustrating or writing.

End Lesson

Lesson 1: What Is a Habitat?

Take-Home Material

Activity Page 1.2

FAMILY LETTER

- Send home Activity Page 1.2.

LESSON

2

ANIMALS AND HABITATS: THE WORLD WE SHARE

Animals of the Arctic Habitat

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will review what a habitat is.

TEKS 1.1.C; TEKS 1.7.C

Reading

Students will identify characteristics of Arctic habitats.

TEKS 1.6.G; TEKS 1.9.D.ii

Language

Students will demonstrate understanding of the Tier 2 word *adapted*.

TEKS 1.3.B; TEKS 1.6.E

Writing

Students will write about characteristics of Arctic habitats.

TEKS 1.1.C; TEKS 1.7.E

FORMATIVE ASSESSMENT

Habitat Journal

Students will write and draw about characteristics of Arctic habitats.

TEKS 1.7.E

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.7.C** Use text evidence to support an appropriate response; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.9.D.ii** Recognize characteristics of informational text including features and simple graphics to locate or gain information; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.7.E** Interact with sources in meaningful ways such as illustrating or writing.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❏ Flip Book: 2A-1
Where Are We?			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❏ Image Cards 1–3 ❏ Flip Book: 2A-2–2A-13
"Animals of the Arctic Habitat"			
Comprehension Questions			
Word Work: *Adapted*			
This is a good opportunity to take a break.			
Application (20 min.)			
Habitat Journal	Whole Group/ Independent	20 min.	❏ Habitat Poster 1 (Flip Book) ❏ characteristic cards ❏ Habitat Journal

ADVANCE PREPARATION

Application

- Display Habitat Poster 1.
- Create a Habitat Journal for each student. Gather eight pieces of paper for writing and drawing and then two additional pieces of paper to create a front and a back cover. Staple all of the pages together. Write "Habitat Journal" on the front cover of each one, or have students write it at a later time with your guidance.
- Write each of the following words on large cards or pieces of chart paper for display: *Climate*, *Water*, *Ground*, *Plants*, *Animals*, *Adaptations*. You may wish to add an image to each card to help students identify the characteristic. You will use these cards throughout the domain as you review characteristics of each habitat so you may wish to create them in order to take notes next to, but not on, them.

Note to Teacher

The Habitat Poster you display for this lesson, and for future lessons, can be cut out of the Flip Book. You will see a faint dotted line at the top of each Poster, indicating where to cut.

The characteristic cards you create will serve as the basis for discussion each time you and your students discuss characteristics of a habitat. The cards are intended to call out important categories but to also allow you to flexibly use and place them as needed.

Beginning in this lesson, students will add information to a Habitat Journal. Students will write and draw about each habitat they learn about in the domain.

Universal Access

- You may wish to gather additional images of the Arctic tundra, Arctic Ocean, and animals that live in these habitats to share with students.
- You may also wish to gather images of animal hooves, earmuffs, and showshoes to help students understand characteristics of various Arctic animals' bodies as described in the Read-Aloud.

CORE VOCABULARY

adapted, v. changed over time to be better prepared for something or to be better able to do something
Example: Over the years, animals in the Arctic have adapted to the cold.
Variation(s): adapt, adapts, adapting

blubber, n. a layer of fat that some animals have under their skin that keeps them warm
Example: Walruses, seals, and polar bears have a layer of blubber under their skin.
Variation(s): none

burrow, v. to dig a hole or tunnel in the ground
Example: Rabbits burrow underground to make their home.
Variation(s): burrows, burrowed, burrowing

exposed, v. not protected; put out in the open with no covering
Example: His bike, which he stored outside, became rusty because it was exposed to the rain.
Variation(s): expose, exposes, exposing

tundra, n. a treeless area where the ground is frozen and the temperature is very cold
Example: Plants in the tundra do not grow very tall, because it is very cold there.
Variations: none

Vocabulary Chart for "Animals of the Arctic Habitat"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	burrow tundra *(tundra)*	adapted *(adaptado/a)* exposed *(expuesto/a)*	
Multiple Meaning	blubber		
Sayings and Phrases	in other words		

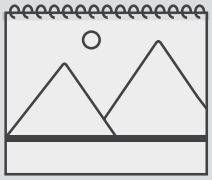
Start Lesson

Lesson 2: Animals of the Arctic Habitat

Introducing the Read-Aloud

10M

Flip Book 2A-1



Speaking and Listening: Students will review what a habitat is.

TEKS 1.1.C; TEKS 1.7.C

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Remind students that they met Rattenborough in the previous lesson, and he will be showing them different habitats around the world.

Check for Understanding

Make a List: Name the three things that a habitat must have in order for living things to survive in it. Make sure that you cite specifics from the Read-Aloud to support your answer. *(food, water, shelter)*

ENGLISH LANGUAGE LEARNERS

Language

Selecting Language Resources

Beginning
Have students verbally share key words to describe their habitat.

Intermediate
Have students verbally craft a complete sentence to describe their habitat.

Advanced/ Advanced High
Have students verbally craft a detailed sentence to describe their habitat.

ELPS 1.A; ELPS 1.E; ELPS 3.H

- Ask students to describe Rattenborough's habitat. *(under the steps in an alley; he gets food from trash cans; he gets water from drains and pipes)*
- In pairs, have students describe their own habitats. *(Answers may vary.)*

WHERE ARE WE? (5 MIN.)

Show Image 2A-1: Map of the world with the Arctic region highlighted

- Explain to students that today they will be learning about a place called the Arctic.
- Point to the Arctic in the image.
- Explain that the Arctic is the region around the North Pole, which is not part of a single continent. Explain that, in this region, there are areas of land, called the Arctic tundra, and a large body of water, known as the Arctic Ocean.
- Explain that today, students will hear about plants and animals that live in the Arctic region, both on land and in the water.

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.7.C** Use text evidence to support an appropriate response.

Lesson 2: Animals of the Arctic Habitat

Read-Aloud

30M

Reading: Students will identify characteristics of Arctic habitats.

TEKS 1.6.G; TEKS 1.9.D.ii

Language: Students will demonstrate understanding of the Tier 2 word *adapted*.

TEKS 1.3.B; TEKS 1.6.E

PURPOSE FOR LISTENING

- Tell students to listen carefully to find out which plants and animals live in the Arctic tundra and in the Arctic Ocean and how they survive.

"ANIMALS OF THE ARCTIC HABITAT" (15 MIN.)

Show Image 2A-2: Rattenborough in Arctic

What do you see in this image?

Hello again, Rattenborough the adventurer here to take you on a tour of one of the coldest habitats on earth: the Arctic **tundra**. In the tundra, there aren't very many plants. In fact, there are no trees at all, and a rat like me has to wear long johns *or a warm layer of clothing under regular clothes* and mittens.

The wind here is incredibly strong, which makes the air feel even colder. The ground is frozen and nearly everything is covered in ice. In the winter, daylight lasts only a few hours, and at times the sun does not come out at all. Some ice will still be here in the summer, but in the summer, the top layer of ice melts so that the ground gets wet and muddy. The temperatures here are so low that most people and animals would freeze. All of these things make the Arctic tundra one of the least friendly habitats on Earth for plants and animals.

Show Image 2A-3: Arctic plants

Some plants and animals can only live in the Arctic tundra in the summer months when the temperature is warmer, but some are able to live there all year long. Arctic plants grow very close together and do not grow very tall, which keeps them from being blown away by the

TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; **TEKS 1.9.D.ii** Recognize characteristics of informational text including features and simple graphics to locate or gain information; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance.

Arctic winds. The kinds of plants that can live in the Arctic tundra are mosses and different types of grasses. For once, I'm one of the tallest things around!

Show Image 2A-4: Muskox

The animals that call the Arctic tundra habitat home all year round have **adapted** to the harsh conditions. When an animal has adapted to a habitat, that means it has changed over the years and now has special things that help it live in that habitat. For example, many animals in the Arctic have adapted by growing heavy fur coats that help them stay warm in the cold temperatures. This creature is called a muskox. The muskox's long, shaggy coat has an extra layer of hair underneath that keeps him warm when the temperature is cold enough to turn a rat into a popsicle, and it sheds its extra coat of hair in the warmer, summer months. *What do you do to adapt when the weather outside is cold?*

Muskoxen travel in herds so they can huddle together for added warmth. Muskoxen *is the plural for* muskox—*one muskox, but many muskoxen.* Their hooves *which are hard coverings on some animals' feet* are very wide to keep them from slipping on the snow and ice. In the winter, muskoxen use their sharp hooves to dig under the snow to find plants to eat.

Show Image 2A-5: Wolverine

Here comes an animal I want to stay hidden from. This is a wolverine. *Do you have any idea why Rattenborough wants to stay hidden from the wolverine?* (Wolverines eat small animals, including rats.) The wolverine uses its fur coat to keep nice and warm. Like the muskox, the wolverine has large paws to help it move across the snow and that come in handy when it's trying to catch food.

ENGLISH LANGUAGE LEARNERS

Language

Selecting Language Resources

Beginning
Provide students with an oral word bank to describe how they adapt to cold weather (e.g., *coat*, *hat*, *layers*, *boots*.).

Intermediate
Provide students with a specific sentence frame (e.g., "I adapt to cold weather by . . .").

Advanced/ Advanced High
Encourage students to use more detailed sentences (e.g., "When it is cold, I put on several layers, wear a thick coat, and put a hat on my head and gloves on my hands.").

ELPS 3.H; ELPS 3.J

Show Image 2A-6: Caribou

These animals are called caribou [/kaer*ə*boo/] and are part of the deer family. They are sometimes called reindeer. These caribou are traveling in a huge herd, which helps to protect them against attack by other animals.

Caribou hair traps air, which helps keep these animals warm. Their hooves change depending on the time of year, so they can walk and run on mushy, wet terrain, or on hard, icy terrain. Caribou also have antlers to help them dig for grass in the snow.

Show Image 2A-7: Arctic fox

What do you see in this picture?

This Arctic fox also has a coat that changes during the winter from a brown summer coat into this very thick, white fur to help the fox blend into its surroundings. The fur also covers its feet so it can walk on snow and ice. Thanks to the fox's fur, it can hide and sneak up on birds, hares, and rodents like me!

Show Image 2A-8: Arctic hare

The Arctic hare's white coat becomes much heavier in the winter. Its ears are smaller than those of other hares, meaning less of its body is **exposed** to the cold. *When something is exposed, it is not protected and is out in the open with nothing covering it. In the Arctic, any part of your body that is exposed would be cold.* In other words, this is no place for critters with long dangly ears, unless they have long dangly earmuffs to keep those ears from freezing! The hare's white coloring also helps it hide in the snow, and its back feet are wide and large, like small snowshoes, so it can run fast in the snow.

Challenge

Ask students to explain why it would be bad if animals' bodies were exposed to the cold in the Arctic.

Show Image 2A-9: Rattenborough in the seascape

There are other kinds of habitats in the Arctic besides the tundra, and different kinds of plants and animals live in these other habitats. The Arctic Ocean is a habitat rich in sea life and animals that rely on the sea for their food. The water is so cold in the Arctic Ocean that most living creatures would be able to stay alive only a few minutes in it.

Show Image 2A-10: Walruses

Animals such as the walrus call the Arctic Ocean home. These huge creatures just love the icy water and can swim around for a long period of time!

Walruses have adapted to life in the Arctic Ocean by storing **blubber** under their skin. *Blubber is a layer of fat that some animals have under their skin that keeps them warm.* Blubber prevents heat from escaping from their bodies. Walruses also have long teeth, called tusks, which they use almost like arms to pull themselves up out of the water and onto the ice.

Show Image 2A-11: Seals

Look at these cute animals. They are seals. Seals have blubber under their skin, just like walruses. Some types of seals are born covered with a layer of white fur to keep them warm until they develop blubber.

Seals are incredible swimmers! Like fish and walruses, seals don't have arms and legs. Instead, seals have flippers, and they swim by wiggling their bodies from side to side, using their flippers to steer. They swim very fast, so they catch plenty of tasty fish. Thankfully, they don't eat rats!

Show Image 2A-12: Polar bear
Here comes a polar bear! Look out! Let's hide behind this rock, and I'll tell you all about this amazing creature.

The polar bear is perhaps the best known of all the animals living around the Arctic Ocean. These astonishing animals have adapted incredibly well to the harsh, Arctic habitat.

Polar bears are the largest bears in the world. Male polar bears weigh up to 1,700 pounds—that's probably heavier than everyone in your class put together, including your teacher. And polar bears grow up to ten feet from head to toe. Yikes!

Polar bears are covered with a heavy coat made up of two layers of fur, and they have a layer of blubber under their skin. Their ears and tails are very small so that not too much of their bodies are exposed to the cold weather. *What does* exposed *mean?* It's a good thing they have all that fur and blubber and sharp claws, because polar bears spend most of their life living on sea ice, or chunks of ice that float in the Arctic Ocean. Sometimes polar bears take a dip in the icy Arctic water to swim from one chunk of ice to another, and they have webbed paws, sort of like a duck's feet, to help them swim. They use those mighty paws to hunt their favorite food—seals. Like all living things, polar bears need water to survive, and they get that water from melted snow and ice.

Support

Explain that if polar bears had big ears and big tails, more of their bodies would get cold and their bodies would have to work harder to stay warm.

Show Image 2A-13: Polar bear with cub
Even though adult polar bears spend most of their time living on sea ice, polar bear babies, or cubs, are born on land. Their mothers, female polar bears, **burrow** in the snow to make a den. *That means they dig a hole in the snow to make a shelter.* They will then hide in the den while they have their babies. They stay in the dens with their young all winter, and in the spring they finally come out. The cubs stay with their mothers for almost two years to learn hunting and survival skills before leaving home.

Now, speaking of home, I really must go. It's absolutely frigid *or very, very cold* here, and my whisker warmers just aren't doing the job! We've learned a

lot about the Arctic habitat and the animals that have managed to adapt and survive here. I think our next stop should be somewhere warmer, don't you? Remember that even habitats as extremely cold as the Arctic tundra and Arctic Ocean can be full of life. Now, it's not easy for me to stay hidden in all this snow, and I can barely move with all these clothes on, so I'm getting out of here before I'm spotted by that Arctic fox. See you next time!

COMPREHENSION QUESTIONS (10 MIN.)

1. **Literal.** Describe the Arctic tundra habitat. *(The Arctic tundra is very cold and windy. The ground is frozen and covered with ice during the winter, when there is very little sunlight. In the summer, the top layer of ice melts, and the ground gets wet and muddy. It has no trees, or is treeless.)*
    - **Literal.** Describe the Arctic Ocean habitat. *(very cold water; too cold for many living creatures to live in for very long; covered with a lot of ice)*
2. **Literal.** What kind of plants grow in the Arctic tundra? *(mosses and grasses)* How have these plants adapted to the Arctic tundra? *(grow close together, grow low to the ground)*
3. **Inferential.** How have walruses, seals, and polar bears adapted to keep warm? *(They have fur coats and a layer of blubber beneath their skin.)*
    - **Inferential.** How have walruses adapted so that they can move from the water of the Arctic Ocean onto ice in and near the Arctic Ocean? *(They have long tusks that they use to pull themselves out of the water and onto the ice.)*
    - **Inferential.** Describe how polar bears have adapted to live near the Arctic Ocean. *(layer of blubber, two layers of fur, small ears and tail, sharp claws, webbed paw*s)
4. **Evaluative.** Why is it important for living creatures to adapt to the environment in which they live? *(Answers may vary, but should include the fact that they need to adapt to be able to survive in the climate and find sufficient food, water, and shelter.)*

Check for Understanding

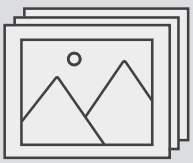
Think-Pair-Share: Is the Arctic a good habitat for a polar bear? Why or why not? *(Yes, because the polar bear can find food [seals], water [melted snow and ice], and shelter [dens].)*

WORD WORK: ADAPTED (5 MIN.)

1. In today's Read-Aloud you heard, "The animals that call the Arctic tundra habitat home all year round have adapted to the harsh conditions.
2. Say the word *adapted* with me.
3. *Adapted* means changed over time to be better prepared for or better able to do something.
4. The animals in the harsh Arctic habitat have adapted to very cold weather.
5. You heard about some types of animals that have developed different ways to adapt to their Arctic habitat. What people have you learned about who needed to adapt in order to survive? Take a moment to think about the Aztec and the canals they created in swampy lands, or King Nebuchadnezzar growing gardens in a desert. Try to use the word *adapted* when you tell your neighbor about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "_____ adapted to _____ by _____."]
6. What's the word we've been talking about?

Use an Image Review activity for follow-up. I will show you images of certain animals you heard about today. Tell me some of the ways each animal has adapted to the Arctic habitat. Be sure to use the word *adapted* in your answer.

Image Cards 1–3



Show Image Card 1 (Arctic Hare)

- How has this Arctic hare adapted to the Arctic? *(It has white fur so it blends in with the snow; its fur gets thicker in the winter; its ears are smaller; its back feet are wide and large, enabling it to run fast in the snow.)*

Show Image Card 2 (Caribou)

- How have these caribou adapted to the Arctic? *(They travel in a large herd; have thick hair that traps air allowing them to stay warm; have hooves that change along with changing land; and have antlers that help them dig for grass in the snow.)*

Show Image Card 3 (Arctic Fox)

- How has this Arctic fox adapted to the Arctic? (*It has a coat that changes to white during the winter so it blends in with the snow, and it has fur on its feet so it can walk on the snow and ice.)*

Lesson 2: Animals of the Arctic Habitat

Application

20M

Writing: Students will write about characteristics of Arctic habitats.

TEKS 1.1.C; TEKS 1.7.E

HABITAT JOURNAL

- Direct students' attention to Habitat Poster 1 that you displayed and note that it is a picture of the Arctic habitat.
- Display the characteristic cards you prepared in advance. Read each label to students and explain what is meant by each category.
  - Climate: the type of weather a place has over a long period of time
  - Water: source(s) of water in a habitat
  - Ground: the type of land or what is on the ground in a habitat
  - Plants: the types of plants in a habitat
  - Animals: the types of animals in a habitat
  - Adaptations: characteristics of plants or animals that allow them to live in a habitat
- Explain that together you will use these categories to discuss each habitat in the domain.
- Engage students in a discussion of the Arctic habitats they learned about, the Arctic tundra and Arctic Ocean, using the characteristic cards and the following as a guide:
  - Climate: both are cold and windy
  - Water: some water in spring and summer from melted ice for drinking; lots of salt water in the ocean that animals can't drink
  - Ground: in the winter—ice and frozen ground; in the summer—wet and muddy ground with some ice; ocean—chunks of ice floating in salt water
  - Plants: moss and grasses on the tundra
  - Animals: muskoxen, wolverines, caribou, Arctic foxes, Arctic hares, walruses, seals, polar bears
  - Adaptations: heavy fur; fur color; unique feet characteristics (hooves, large paws); blubber

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.7.E** Interact with sources in meaningful ways such as illustrating or writing.

- Tell students they will add information about each habitat in a Habitat Journal. Pass out the Habitat Journals you prepared in advance.
- Have students turn to the first blank page and write "Arctic" at the top. You may wish to write "Arctic" on the board or chart paper for them to copy.
- Ask students to write 1 or 2 sentences about what they learned about Arctic habitats. Then ask students to draw pictures to go with their sentences.
- Circulate around the room, offering guidance and support as needed.
- As students finish their Arctic habitats journal entry, have them share their writing with a partner.

End Lesson

Support

Have students draw first, then describe their drawings as a basis for dictating a sentence.

Challenge

Have students write three or more sentences about Arctic habitats.

ENGLISH LANGUAGE LEARNERS

Writing

Writing

Beginning
Allow students to dictate the sentence(s) to an adult.

Intermediate
Allow students to dictate to a partner and then review what the partner writes for accuracy.

Advanced/ Advanced High
Have students write the sentences independently and then say them to a partner to check for accuracy.

ELPS 2.I; ELPS 4.G; ELPS 5.F

LESSON

3

ANIMALS AND HABITATS: THE WORLD WE SHARE

Animals of the Sonoran Desert Habitat

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will review characteristics of Arctic habitats.

TEKS 1.1.A; TEKS 1.1.C; TEKS 1.6.E

Reading

Students will identify characteristics of the desert habitat.

TEKS 1.6.E; TEKS 1.6.G; TEKS 1.9.D.i

Language

Students will demonstrate understanding of the Tier 3 word *camouflage*.

TEKS 1.3.B

Writing

Students will write about characteristics of the desert habitat.

TEKS 1.12.B

FORMATIVE ASSESSMENT

Habitat Journal — Students will write and draw about characteristics of the desert habitat.

TEKS 1.12.B

TEKS 1.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 1.1.C** Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.9.D.i** Recognize characteristics of informational text including the central idea and supporting evidence with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❑ characteristic cards (optional) ❑ Flip Book: 3A-1, 3A-2
Essential Background Information or Terms			
Where Are We?			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❑ Flip Book: 3A-3–3A-11
"Animals of the Sonoran Desert Habitat"			
Comprehension Questions			
Word Work: *Camouflage*			
This is a good opportunity to take a break.			
Application (20 min.)			
Herbivore, Carnivore, Omnivore	Whole Group/ Independent	20 min.	❑ animal cards ❑ Sorting Chart (Digital Components) ❑ tape ❑ Habitat Poster 2 (Flip Book) ❑ characteristic cards ❑ Habitat Journal
Habitat Journal			

ADVANCE PREPARATION

Application

- Cut out the animal cards found in Teacher Resources.
- Create a 3-column sorting chart with the following column labels: *Herbivore*, *Carnivore*, *Omnivore*. Alternatively, you can access a digital version in the digital components for the domain.
- Display Habitat Poster 2.

Universal Access

- You may wish to gather additional images of the Sonoran desert and animals that live there to share with students.

CORE VOCABULARY

camouflage, v. to blend in with surroundings
Example: The green color of leaf insects helps to camouflage them in the forest.
Variation(s): camouflages, camouflaged, camouflaging

carnivore, n. an animal that eats only other animals
Example: A polar bear is a carnivore that eats seal and fish.
Variation(s): carnivores

herbivores, n. animals that eat only plants
Example: My pet rabbits are herbivores and eat only plants.
Variation(s): herbivore

omnivore, n. an animal that eats both plants and other animals
Example: A grizzly bear is an omnivore that eats fish as well as berries.
Variation(s): omnivores

scavengers, n. animals that eat meat and waste left by other animals
Example: Those rats are quite the scavengers; they ate all the leftovers in the alley.
Variation(s): scavenger

Vocabulary Chart for "Animals of the Sonoran Desert Habitat"

Type	**Tier 3 Domain-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	camouflage *(camuflaje)* carnivore *(carnívoro/a)* herbivores *(herbívoro/a)* omnivore *(omnívoro/a)* scavengers		
Multiple Meaning			
Sayings and Phrases	I'm sad to say		

Lesson 3: Animals of the Sonoran Desert Habitat

Introducing the Read-Aloud

10M

Speaking and Listening: Students will review characteristics of Arctic habitats.

TEKS 1.1.A; TEKS 1.1.C; TEKS 1.6.E

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Review the Arctic habitats students learned about, the Arctic tundra and the Arctic Ocean. You may wish to use the characteristic cards to promote discussion.
  - Climate: both are cold and windy
  - Water: some water in spring and summer from melted ice for drinking; lots of salt water in the ocean that animals can't drink
  - Ground: in the winter—ice and frozen ground; in the summer—wet and muddy ground with some ice; ocean—chunks of ice floating in salt water
  - Plants: moss and grasses on the tundra
  - Animals: muskoxen, wolverines, caribou, Arctic foxes, Arctic hares, walruses, seals, polar bears
  - Adaptations: heavy fur; fur color; unique feet characteristics (hooves, large paws); blubber

Check for Understanding

Vocabulary: What does *adapted* mean? *(changed over time to be better prepared for or better able to do something)*

TEKS 1.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 1.1.C** Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance.

ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN.)

- Explain that today students will be learning about a habitat called a desert and about some of the animals that live in that habitat.
- Ask students what they know about deserts from *Early American Civilizations*. *(hot, dry, not much water, hard to grow crops, etc.)*

Show Image 3A-1: The desert

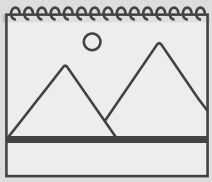
- Tell students that this is a picture of a desert. Ask them to describe what they see in the illustration. *(Answers may vary.)*
- Ask them to explain how it looks different from the pictures they have seen of the Arctic. *(Answers may vary.)*
- Explain that the temperature found in a desert is almost exactly the opposite of that found in the Arctic: the Arctic is very cold, whereas deserts are usually very hot; the Arctic is wet and muddy in the summer, whereas the desert is very dry and sandy.
- Ask students if they think the same animals that live in the Arctic live in the desert. Why or why not? *(Answers may vary.)*
- Then have students predict how the animals that live in the desert might be different from the animals that live in the Arctic. *(Answers may vary.)*

WHERE ARE WE?

Show Image 3A-2: World map with the southwest of the United States and the northwest of Mexico highlighted

- Tell students that deserts are located in many different regions of the world, but today they are going to hear about a particular desert that is located in the northwestern part of Mexico and the southwestern part of the United States—in parts of the states of Arizona and California.
- Point to this area on the map. Tell students that the particular desert located here is called the Sonoran Desert.

Flip Book 3A-1, 3A-2



ENGLISH LANGUAGE LEARNERS

Speaking and Listening

Offering Opinions

Beginning
Provide students with sentence frames using a small set of learned phrases (e.g., "I think animals in the desert have different fur.").

Intermediate
Provide students with sentence frames using an expanded set of learned phrases (e.g., "I think animals in the desert... compared to animals in the Arctic.").

Advanced/ Advanced High
Provide minimal support and guidance for open responses (e.g., "What else can you tell me about animals that live in the desert?").

ELPS 1.E; ELPS 3.G

Lesson 3: Animals of the Sonoran Desert Habitat

Read-Aloud

30M

Reading: Students will identify characteristics of the desert habitat.

TEKS 1.6.E; TEKS 1.6.G; TEKS 1.9.D.i

Language: Students will demonstrate understanding of the Tier 3 word *camouflage*.

TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen to find out more about the Sonoran Desert and how animals have adapted to living there.

"ANIMALS OF THE SONORAN DESERT HABITAT" (15 MIN.)

Show Image 3A-3: Rattenborough in desert

After nearly freezing and almost becoming a polar bear snack in the Arctic, I thought we should go someplace where my whiskers and tail could thaw out and warm up, so I've brought you to the desert. There are many deserts all over the world. You know you're in a desert when it doesn't rain very much. Many deserts can also be very hot. Because it's so hot and dry, only certain types of plants and animals can live there.

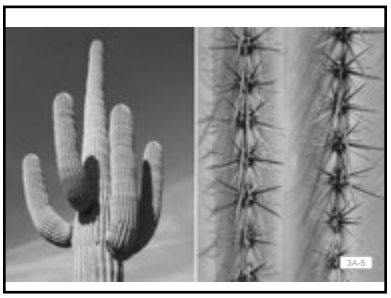
Show Image 3A-4: The Sonoran Desert

Welcome to the Sonoran Desert in the southwestern part of the United States and the northwestern part of Mexico. The temperature is quite hot during the day, and it doesn't rain very much. The heat and lack of rain make it hard for some plants and animals to live in the desert. They must all be specially adapted to live in the hot weather and survive with very little rain.

How do they do it? Some plants can save and store water inside their plant parts when it does rain. Other plants grow only in shady areas near mountains or rocks.

TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.9.D.i** Recognize characteristics of informational text including the central idea and supporting evidence with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.

Because there are very few plants that can be used as shelter, the animals that have adapted to living in the desert often seek shelter underground and make their homes under the sand. Living underground helps them stay cool when it gets hot, and it keeps them hidden from other animals that may want to eat them for lunch!



Show Image 3A-5: Saguaro cactus

What do you see in this image?

Ouch! What did I walk into? Aha! Here is one plant that lives in the Sonoran Desert. The saguaro [/sə*war*oe/] cactus is the world's largest cactus. Cacti don't have leaves; they have prickly spines instead, which is exactly why it hurt so much to touch this one! *The word* cacti *is the plural for* cactus*—one cactus, but many cacti.* The incredible saguaro lives for up to two hundred years, and in that time can grow as high as a house and can weigh as much as several cars!

The most amazing thing about the saguaro is that it is a habitat in itself. That's right. Not only does it manage to live and thrive in the desert habitat, but just by being there, it provides food, water, and shelter to many different animals. Let me get my climbing gear out—and some gloves to protect me from these sharp spines—and I'll meet you at the top.

Show Image 3A-6: Cacti

You already know that it hardly ever rains in the desert, but when it does, the saguaro cactus saves and stores huge quantities of water in its roots and stems. *[Point to the stem of the cactus as you talk about it.]* The cactus saves the extra water and uses it to survive during those times when it is very dry and does not rain.

Show Image 3A-7: Cactus bloom

In the spring, white flowers grow on the saguaro. At night, when the desert cools down, these flowers open to show sweet nectar, which butterflies, bats, and birds feed on before the flowers close the next day when it once again becomes very hot. In the

summer, red fruit begins to grow on the saguaro. Many animals eat the fruit of the cactus.

Show Image 3A-8: Gila woodpecker
Here is an interesting bird called a Gila [/hee*lə/] woodpecker. The Gila pecks holes into the soft cactus with its beak to make a nest for its eggs.

The Gila woodpecker is an **omnivore**. An omnivore is an animal that eats plants as well as other animals. Gilas feed on cactus fruit and berries as well as insects that have invaded the saguaro. Thankfully, I brought a sandwich, so I won't have to join these Gilas for a buggy lunch!

It really is way too hot for a regular rat like me to live here. I'm glad I brought my fan with me. *Here the word* fan *means an object that is used to move air to make people or things cooler.* Interestingly enough, birds like this Gila woodpecker can live in the desert habitat because their feathers help protect them from the hot desert sun by trapping cool air next to their skin. Still, most birds only go out to feed in the early morning or evening when it's cooler outside. From noon to late afternoon, many of these birds seek shelter in the holes that they have dug in a cactus or in other shady places.

Support

The word *fan* also means a person who likes or admires someone or something, such as a sports team, in an enthusiastic way. Refer to Poster 1M in the Flip Book for additional support on the multiple meanings of *fan*.

Show Image 3A-9: Elf owl
Here's another bird that makes its home in the saguaro cactus: the elf owl. The elf owl, the world's smallest owl, is only five inches long—that's just a bit bigger than one of your hands. It moves into nests that have been abandoned by Gila woodpeckers. *When something is abandoned, that means that it has been left for good.* The elf owl, like most owls, is nocturnal, which means that it rests during the day and wakes at night to hunt for food.

The elf owl is also a **carnivore**. A carnivore is an animal that eats only other animals—no plants. It uses its large eyes to hunt in the dark night for bugs that live in the desert. Most owls eat mice and, I'm sad to say, rats. But I think I'm safe from the elf owl because I'm bigger than it is!

Show Image 3A-10: Desert cottontail

Oh look, here comes a desert cottontail rabbit, another animal that lives in the Sonoran Desert. The desert cottontail looks a little like the Arctic hare we saw in the tundra, but it has larger ears and longer back legs. *What are some ways the Arctic hare has adapted to the Arctic tundra?* (has smaller ears so less of its body is exposed to the cold; has white fur to blend in; has larger, wider back feet so it can run fast in the snow)

Desert cottontail rabbits are **herbivores**. Herbivores are animals that eat only plants—no animals. The desert cottontail eats grass and even cacti.

Smaller animals like the desert cottontail always need to watch out for larger animals in the desert that might eat them. Many animals and plants are part of a cycle called the food chain. You will learn more about the food chain in the next Read-Aloud. Coyotes, for instance, like to eat rabbits. In fact, there's a coyote coming this way, so let's stay up here and watch it.

Show Image 3A-11: Coyote

Coyotes are found all over the United States, including the Sonoran Desert. As you can see, the coyote has a light, tan-colored coat to help reflect the sun's rays and to **camouflage** it. *To camouflage something means to make it blend in with its surroundings. The color of the coyote's fur blends in with the color of the desert sand so it is difficult for other animals to see the coyote in the desert background.* Coyotes are carnivores like the elf owls. Coyotes have very good senses of smell, hearing, and vision, and they can run very fast, which means they are excellent hunters. They are also **scavengers**. *Scavengers are animals that eat meat and waste left by other animals.* Coyotes live in dens, which they make by burrowing into the ground. I think this one has smelled something, because he's just run off.

Now, I'm getting down from this cactus before another coyote comes along to make me its dinner! It seems like rats are on the menu everywhere I go!

Challenge

Ask students if they have predictions about what a food chain is and what role the desert cottontail might play in it.

COMPREHENSION QUESTIONS (10 MIN.)

1. **Evaluative.** Were your predictions about whether desert animals are different from Arctic animals correct? Why or why not? *(Answers may vary.)*
2. **Literal.** Describe the weather and temperature of the Sonoran Desert. *(dry, hot, not much rain)*
   - Do many plants and animals live in the desert? *(no)* Why not? *(It is hot and very dry.)*
3. **Evaluative.** How are the Arctic and the Sonoran Desert different? *(The weather and temperature are very different—the Arctic is very cold; the Sonoran Desert is very hot. Also, the ground in the Arctic is covered with lots of ice, and the desert is covered with sand.)* How are they the same? *(One way that the two habitats are similar is that the animals and plants that live in each habitat must adapt to the very difficult conditions of each habitat.)*

ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt and support students to recall words and phrases related to each habitat.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater details related to each habitat.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to each habitat (e.g., "What else can you tell me about the desert habitat?).

ELPS 1.E; ELPS 4.G; ELPS 4.I

Check for Understanding

Use Evidence: How are animals in the desert adapted to living there? *(come out at night; make shelters underground or in cacti; feathers traps cool air next to Gila's skin)* How do animals find shelter in the desert? *(underground, or in holes they make in plants like the saguaro cactus)*

WORD WORK: CAMOUFLAGE (5 MIN.)

1. In the Read-Aloud you heard, "[T]he coyote has a light, tan-colored coat to . . . camouflage it."
2. Say the word *camouflage* with me.
3. *Camouflage* means to blend in with surroundings. Often the color of the object or animal is similar to the background, which makes it hard for other animals to see it.
4. The Arctic hare's white coat serves to camouflage it in the snowy Arctic tundra.
5. What types of things could be camouflaged in green grass? [Ask two or three students. If necessary guide and/or rephrase their answers "A _____ could be camouflaged in the grass." It may help to point out that because grass is green, objects that might be camouflaged by grass would probably be small, green objects.]
6. What's the word we've been talking about?

Use a Making Choices activity for follow-up. I will describe something to you. You should decide how you could camouflage it. For example, if I say "a green leaf," you could say, "I could camouflage that by placing it on green grass." *(Answers may vary for all.)*

- a white piece of paper *(I could camouflage that by placing it on a white floor.)*
- a black cat *(I could camouflage that by placing it outside at night.)*
- an Arctic hare *(I could camouflage that by placing it on a snowy surface.)*
- a yellow pencil *(I could camouflage that by placing it in a vase of yellow flowers.)*

Lesson 3: Animals of the Sonoran Desert Habitat

Application

20M

Writing: Students will write about characteristics of the desert habitat.

TEKS 1.12.B

HERBIVORE, CARNIVORE, OMNIVORE (5 MIN.)

- Direct students' attention to the Sorting Chart you prepared in advance. Read the column headers aloud.
- Explain that together you will determine whether certain animals are herbivores, carnivores, or omnivores.

Check for Understanding

Vocabulary: What is an herbivore? *(an animal that eats only plants)* What is a carnivore? *(an animal that eats only other animals)* What is an omnivore? *(an animal that eats both plants and other animals)*

- Hold up the animal card showing the wolverine. Explain that it eats other animals.
- Ask students if the wolverine is a carnivore, herbivore, or omnivore. *(carnivore)* Tape the image to the appropriate place on the Sorting Chart.
- Follow the same procedure for the other animals cards, using the following information:
  - This is a caribou. It eats grasses. Is the caribou a carnivore, herbivore, or omnivore? *(herbivore)*
  - This is a desert cottontail rabbit. It eats plants. Is the desert cottontail rabbit a carnivore, herbivore, or omnivore? *(herbivore)*
  - This is an elf owl. It eats other animals, such as bugs and rats. Is the elf owl a carnivore, herbivore, or omnivore? *(carnivore)*
  - This is a Gila woodpecker. It eats plants as well as other animals. Is the Gila woodpecker a carnivore, herbivore, or omnivore? *(omnivore)*

TEKS 1.12.B Dictate or compose informational texts, including procedural texts.

- This is a squirrel. It eats plants as well as other animals. Is the squirrel a carnivore, herbivore, or omnivore? *(omnivore)*

HABITAT JOURNAL (15 MIN.)

- Direct students' attention to Habitat Poster 2 that you displayed and note that it is a picture of the Sonoran Desert habitat.
- Engage students in a discussion of the Sonoran Desert habitat, using the characteristic cards and the following as a guide:
  - Climate: hot and sunny
  - Water: not much rain; very dry
  - Ground: lots of sand
  - Plants: cacti
  - Animals: Gila woodpeckers, elf owls, desert cottontails, coyotes
  - Adaptations: nocturnal; seeking shelter or shade during the day; fur color; plants store water
- Have students turn to the next blank page in their Habitat Journal and write "Desert" at the top. You may wish to write "Desert" on the board or chart paper for them to copy.
- Ask students to write 1 or 2 sentences about what they learned about the desert habitat. Then ask students to draw pictures to go with their sentences.
- Circulate around the room, offering guidance and support as needed.
- As students finish their desert habitat journal entry, have them share their writing with a partner.

End Lesson

Support

Have students draw first, then describe their drawings as a basis for dictating a sentence.

Challenge

Have students write three or more sentences about the desert habitat.

ENGLISH LANGUAGE LEARNERS

Writing

Writing

Beginning
Allow students to dictate the sentence(s) to an adult.

Intermediate
Allow students to dictate to a partner and then review what the partner writes for accuracy.

Advanced/ Advanced High
Have students write the sentences independently and then say them to a partner to check for accuracy.

ELPS 5.F

LESSON

4

ANIMALS AND HABITATS: THE WORLD WE SHARE

Animals of the East African Savanna Habitat

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will identify similarities and differences between Arctic habitats and the desert habitat.

TEKS 1.1.C; TEKS 1.6.E

Reading

Students will identify characteristics of the grassland habitat.

TEKS 1.6.G; TEKS 1.9.D.i

Language

Students will demonstrate understanding of the Tier 2 word *hardy*.

TEKS 1.3.B

Writing

Students will write about characteristics of the grassland habitat.

TEKS 1.12.B

FORMATIVE ASSESSMENT

Habitat Journal — Students will write and draw about characteristics of the grassland habitat.

TEKS 1.12.B

Writing Studio

If you are using Writing Studio, you may begin Unit 5 Lesson 1 after completing this Knowledge lesson. If you have not done so already, you may wish to review the Writing Studio materials and their connections to this domain.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❑ Venn Diagram (Digital Components) ❑ Flip Book: 4A-1
Where Are We?			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❑ Flip Book: 4A-2–4A-15 ❑ ruler ❑ characteristic cards (optional)
"Animals of the East African Savanna Habitat"			
Comprehension Questions			
Word Work: *Hardy*			
This is a good opportunity to take a break.			
Application (20 min.)			
Food Chain	Whole Group/ Independent/ Partner	20 min.	❑ Image Cards 8, 10, 11 ❑ Habitat Poster 3 (Flip Book) ❑ characteristic cards ❑ Habitat Journal
Habitat Journal			
Take-Home Material			
Family Letter			❑ Activity Page 4.1

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.9.D.i** Recognize characteristics of informational text including the central idea and supporting evidence with adult assistance; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

ADVANCE PREPARATION

Introducing the Read-Aloud

- Prepare a 2-circle Venn diagram. Label the circle on the left "Arctic" and the circle on the right "Desert." Alternatively, you may access a digital version in the digital components for the domain.

Application

- Display Habitat Poster 3.

Universal Access

- You may wish to gather additional images of savannas or grasslands and animals that live there to share with students.
- You may also wish to gather up-close images of animal hooves to help students understand that many animals in the grassland habitat are hooved animals.
- You may wish to gather images or information about examples of animals that coexist, similar to how the giraffe and oxpecker coexist in the savanna.

CORE VOCABULARY

coexist, v. to live together peacefully
Example: The cat and dog were able to coexist in my grandmother's house.
Variation(s): coexists, coexisted, coexisting

hardy, adj. able to survive in tough conditions
Example: Cacti are hardy plants, able to survive the harsh conditions of the desert.
Variation(s): hardier, hardiest

predators, n. animals that hunt and kill other animals
Example: Lions are large predators that hunt other animals living in the savanna.
Variation(s): predator

prey, n. animals that are hunted by other animals
Example: Many grasshoppers hide in the grass of the savanna so they do not become prey to the birds flying overhead.
Variation(s): none

Vocabulary Chart for "Animals of the East African Savanna Habitat"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	predators *(depredador/a)* prey *(presa)*	coexist *(coexistir)* hardy	
Multiple Meaning			
Sayings and Phrases	not a chance I [ran] into		

Lesson 4: Animals of the East African Savanna Habitat

Introducing the Read-Aloud

10M

Speaking and Listening: Students will identify similarities and differences between Arctic habitats and the desert habitat.

TEKS 1.1.C; TEKS 1.6.E

WHAT HAVE WE ALREADY LEARNED?

- Direct students' attention to the Venn diagram you prepared in advance. Review what a Venn diagram is and how to use it. *(A Venn diagram helps identify how things are similar and different. The place where the circles overlap is how the two things are similar. The places where the circles do not overlap is how the two things are different.)*
- Tell students you will use the Venn diagram to identify similarities and differences between Arctic habitats and the desert habitat.
- Ask students to explain how Arctic habitats and the desert habitat are similar. *(Plants and animals must adapt to the very difficult conditions in each habitat.)*
- Record students' responses in the place on the Venn diagram where the circles overlap. Tell students that you are writing down what they say, but that they are not expected to be able to read what you write because they are still learning all the rules for decoding. Emphasize that you are writing what they say so that you don't forget. Tell them that you will read the words to them.
- Ask students to explain how Arctic habitats and desert habitats are different. *(The weather and temperature are very different—the Arctic is very cold and a desert is very hot; the ground in the Arctic is covered with lots of ice, and the desert is covered with sand; generally, there isn't much water in the desert at any given time, but in warmer months melting snow and ice provide water in Arctic habitats; animals have adapted to stay warm in Arctic habitats, whereas animals in desert habitats have adapted to stay cool; etc.)*
- Record students' responses on the Venn diagram in the appropriate places in each circle.
- Read the completed Venn diagram aloud to students.

ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt and support students to recall words and phrases related to each habitat.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater details related to each habitat.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to each habitat.

ELPS 3.G; ELPS 4.G; ELPS 4.I

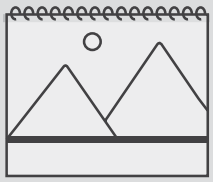
TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance.

WHERE ARE WE?

- Tell students that today they will be learning about another type of habitat called a grassland habitat.
- Explain that there are many grassland habitats in the world, but that they will be learning about one in particular: the East African Savanna. Explain to students that the word *savanna* is another word for *grassland*.

Show Image 4A-1: Map of the world with the East African savannas highlighted

Flip Book 4A-1



- Point to the East African Savanna on the map.
- Remind students where the Arctic tundra, the Arctic Ocean, and the Sonoran Desert are located as well.
- Show students where they live in relation to the East African Savanna.

Lesson 4: Animals of the East African Savanna Habitat

Read-Aloud

30M

Reading: Students will identify characteristics of the grassland habitat.

TEKS 1.6.G; TEKS 1.9.D.i

Language: Students will demonstrate understanding of the Tier 2 word *hardy*.

TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen to find out how the East African Savanna may be the same and/or different from the Arctic and the Sonoran Desert habitats.

"ANIMALS OF THE EAST AFRICAN SAVANNA HABITAT" (15 MIN.)

Show Image 4A-2: Rattenborough in savanna

Rattenborough, your intrepid *or fearless* adventurer here, to show you something a little different. We've been talking about habitats—the places where plants and animals live—and we've spent time in three of the most extreme habitats in the world: the freezing Arctic tundra, the Arctic Ocean, and the scorching Sonoran Desert. Now, I've come to a habitat that should be of great interest to you. Some of the most famous animals in the world live here.

Show Image 4A-3: African savanna

What do you see in this image?

Welcome to the East African Savanna. *Savanna* is another name for grassland, a wide-open, vast stretch of grass-covered land. You know you're in a grassland when there is a lot of grass around you, but not many trees or bushes.

The East African Savanna has very warm weather all year round. However, it only has two seasons: the rainy summer and the dry winter. The plants and animals that live here have had to adapt to these two very different kinds of weather in the summer and winter. Luckily, I brought my umbrella in case it starts to pour!

TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; **TEKS 1.9.D.i** Recognize characteristics of informational text including the central idea and supporting evidence with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.

Show Image 4A-4: African savanna grasses
Boy, I can barely see a thing in all this grass—there's so much of it. As the name *grassland* suggests, grass is the most important plant growing in the savannas. The grasses are very **hardy**, which means they can survive the tough conditions of their habitat—long spells of dry, hot weather as well as heavy rainfall and flooding. The grass has adapted to these conditions by growing very deep roots. Even if the grass above ground is destroyed, the roots underground survive and the grass can grow back. This grass grows very quickly—as much as an inch per day! *[Using a ruler, show students how big an inch is.]* The grass in your backyard might take a whole week to grow an inch.

Show Image 4A-5: Zebras
Yikes, I'm surrounded by hooves! That's because grass is food for many of the larger animals, like elephants, zebras, gazelles, and antelope. They chew on grass all day long.

I don't think grass is all that tasty, to tell the truth, but these animals depend on the nutrients in the grass to survive. It's all they need to eat. *[Review the words* omnivore*,* carnivore*, and* herbivore*, and tell students to use one of these words to answer the following question.] What do we call all of these animals that eat only grass?* (herbivores) It would seem that because so many animals eat the grass in the savanna every day, there wouldn't be very much grass left after a while. But, remember that this grass grows back very quickly, so there's usually plenty for the different herbivores, like zebras and antelopes, to eat!

Check for Understanding

Making Choices: What is a savanna? *(a grassland, or wide-open stretch of grass-covered land without many trees or bushes)*
What is one thing you might see in a savanna? *(Answers may vary, but may include: grass, zebras, elephants, gazelles, antelope.)*

Show Image 4A-6: Giraffe eating from acacia tree

Grass is not the only important source of food in the savanna. Many animals get their meals from the acacia [/ə*kae*shə/] tree. Giraffes, with their long necks and tongues, are able to eat twigs and leaves from the top of the acacia. Not only are giraffes' tongues long, they are also very tough. It is a good thing, too, because the twigs of the acacia tree are covered with sharp thorns that the giraffes eat along with the twigs and leaves! *Which word best describes giraffes*—omnivores, carnivores, *or* herbivores*?* (herbivores)

Show Image 4A-7: Elephants

Elephants eat grass, and they like acacias, too. They rest in the acacia's shade and eat the acacia leaves, branches, and seeds. They even like to strip off the bark and chew on it. *Elephants eat grass and parts of the acacia tree. Are elephants carnivores, herbivores, or omnivores?* (herbivores)

Show Image 4A-8: Acacia tree

What do you see in this picture?

I think this acacia tree might be great to climb and get a better look at the savanna, but don't forget that it's covered in prickly thorns—ouch! *The thorns on the acacia tree are small and very sharp.* Acacias have adapted well to their habitat. Acacias have small leaves that don't dry out as quickly as larger leaves would in the dry, hot months. The roots of an acacia grow very deep into the ground, which allows them to collect water from far underground when there is not much rainfall. And their sharp thorns help keep some animals from eating too many of the branches. These trees are right at home in this habitat.

Show Image 4A-9 Giraffe near a tree

Animals living in the savanna have adapted to their habitat in many ways. Some animals, like the giraffe, have long, powerful legs so that they can quickly run away from **predators**, animals that hunt and kill other animals. Their long legs also help them travel long distances searching for food. Can you imagine a rat like me keeping up with a giraffe or zebra? Not a chance!

Show Image 4A-10: Oxpecker on giraffe

Now, there's a little bird that's been sitting on this giraffe the whole time I've been watching. This is the oxpecker. Oxpeckers perch on the backs of large animals. This oxpecker will use its sharp claws to hold on to the giraffe, who will hardly even know it's there. The giraffe and the oxpecker **coexist**. *When two animals coexist, it means that they live together peacefully.* The oxpecker feeds on the fleas and ticks living on the giraffe's body and warns the giraffe of any predators that might be trying to sneak up on it. In turn, the giraffe will let the oxpecker live on its back and provide the oxpecker food (fleas and ticks), shelter, and protection from predators. The oxpecker will spend most of its life on the giraffe's back. What a partnership!

Show Image 4A-11: Zebra

So, here I am, back in all this tall grass, and I bet you recognize the black and white stripes of the zebra I've just run into. Zebras are specially adapted to living in the savanna. They have strong, long legs that make them very good at outrunning lions and other predators, and the stripes on the zebra's legs and body don't just make it look pretty—they camouflage the zebra against the grass so that predators can't see it. Zebras eat the grass on the savanna, so they are herbivores. *What does* camouflage *mean?*

Support

Explain that the relationship between the giraffe and oxpecker is one example of animals coexisting. Each animal helps the other in some way. Some animals in other habitats coexist as well.

Challenge

Ask students to explain why zebras would need to outrun lions and other predators and be camouflaged in the grass.

Show Image 4A-12: Elephant

Over there I can see the largest land animal in the world. Can you guess what it is? This African elephant is very big and eats up to four hundred pounds of trees and grasses every day! That's about the same amount as the weight of nine first-graders!

African elephants are adapted to the hot weather in the savanna. They have huge ears that flap like fans to stay cool and keep away bugs. They also have thick skin, which protects them from branches and thorns.

Do you see the trunk on that elephant? An elephant uses its trunk for all sorts of things. The trunk is, of course, the elephant's nose for breathing and smelling, but the trunk is also used like a hand for lifting things, gathering food, and even holding onto other elephants' tails. Baby elephants, or calves, use their trunks to grasp other elephants' tails to keep them from wandering away from the rest of the herd and getting lost. Elephants also use their trunks to drink water. They suck up the water with their trunks and then put the water from the trunk into their mouths. They also use their trunks like a hose for showers and playtime!

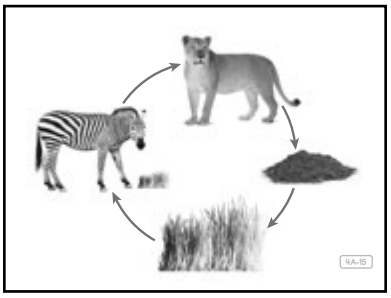
Show Image 4A-13: Lions

These animals are lions. Lions live in groups called prides. The females, or lionesses, do most of the hunting. They are carnivores that hunt zebras, elephants, and all kinds of other savanna animals. Most groups of lions have just one or two male lions. The male lion is huge and incredibly strong. It has a furry mane, powerful jaws, and fearsome claws. Unless this lion meets a stronger lion, no other animal in the savanna habitat can match the lion's strength and power.

Animals that are hunted by predators are called **prey**. One of lions' favorite prey to hunt and eat are zebras. Zebras try to use the camouflage of their stripes to hide in the grasses of the savanna so the lions will not see them.

Show Image 4A-14: Vultures

Up at the top of this tree I can see and hear birds that are waiting for the lions to finish eating so they can have dinner. These birds are called vultures. A vulture is a scavenger, which, as you have learned, is an animal that eats leftovers.



Show Image 4A-15: Food chain

All of the animals and plants you've learned about so far are part of something we call the food chain, which is illustrated in this image. What do you see at the bottom of the picture? It is the savanna grass. The arrow points from the savanna grass to the zebra because the zebra eats the grass. The next arrow points from the zebra to the lion because . . . you guessed it: the lion eats the zebra. The next picture after the lion is a picture of the soil, because eventually the lion dies and its body becomes a part of the soil. Then more grass grows out of that soil, and that starts the chain all over again. *So, a food chain is the relationship of living things as food sources for other living things.*

Next, I think we should head to a habitat that's a bit closer to home and explore some plants and animals that might look quite familiar to us. But for now, I'm going to go check out more wildlife. I'll see you later.

ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt and support students to recall words and phrases related to each habitat.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater details related to each habitat.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to each habitat.

ELPS 1.E; ELPS 4.G; ELPS 4.I

COMPREHENSION QUESTIONS (10 MIN.)

1. **Inferential.** Describe the East African Savanna. [Prompt students as necessary using the characteristic cards.] *(two seasons—a dry season and a rainy season; lots of grass; not many trees)*

2. **Evaluative.** How is the savanna similar to the Arctic tundra? *(Animals have adapted to live in both places.)* How is the savanna different from Arctic habitats? *(The savanna has two seasons, dry and rainy; it is cold all the time in the Arctic and there isn't much water for drinking unless snow and ice melt; the savanna is filled with tall grass that grows quickly; there is not much plant life in the Arctic; grass covers the savanna; some animals coexist in the savanna.)*
   - **Evaluative.** How is the savanna similar to the desert? *(Animals have adapted to live in both places; some plants have roots that grow deep in the ground to collect water; some plants have sharp parts to keep animals from eating too much; some animals look a particular way to camouflage them with their surroundings.)* How is the savanna different from the desert? *(The savanna has a rainy season that brings lots of water; the desert has very little rain at all; some animals have long, strong legs to help them get away from predators; some animals coexist in the savanna.)*

3. **Inferential.** What are some of the plants that live in the savanna? *(grass, acacia tree)* Both the grasses of the savanna and acacia trees have deep root systems. How do these deep roots helps these plants survive in the savanna? *(During the hot and dry summer season, when there is very little rain, the roots of these plants can reach far underground where the soil is wetter and dries out less quickly.)*

Check for Understanding

Use Evidence: Are giraffes, elephants, and zebras herbivores, carnivores, or omnivores? How do you know? *(herbivores: giraffes eat acacias; elephants eat grass and acacias; zebras eat grass)*

4. **Inferential.** How do the oxpecker and the giraffe coexist? *(The oxpecker eats the bugs that irritate the giraffe. The giraffe provides food and protection for the oxpecker.)*

WORD WORK: HARDY (5 MIN.)

1. In the Read-Aloud you heard, "The grasses are very hardy, which means they can survive the tough conditions of their habitat—long spells of dry, hot weather as well as heavy rainfall and flooding."
2. Say the word *hardy* with me.
3. Something that is hardy is able to survive in tough conditions.
4. Many plants that live in extreme climates have hardy exteriors in order to survive there.
5. You learned that grasses in the savanna are hardy. What else might be considered hardy? [Ask two or three students. If necessary guide and/or rephrase students' answers, "A _____ might be considered hardy because . . ."]
6. What's the word we've been talking about?

Use an Antonyms activity for follow-up. The opposite, or antonym, of *hardy* is *weak*. Listen to the following examples. If I describe something that is hardy, say "That is hardy." If I describe something that is weak, say "That is weak."

- Acacias have deep roots that collect water when there is not much rainfall. *(That is hardy.)*
- Don't sit on the patio furniture because it is old and might fall apart. *(That is weak.)*
- The soldiers stayed strong despite the unbearable heat and dry conditions of the desert battlefield. *(That is hardy.)*
- The saguaro cactus has prickly spines and deep roots for living in the desert. *(That is hardy.)*
- After several very hot, sunny days, the new paint on the front porch started to peel. *(That is not hardy.)*

Lesson 4: Animals of the East African Savanna Habitat

Application

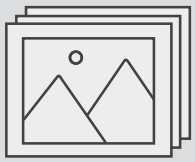
20M

Writing: Students will write about characteristics of the grassland habitat.

TEKS 1.12.B

FOOD CHAIN (5 MIN.)

Image Cards 8, 10, 11



- Review that a food chain is the relationship of living things as food sources for other living things.
- Using Image Card 8 (Acacia Tree and Savanna Grass), Image Card 10 (Lion), and Image Card 11 (Zebra), help students create a food chain of the East African Savanna habitat. *(Zebra eats savanna grass; lion eats zebra; when lion dies, it becomes part of the soil, where more grass grows; and on and on like that.)*
- Once students have created the food chain, remove one of the cards and discuss what they think will happen to the other plant(s) and animal(s) in the food chain. *(Answers may vary, but should include that all living things will be impacted because if one living thing loses a food source, it can't survive, meaning it can't serve as a food source for another living thing.)*
- You may wish to use the following to promote a discussion:
  - Will all of them die, or could they find another source of food?
  - What else could those animals eat? For example, if the zebra is removed, what else do they think the lion could eat?
  - What happens if there are no replacements? Can the animals survive without anything to eat?
- Explain that this is just one possible food chain in the East African Savanna. Other food chains exist on the savanna and in other habitats.

ENGLISH LANGUAGE LEARNERS

Speaking and Listening

Offering Opinions

Beginning
Provide students with sentence frames using a small set of learned phrases (e.g., "I think the rest of the plants and animals will not survive.").

Intermediate
Provide students with sentences frames using an expanded set of learned phrases (e.g., "I think the rest of the plants and animals will . . .").

Advanced/ Advanced High
Provide minimal support and guidance for open responses.

ELPS 1.E; ELPS 3.G

TEKS 1.12.B Dictate or compose informational texts, including procedural texts.

HABITAT JOURNAL (15 MIN.)

- Direct students' attention to Habitat Poster 3 that you displayed and note that it is a picture of the East African Savanna habitat.
- Engage students in a discussion of the grassland habitat using the characteristic cards and the following as a guide:
  - Climate: two seasons—rainy summer, dry winter
  - Water: not much during the winter but a lot during the summer
  - Ground: covered with grasses
  - Plants: grasses, acacia trees
  - Animals: zebras, giraffes, elephants, oxpeckers, lions, vultures
  - Adaptations: acacia tree has thorns to protect it from being overeaten and deep roots for collecting water in dry weather; giraffes have long necks and long, tough tongues to reach leaves at the top of acacia trees and eat the thorns along with the twigs and leaves; zebras have stripes to camouflage with grasses and strong, long legs to escape predators
- Have students turn to the next blank page in their Habitat Journal and write "Savanna" at the top. You may wish to write "Savanna" on the board or chart paper for them to copy.
- Ask students to write 1 to 2 sentences about what they learned about the savanna habitat. Then ask students to draw pictures to go with their sentences.
- Circulate around the room, offering guidance and support as needed.
- As students finish their savanna habitat journal entry, have them share their writing with a partner.

Support

Have students draw first, then describe their drawings as a basis for dictating a sentence.

Challenge

Have students write three or more sentences about the savanna habitat.

End Lesson

Lesson 4: Animals of the East African Savanna Habitat

Take-Home Material

FAMILY LETTER

Activity Page 4.1

- Send home Activity Page 4.1.

Grade 1 | Knowledge 7

Pausing Point

NOTE TO TEACHER

You should pause here and spend two days reviewing, reinforcing, or extending the material taught thus far.

You may have students do any combination of the activities listed below, but it is highly recommended you use the Mid-Domain Assessment to assess students' knowledge of animals and their habitats. The other activities may be done in any order. You may also choose to do an activity with the whole class or with a small group of students who would benefit from the particular activity.

CORE CONTENT OBJECTIVES UP TO THIS PAUSING POINT

Students will:

- Explain what a habitat is
- Explain why living things live in habitats to which they are particularly suited
- Identify characteristics of the Arctic tundra habitat
- Identify characteristics of the Arctic Ocean habitat
- Explain how Arctic animals have adapted to the Arctic habitats
- Identify characteristics of the desert habitat
- Explain how desert animals have adapted to the desert habitat
- Classify animals based on the types of foods they eat (herbivore, carnivore, omnivore)
- Identify characteristics of the grassland habitat
- Explain how grassland animals have adapted to the grassland habitat

MID-DOMAIN ASSESSMENT

Activity Page PP.1

Materials: Three sheets of paper per student, drawing tools, glue

- Give each student three sheets of paper and drawing tools.
- On one sheet of paper, have them draw the Arctic habitat; on the second sheet of paper, have them draw the desert habitat; and on the third sheet of paper, have them draw the savanna or grassland habitat. Ask students to include plants that might live in each habitat.
- Next, hand out Activity Page PP.1.
- Have students cut out the animals and glue them in the correct habitat. Have each student write or talk about their work and why they placed certain animals in certain habitats.

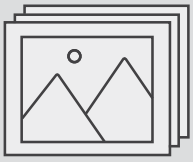
ACTIVITIES

Image Review

- Show the Flip Book images from any Read-Aloud again, and have students discuss the Read-Aloud using the images.

Image Card Review

Image Cards 1–11



Materials: Image Cards 1–11

- In your hand, hold Image Cards 1–11 fanned out like a deck of cards.
- Ask a student to choose a card but not show it to anyone else in the class. The student must then perform an action or give a clue about the picture they are holding. For example:
  - For the Arctic fox, the student may describe the habitat in which the fox lives, what it eats, and what it looks like. The rest of the class will guess what animal or plant is being described.
- Proceed to another card when the correct answer has been given.

Domain-Related Trade Book or Student Choice

Materials: Trade book

- Read a trade book to review animals from a particular habitat. You may also choose to have students select a Read-Aloud to be heard again.

Key Vocabulary Brainstorming

Materials: board/chart paper

- Give students a key domain concept or vocabulary word such as *shelter* or *camouflage*. Have them brainstorm everything that comes to mind when they hear the word.
- Record their responses on chart paper, a chalkboard, or a whiteboard for reference.

Riddles for Core Content

- Ask students riddles such as the following to review core content:
  - I live in the Sonoran Desert, and I love to eat cactus fruit as well as insects. I make my home by pecking holes in cacti. What am I? *(Gila woodpecker)*
  - I live in the Arctic and have a long, shaggy coat to keep me warm in freezing temperatures. I have wide hooves so I don't slip on the snow and ice. What am I? *(muskox)*
  - I live in the Sonoran Desert. I look a little like the Arctic hare, but I have longer ears and longer back legs. I love to eat grass and even cacti. What am I? *(desert cottontail)*
- You may also wish to make some of your own riddles, depending on your students' needs.

Venn Diagram: Cacti and Acacia Trees

Materials: board/chart paper

- Create a Venn diagram with two overlapping circles on the board or chart paper. Label the circles with simple drawings of a cactus and an acacia tree.
- Ask students to think about how cacti and acacia trees are alike. *(Both provide shelter and food for many animals; both may grow to be very tall and old; both are covered with sharp parts; both have deep roots for collecting water; etc.)* Record students' responses in the overlapping part of the circles.
- Next, ask students to think about how cacti and acacia trees are different. *(Cacti grow in the desert, whereas acacia trees grow in the savanna; cacti do not have leaves, whereas acacia trees do; etc.)* Record differences in the respective parts of the circles that do not overlap.
- Have students create sentences using information from the Venn diagram to compare and contrast cacti and acacia trees.

Class Book: Habitats

Materials: paper, drawing tools

- Tell the class or a group of students that they are going to make a class book to help them remember what they have learned thus far in this domain.
- Have students brainstorm important information about the animals that live in particular habitats.
- Have each student choose one idea to draw a picture of and have them also write a caption for the picture.
- Bind the pages to make a book to put in the class library for students to read again and again. You may choose to add more pages upon completion of the entire domain before binding the book.

Locate Habitats

Materials: World map or globe

- Help students locate and identify the Arctic, the Sonoran Desert, and the East African Savanna.
- Discuss with students the habitat of each area.

You Are There

- Have students pretend that they have been transported to the Arctic, the Sonoran Desert, or the East African savanna.
- Ask students to describe what they see and hear. You may wish to prompt students with the following questions:
  - What is the weather like?
  - What kinds of plants and animals are there?
- Consider extending this activity by adding group or independent writing opportunities associated with the "You Are There" concept. For example:
  - Ask students to pretend they are Rattenborough describing one of the habitats to their classmates and to write a group article about the habitat.
  - As Rattenborough they might use as writing anchors the question words *who*, *what*, *when*, *where*, and *why*.

Idea Webs

Materials: chart paper, markers, tape

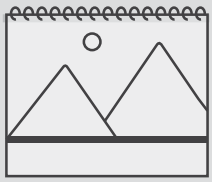
- Draw a large circle in the middle of four large pieces of chart paper.
- Write the following habitat names in the center of the circles, one name per circle: *Arctic tundra*, *Arctic Ocean*, *desert*, *savanna*.
- Divide students into four groups. Give each group an idea web.
- Have students brainstorm everything that comes to mind when they think of the habitat on their idea web.
- Have them record their responses on the web, using the sound/spelling correspondences they know so far.
- When all groups are finished, have each group present their web, explaining the topic and the information they added.

Multiple Meaning Word Activity: Fan

Materials: Poster 2M

- Show Poster 2M (Fan).
- Explain that in the Read-Aloud about the Sonoran desert, students heard, "It really is way too hot for a regular rat like me to live here. I'm glad I brought my fan with me."
- Explain that in this sentence, *fan* means an object that is used to move air to make people cooler.
- Have students hold up one or two fingers to indicate which image on the poster shows this meaning of fan. *(two fingers)*
- Explain that *fan* also means a person who likes or admires someone or something, such as a sport or sports team, in an enthusiastic way.
- Have students hold up one or two fingers to indicate which image on the poster shows this meaning. *(one finger)*
- Point to the image of a fan cheering at a sporting event. Have students talk with a partner about what they think of when they see this kind of fan. Tell them you will call on a few partners to share what they came up with. Remind them to answer in complete sentences. *(When I see this kind of fan, I think of cheering, football, teams, etc.)*

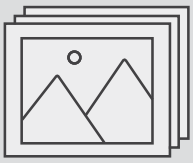
Flip Book 2M



- Point to the image of the fan that is an object used to move air to make people cooler. Have students talk with a partner about what they think of when they see this kind of fan. Tell them you will call on a few partners to share what they came up with. Remind them to answer in complete sentences. *(When I see this kind of fan, I think of summer, hot air, wind, etc.)*

Food Chain

Image Cards 1–11



Materials: Image Cards 1–11, paper, drawing tools

- Divide students into three groups, one for each of the following habitats: Arctic tundra, desert, savanna.
- Give students the Image Cards associated with their assigned habitat.
- Have students use the Image Cards to create a food chain (or more than one, if it exists) within that habitat. Students may find some food sources are missing from Image Cards. Students should create cards for those food sources to complete the food chain.
- Have each group present their food chain(s) to the class. Have students explain the pieces they added, as needed.
- After each group presents, remove one of the cards and discuss what they think will happen to the other plant(s) and animal(s) in the food chain. *(Answers may vary, but should include that living things will all be impacted because if one living thing loses a food source, it can't survive, meaning it can't serve as a food source for another living thing.)*
- You may wish to use the following to promote a discussion:
  - Will all of them die, or could they find another source of food?
  - What else could those animals eat? For example, if the zebra is removed, what else do they think the lion could eat?
  - What happens if there are no replacements? Can the animals survive without anything to eat?

Habitat Journal

Materials: Habitat Journal, drawing and writing tools

- Review the journal entries up to this point by having students read their sentences about each habitat and describe their drawings.
- Have students add additional sentences about each habitat and add more details to their drawings.
- With a partner or in small groups, have students create sentences describing why each habitat is unique.

LESSON

5

ANIMALS AND HABITATS: THE WORLD WE SHARE

Animals of the Temperate Deciduous Forest Habitat

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will explain what a forest is.

TEKS 1.1.C; TEKS 1.6.E

Reading

Students will identify characteristics of the temperate deciduous forest habitat.

TEKS 1.6.G

Language

Students will demonstrate understanding of the Tier 2 word *store* and the Tier 3 word *bark*.

TEKS 1.1.C; TEKS 1.3.B

Writing

Students will write about characteristics of the deciduous forest habitat.

TEKS 1.12.B

FORMATIVE ASSESSMENT

Habitat Journal — Students will write and draw about characteristics of the temperate deciduous forest habitat.

TEKS 1.12.B

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
Essential Background Information or Terms	Small Group/ Whole Group	10 min.	❑ Flip Book: 5A-1, 5A-2
Where Are We?			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❑ Flip Book: 5A-3–5A-14
"Animals of the Temperate Deciduous Forest Habitat"			
Comprehension Questions			
Word Work: *Store*			
This is a good opportunity to take a break.			
Application (20 min.)			
Multiple Meaning Word Activity: Bark	Whole Group/ Independent	20 min.	❑ Poster 3M: Bark (Flip Book) ❑ Habitat Poster 4 (Flip Book) ❑ characteristic cards
Habitat Journal			❑ Habitat Journal

ADVANCE PREPARATION

Application

- Display Habitat Poster 4.

Universal Access

- You may wish to gather additional images of a deciduous forest habitat and animals that live there to share with students.

CORE VOCABULARY

climate, n. the type of weather a place has over a long period of time
Example: The climate in the desert is very dry and very different from the climate in the tropical rainforest.
Variation(s): climates

species, n. a group of living things that have similar characteristics
Example: There are about seventy species of whales.
Variation(s): none

store, v. to save for future use
Example: To prepare for the winter, some animals store food.
Variation(s): stores, stored, storing

temperate, adj. not extremely hot or extremely cold
Example: Many places in the United States have a temperate climate.
Variation(s): none

territory, n. an area in which an animal or group of animals lives
Example: Many animals protect their territory.
Variation(s): territories

Vocabulary Chart for "Animals of the Temperate Deciduous Forest Habitat"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	climate *(clima)* species *(especie)* temperate		
Multiple Meaning	territory *(territorio)*	store	
Sayings and Phrases			

Lesson 5: Animals of the Temperate Deciduous Forest Habitat

Introducing the Read-Aloud

10M

ENGLISH LANGUAGE LEARNERS

Speaking and Listening

Exchanging Information and Ideas

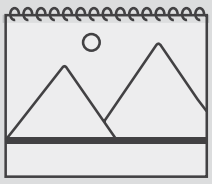
Beginning
Ask students simple yes/no questions (e.g., "Is a forest a flat area of land with few trees?").

Intermediate
Provide students with a simple sentence frame (e.g., "In a forest . . .").

Advanced/ Advanced High
Encourage students to use more detailed sentences (e.g., "A forest has many trees that provide food and shelter for animals.").

ELPS 1.E; ELPS 3.C

Flip Book 5A-1, 5A-2



Speaking and Listening: Students will explain what a forest is.

TEKS 1.1.C; TEKS 1.6.E

ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN.)

- Ask students what they know about forests. *(Answers may vary.)* You may prompt discussion with the following questions:
  - What is a forest? [You may need to explain that a forest is a large area of trees.]
  - Have you ever seen or been in a forest? If so, where?
  - What things are found in a forest?
  - Are all forests the same, or are there different kinds of forests?

WHERE ARE WE? (5 MIN.)

- Tell students that not all forests are the same. Share that the forest they are going to learn about today is a temperate deciduous forest.

Show Image 5A-1: Map of the world with temperate deciduous forests around the world highlighted

- Point to the highlighted portions of the map.
- Explain that all of these highlighted areas have temperate deciduous forests and that these kinds of forests exist all around the world.
- Tell students today they are going to hear about a temperate deciduous forest in the United States, one that is part of the states of Tennessee and North Carolina.

Show Image 5A-2: Great Smoky Mountains

- Explain that this forest is also a national park called Great Smoky Mountains National Park and is one of the most visited national parks in the United States. The mountains are named for the blue-gray mist that surrounds the mountain peaks.

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance.

Lesson 5: Animals of the Temperate Deciduous Forest Habitat

Read-Aloud

30M

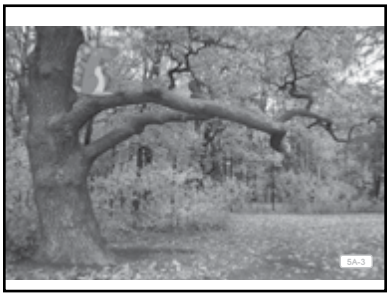
Reading: Students will identify characteristics of the temperate deciduous forest habitat.
TEKS 1.6.G

Language: Students will demonstrate understanding of the Tier 2 word *store*.
TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully to learn what a temperate deciduous forest is.

"ANIMALS OF THE TEMPERATE DECIDUOUS FOREST HABITAT" (15 MIN.)



Show Image 5A-3: Rattenborough in an oak tree
Rattenborough here with the next thrilling chapter in our habitat Read-Alouds. After looking at some very exotic, *or strange and fascinating* faraway places, I thought we could visit a habitat that is quite common in many parts of the United States. This is a forest habitat. You know you're in a forest habitat when everywhere you look there are trees all around you!

You may be wondering why I'm up in a tree. Well, I'm enjoying the wonderful view of a forest in North America! There are over five hundred thousand acres of forest in this national park. *One acre is about as big as an American football field.* Many of you may have seen forests like this before, either in real life or in books. You may be familiar with some of the plants and animals that live here in the Smoky Mountains. A lot of them live in many other places all over the United States.

Show Image 5A-4: View through the trees
There are many different kinds of forests in the world. The forests of the Smoky Mountains are called **temperate** forests. A temperate forest grows in an area that has four seasons, including a warm summer and a cold winter, and receives steady rainfall throughout the

TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.

year. *Even though these forests have a warm summer and a cold winter,* temperate *means it's not extremely hot or extremely cold like in other areas.*

This forest is also called a deciduous forest because it is full of deciduous plants—trees, bushes, and shrubs that lose their leaves every fall, then grow leaves again when the temperatures start to rise in the spring. The temperate deciduous forest has a much friendlier **climate** than the other habitats we've learned about, and it can support many different kinds of plant and animal life. *The climate of a habitat is the type of weather a place has over a long period of time.*

Check for Understanding

Vocabulary: What does temperate mean? *(not extremely hot or cold)* What does deciduous mean? *(loses leaves every fall, then grows leaves again when temperatures start to rise in the spring)* What is a temperate deciduous forest? *(a forest in an area that experiences four seasons and that has trees that lose their leaves in the fall and grow them back in the spring)*

Show Image 5A-5: Forest

A temperate deciduous forest is made up of broadleaf trees like oak, maple, beech, and elm. *Broadleaf trees have broad, or wide, leaves.* These trees grow very tall and are thickly covered with wide leaves that are better at collecting sunlight than trees like pine trees that have needles instead of leaves. Under these taller trees, there are saplings (young trees), as well as shrubs, bushes, and plants that bear *or produce* fruit. Closer to the ground grow shorter plants like grasses and wildflowers.

Challenge

Ask students to explain why the fruit from these bushes and plants might be important in a forest.

Show Image 5A-6: Oak tree

I'm going to start at the top and work my way down so I can show you this wonderful habitat. The tree I am standing in now is an oak tree. This oak is very tall and is covered with leaves and acorns. An acorn is a seed, and if it gets planted in the forest soil, it can grow roots and a shoot, which will eventually turn into an oak sapling.

Like the saguaro cactus in the desert and the acacia tree in the savanna, oak trees provide shelter and food for many animals. Owls, woodpeckers, mice, and foxes make their homes in the branches or around the roots of the oak tree, and acorns are food for squirrels, birds, deer, and other animals.

Show Image 5A-7: Insect

Look at that tasty insect! Well, the oak tree is home for hundreds of different kinds of insects, like the stink bug and the weevil, which eat its leaves and acorns. Moths and butterflies lay their eggs in the tree. Other insects, like ants and timber beetles, live under the bark of the oak or in dead and fallen trees.

Just as insects are drawn to the oak as a source of food, so are animals that feed on insects. Spiders and all kinds of birds hunt for tasty bugs among he branches of the oak tree. Bears and other animals find food here, too. The oak tree is an amazing habitat in itself!

Show Image 5A-8: Berry bushes

Down on the forest floor there are all kinds of shrubs, the fruits of which are food to many different **species** of animals, including rabbits, chipmunks, deer, and omnivores like bears. *A species is a group of living things that have similar characteristics. The animals you just heard listed are all different species.*

Mmm, some of these blueberries are perfectly ripe, and they taste delicious. What a tasty treat!

Down here on the ground I can see wildflowers, grasses, and clover. These plants, which cover the forest floor, are home to many types of insects and are food to grazing animals such as deer and mice.

One interesting thing about the plants in a forest is that often they grow leaning in the same direction. Isn't that strange? *Why do you think the plants might be leaning in one direction?* Well, they have to do that because they are looking for sunlight. The leaves of the big trees get all the sun; only a small amount of sunlight gets through to the forest floor—that's why it's so shady in here. The plants down here have to grow toward the sun so they can get enough light to make the food they need to survive.

Show Image 5A-9: Moss

You may have seen this fuzzy green stuff growing on rocks, trees, and the ground in the forest or countryside. *[Point to the moss in the picture.]* Mosses are small green plants that grow in clumps in damp and shaded places. They cover parts of the forest floor like a carpet and are home to many small animals and insects. It feels really soft to walk on—thick and spongy—and it tickles a bit!

Now we're going to take a look at some of the animals that live here. Great Smoky Mountains National Park is home to almost four hundred different kinds of animals. Animals that live in the temperate deciduous forest are adapted to living in a habitat with four seasons.

Check for Understanding

Turn and Talk: Name the four seasons, and describe what the weather is like in each one. [Have a few student pairs share their ideas.] *(fall: temperatures get cooler, some rain possible; winter: cold, snow and ice possible; spring: temperatures get warmer, some rain possible; summer: hot, thunderstorms with rain possible)*

Show Image 5A-10: Squirrel eating an acorn

Let's start with the mighty oak tree again. This amazing tree is home to many animals, and I'm standing at the nest of one of them—the brown squirrel. This little animal is covered in warm, brown fur and a long, bushy tail. Squirrels live in holes in the trunks of trees or in nests high up in trees like this one. Their nests are built from twigs, leaves, moss, and grass. Squirrels use their strong back legs and sharp claws to help them leap from tree to tree and to run up and down tree trunks, and they use their tails to help them balance. Squirrels are omnivores and spend most of their time looking for food. *What are omnivores?* (animals that eat both plants and other animals) The squirrel eats mostly acorns from the oak tree, but it also eats nuts, mushrooms, berries, seeds, and even bird eggs and insects. This squirrel might nibble on an acorn or two now, but it will also bury and **store** *or save* many acorns underground so it will have them in the winter when other food is hard to find.

Show Image 5A-11: Barred owl

A barred owl lives in a hole in this oak tree. I have to be careful, because owls are carnivores. *What are carnivores?* (animals that eat other animals) Unlike the elf owl in the desert, this owl happens to enjoy eating rats! This owl also eats other small animals like mice, insects, and even other birds. Owls have very good hearing and excellent eyesight, which allows them to find their prey easily in the thick forest. Owls are nocturnal, which means they only come out at night, so I have some time before this one is ready for a late-night snack.

Show Image 5A-12: Black bear

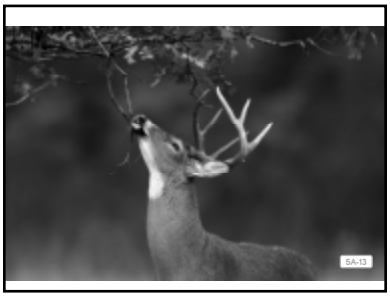
Hold on, what's that scratching sound coming from below? It's a black bear! Black bears are common in North American temperate deciduous forests, and there are more than a thousand in this national park. They are large animals—they weigh as much as fourteen first graders would weigh all together—and when they stand on their hind legs, they can be taller than a person.

Bears are omnivores and hibernate, or sleep, during the winter in hollowed-out trees or caves. When they are hibernating, bears use less energy and do not need to eat any food for many, many days. This is a good thing, because during the winter the foods that bears eat are scarce and hard to find.

Bears are covered in thick, black or brown fur, and they have sharp claws to strip the bark off trees to uncover the insects that live there. *The word* bark *in this sentence means the outer covering of a tree.* This bear will use its long, sticky tongue to get into every crack to hunt out the insects, and they'll make a delicious meal for him, I'm sure.

Support

The word *bark* can also refer to the sound a dog makes.



Show Image 5A-13: Buck

I just saw a deer through the trees. Deer often live in the temperate deciduous forest because it is such a good place to stay hidden, but they often hunt for food in neighboring meadows. This is a buck. A buck is a male deer, and we can tell because male deer have antlers.

Did you know that a buck's antlers fall off every year and will grow back again? Bucks mark their **territory** by stripping the bark off trees with their antlers. *A territory is an area in which an animal or group of animals lives. Animals often protect their territory and try to keep other animals out.* Bucks also use their antlers for fighting with other male deer. This deer is a white-tailed deer. Its coat is tan right now, but in the winter it will change to gray-brown, and it has patches of white on its underside. This helps the deer to be camouflaged or hidden in the environment. How do you think the change in color from tan to gray-brown with patches of white in winter helps to camouflage the deer?
[Pause for student responses.]

Show Image 5A-14: Doe running away

Deer graze on grasses and eat tree leaves, berries, and acorns, among other things. They mostly come out to feed at night when the light is low, and they rest during the day. This white-tailed deer has strong, long legs which are good for running and jumping and for escaping from predators like wolves, coyotes, and people.

The temperate deciduous forest's climate can support many different plants and animals because it has four seasons. It is called temperate because it never gets too cold, like the Arctic, or too hot, like the Sonoran Desert. There is a steady rate of rainfall throughout the year, so plants can grow and animals can have food and water to keep them alive. This is just one of the many kinds of forests in the world. Next we're going to take a look at another kind. It's going to be very different in a lot of ways. I'll see you on our next adventure.

COMPREHENSION QUESTIONS (10 MIN.)

1. **Literal.** Are all forests the same, or are there different kinds of forests? *(different kinds)*

2. **Inferential.** Describe the temperate deciduous forest habitat. *(It has cold and warm seasons; gets a steady amount of rainfall throughout the year—not too much, not too little; plants lose their leaves in the fall and grow more in the spring; etc.)*

3. **Evaluative.** How is the temperate deciduous forest habitat of the Great Smoky Mountains like the other habitats that you have learned about? *(Plants and animals have adapted to live there.)* How is it different? *(The climate is not extremely hot or extremely cold; different plants and animals are found there; trees lose their leaves in fall and grow them back in spring; the forest floor doesn't get much sunlight; some animals hibernate during winter; etc.)*

Show Image 5A-10: Squirrel eating an acorn

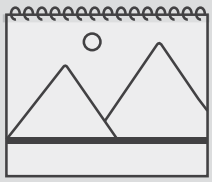
4. **Inferential.** What animal is this? *(brown squirrel)* Where does the brown squirrel find shelter in the temperate deciduous forest? *(either in a hole or a nest in an oak tree)* What food does the brown squirrel in a temperate deciduous forest eat? *(It eats acorns, other small plants, and insects.)* Is the brown squirrel a carnivore, herbivore, or omnivore? *(omnivore)*

Show Image 5A-12: Black bear

5. **Inferential.** What animal is this? *(black bear)* Where does the black bear find shelter in the temperate deciduous forest? *(in hollowed-out trees or caves)* In a temperate deciduous forest, what food does the black bear eat? *(It eats plants and small animals.)* Is the black bear a carnivore, herbivore, or omnivore? *(omnivore)* During the winter, the black bear hibernates. What does that mean? *(It sleeps during the winter.)*

6. **Evaluative.** How are the brown squirrel, barred owl, black bear, and deer alike? *(They all live in the temperate deciduous forest; they all need food, water, and shelter; etc.)* How are they different? *(They may be carnivores, herbivores, or omnivores; they have different adaptations; etc.)*

Flip Book 5A-10, 5A-12



ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt and support students to recall words and phrases related to each animal.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater details related to each animal.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to each animal.

ELPS 1.E; ELPS 4.G; ELPS 4.I

WORD WORK: STORE (5 MIN.)

1. In the Read-Aloud you heard, "This squirrel might nibble on an acorn or two now, but it will also bury and store many acorns underground so it will have them in the winter when other food is hard to find."
2. Say the word *store* with me.
3. *Store* means to save for future use.
4. When warm weather arrives, I store my winter hat and gloves in a box in the closet.
5. Do you sometimes store food? What other things do you store? Try to use the word *store* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "I store . . ."]
6. What's the word we've been talking about?

Use a Making Choices activity for follow-up. [Write *store, stockpile,* and *save* on the board,] Some words mean almost the same thing but are still different. The words might express more or less action. For example, *store, stockpile,* and *save* mean to keep for future use but they are still different. "*Save*" is used when you are talking about keeping a small amount of things for the future. "I want to save the candy bar for dessert." "*Store*" is used when you are talking about saving a medium amount of things for the future. "The squirrel stores nuts for the winter." "*Stockpile*" is used when you are talking about saving a large amount of things for the future. "The town will stockpile bottled water for everyone to have in case of an emergency."

I am going to read a sentence that has a word missing. With a partner I want you to decide if the word *save, store,* or *stockpile* fits best and explain why.

- _____ your lunch for later. *(save)*
- The school will _____ all of the books from the school for the summer. *(stockpile)*
- I _____ my toys in a toy box. *(store)*

Lesson 5: Animals of the Temperate Deciduous Forest Habitat

Application

20M

Language: Students will demonstrate understanding of the Tier 3 word *bark*.

TEKS 1.1.C; TEKS 1.3.B

Writing: Students will write about characteristics of the deciduous forest habitat.

TEKS 1.12.B

MULTIPLE MEANING WORD ACTIVITY: BARK (5 MIN.)

Show Poster 3M (Bark)

- Tell students in the Read-Aloud they heard, "Bears are covered in thick, black or brown fur, and they have sharp claws to strip the bark off trees to uncover the insects that live there."

Check for Understanding

Vocabulary: What does the word *bark* mean in this sentence? *(the outer covering of a tree)*

- Have students hold up one or two fingers to indicate which image on the poster shows this meaning. *(one finger)*
- Explain that *bark* also refers to the sound a dog makes.
- Have students hold up one or two fingers to indicate which image on the poster shows this meaning. *(two fingers)*
- Point to the image of bark on the tree. With a partner, have students discuss what they think of when they see this kind of bark.
- Tell them you will call on a few partners to share what they came up with. Remind them to answer in complete sentences. *(When I see this kind of bark, I think of trees, scratchy, covering, etc.)*
- Point to the bark that is the sound a dog makes. With a partner, have students discuss what they think of when they see this kind of bark.
- Tell them you will call on a few partners to share what they came up with. Remind them to answer in complete sentences. *(When I see this kind of bark, I think of noise, dogs, a way of talking, etc.)*

ENGLISH LANGUAGE LEARNERS

Language

Analyzing Language Choices

Beginning
Ask questions students can answer by pointing to the image on the poster (e.g., "Which image shows bark on a tree?").

Intermediate
Ask students to provide examples of items related to each meaning of bark (e.g., different textures of bark on different trees, the different pitches of dog barks, etc.).

Advanced/ Advanced High
Have students use each meaning correctly.

ELPS 1.F; ELPS 2.G; ELPS 3.J

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

HABITAT JOURNAL (15 MIN.)

- Direct students' attention to Habitat Poster 4 that you displayed and note that it is a picture of a deciduous temperate forest habitat.
- Engage students in a discussion of the temperate deciduous forest habitat, using the characteristic cards and the following as a guide:
  - Climate: temperate, four seasons with varied temperatures, rain throughout the year
  - Water: rain/precipitation throughout the year
  - Ground: mostly shaded, covered with moss and small plants
  - Plants: grasses, wildflowers, moss, trees
  - Animals: squirrels, barred owls, black bears, deer, chipmunks, rabbits, mice
  - Adaptations: trees with broadleaf leaves; plants grow leaning in the same direction; squirrels have strong back legs and sharp claws for climbing trees and moving from tree to tree; owls have very good hearing and eyesight; bears have sharp claws for stripping bark off trees to find insects; deer's fur changes color
- Have students turn to the next blank page in their Habitat Journal and write "Forest" at the top. You may wish to write "Forest" on the board or chart paper for them to copy.
- Ask students to write 1 or 2 sentences about what they learned about the temperate deciduous forest habitat. Then ask students to draw pictures to go with their sentences.
- Circulate around the room, offering guidance and support as needed.
- As students finish their temperate deciduous forest habitat journal entry, have them share their writing with a partner.

End Lesson

Support

Have students draw first, then describe their drawings as a basis for dictating a sentence.

Challenge

Have students write three or more sentences about the temperate deciduous forest habitat.

LESSON

6

ANIMALS AND HABITATS: THE WORLD WE SHARE

Animals of the Tropical Rainforest Habitat

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will review characteristics of the temperate deciduous forest habitat.

TEKS 1.1.C

Reading

Students will explain how the tropical rainforest habitat is similar to the deciduous forest habitat.

TEKS 1.6.G

Language

Students will demonstrate understanding of the Tier 3 word *canopy*.

TEKS 1.3.B

Students will identify and use the conjunction *but*.

TEKS 1.7.F

Writing

Students will write about characteristics of the tropical rainforest habitat.

TEKS 1.12.B

FORMATIVE ASSESSMENT

Habitat Journal — Students will write and draw about characteristics of the tropical rainforest habitat.

TEKS 1.12.B

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.7.F** Respond using newly acquired vocabulary as appropriate; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❑ characteristic cards (optional) ❑ globe ❑ Flip Book: 6A-1
Essential Background Information or Terms			
Where Are We?			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❑ Flip Book: 6A-2–6A-15
"Animals of the Tropical Rainforest Habitat"			
Comprehension Questions			
Word Work: *Canopy*			
This is a good opportunity to take a break.			
Application (20 min.)			
Syntactic Awareness Activity: Conjunction *But*	Whole Group/ Independent	20 min.	❑ Habitat Poster 5 (Flip Book) ❑ characteristic cards ❑ Habitat Journal
Habitat Journal			

ADVANCE PREPARATION

Read-Aloud

- Determine about how much rainfall occurs yearly where you live. Be prepared to demonstrate the amount using your hands. You will share this information in comparison to the amount of rainfall in the Amazon.
- Determine an example of something that is about thirteen feet long, preferably something in your classroom or school.

Application

- Display Habitat Poster 5.

Note to Teacher

The purpose of this syntactic awareness activity is to help students understand the direct connection between grammatical structures and the meaning of text. This syntactic awareness activity should be used in conjunction with the complex text presented in the Read-Alouds.

Universal Access

- You may wish to gather images of things that are tapered to help students understand the shape of leaves on many plants in the tropical rainforest.
- You may wish to gather additional pictures of leopards and jaguars to help students distinguish between the two animals.

CORE VOCABULARY

canopy, n. the top layer of the forest formed by the branches and leaves at the tops of the trees
Example: The canopy of the forest shades the plants and animals below.
Variation(s): canopies

colonies, n. groups of the same kind of animals or plants living and growing together
Example: There were several ant colonies in his backyard.
Variation(s): colony

humid, adj. having wetness in the air
Example: The air is often sticky and humid on a hot summer day.
Variation(s): none

stalk, n. to follow in a slow, quiet way in order to hunt and catch
Example: A jaguar's features make it easier to stalk prey.
Variation(s): stalks, stalked, stalking

Vocabulary Chart for "Animals of the Tropical Rainforest Habitat"

Type	**Tier 3 Domain-Specific Words**	**Tier 2 General Academic Words**	**Tier 1 Everyday Speech Words**
Vocabulary	humid *(húmedo/a)*		
Multiple Meaning	canopy colonies *(colonias)* stalk		
Sayings and Phrases			

Lesson 6: Animals of the Tropical Rainforest Habitat

Introducing the Read-Aloud

10M

Speaking and Listening: Students will review characteristics of the temperate deciduous forest habitat.

TEKS 1.1.C

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Review the temperature deciduous forest habitat. You may wish to use the characteristic cards to promote discussion.
  - Climate: temperate, four seasons with varied temperatures, rain throughout the year
  - Water: rain/precipitation throughout the year
  - Ground: mostly shaded, covered with moss and small plants
  - Plants: grasses, wildflowers, moss, trees
  - Animals: squirrels, barred owls, black bears, deers, chipmunks, rabbits, mice
  - Adaptations: trees with broadleaf leaves; plants grow leaning in the same direction; squirrels have strong back legs and sharp claws for climbing trees and moving from tree to tree; owls have very good hearing and eyesight; bears have sharp claws for stripping bark off trees to find insects; deer's fur changes color

ENGLISH LANGUAGE LEARNERS

Language

Selecting Language Resources

Beginning
Provide students with an oral word bank (e.g., *temperate*, *leaves*, *rain all year*, *four seasons*, *claws for climbing trees*, etc.).

Intermediate
Provide students with a specific sentence frame (e.g. "Animals in the temperate deciduous forest . . .").

Advanced/ Advanced High
Encourage students to use key details in complete sentences (e.g. "Several animals in the temperature deciduous forest have claws for grabbing or tearing off tree bark.").

ELPS 1.F; ELPS 4.I

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language.

ESSENTIAL BACKGROUND INFORMATION OR TERMS

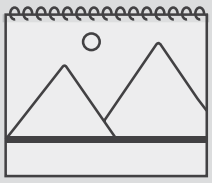
- Using a globe, point to and use your finger to trace around the equator. As you do this, ask students to tell you what the equator is. *(an imaginary line around the center of the earth)*
- Explain that the land and water near the equator stay very warm year-round.

Check for Understanding

Evaluate an Idea: Would a temperate deciduous forest be found near the equator? Why or why not? *(No, because a temperate deciduous forest has all four seasons, including winter with cold temperatures.)*

WHERE ARE WE? (5 MIN.)

Flip Book 6A-1



Show Image 6A-1: Map of the world with Amazon rainforest highlighted

- Tell students that the next Read-Aloud is about a different kind of forest that is located near the equator where it stays warm and wet all year long.
- Explain that this type of forest is called the tropical rainforest.
- Note that the particular rainforest Rattenborough will visit today is called the Amazon rainforest and is located on the continent of South America.
- Point to South America and the approximate location of the Amazon rainforest.
- Explain that the Amazon rainforest covers more than 1.4 billion acres in the following countries—Brazil (with sixty percent of the rainforest), Peru (with thirteen percent of the rainforest, second after Brazil), Colombia, Venezuela, Ecuador, Bolivia, Guyana, Suriname, and French Guiana.

Lesson 6: Animals of the Tropical Rainforest Habitat

Read-Aloud

30M

Reading: Students will explain how the tropical rainforest habitat is similar to the deciduous forest habitat.

TEKS 1.6.G

Language: Students will demonstrate understanding of the Tier 3 word *canopy*.

TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully to learn about one example of a tropical forest, the Amazon rainforest.

"ANIMALS OF THE TROPICAL RAINFOREST HABITAT" (15 MIN.)

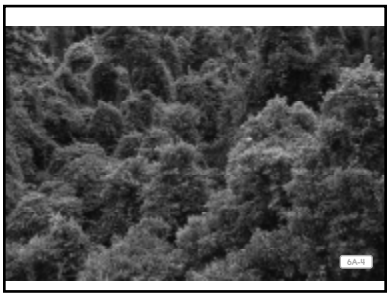
Show Image 6A-2: Rattenborough swinging through rainforest

Hello there. Rattenborough reporting from a fascinating habitat—a habitat that has the greatest variety of plants and animals of any habitat on Earth. Welcome to the tropical rainforest. Tropical places are warm and wet. A rainforest is a thick forest of plants that stay green year-round. So, a tropical rainforest is a warm, wet, thick forest of plants that stay green year-round. There are tropical rainforests in many places around the world close to the equator, but the one we are visiting is called the Amazon rainforest. It is in South America and is the largest tropical rainforest on Earth. The Amazon rainforest is so dense *or thick* that a rat like me could easily get lost. *The plants in the tropical rainforest are thick because there are so many growing closely together.* It's hot and very **humid** here. The temperature is always very warm, and it rains heavily all year long. *Because of the warm temperature and rain, the air feels wet, or humid.* My fur is feeling very wet and sticky, and it's a good thing that I brought my umbrella. There are between eighty and two hundred forty inches of rainfall here every year. That makes this one of the wettest places you can find on land. *[Provide students with an idea of the number of inches of rainfall yearly where you live—demonstrate the amount with your hands—to put the amount of rainfall in the Amazon in context.]*

TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.

Show Image 6A-3: Dense jungle

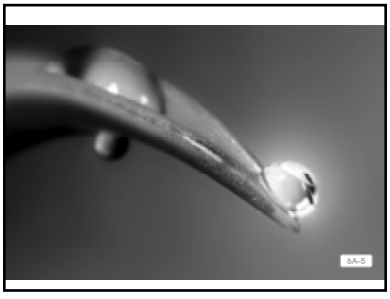
Temperate deciduous forests, which you learned about last time, have broadleaf trees that lose all of their leaves in the fall. The Amazon rainforest also has broadleaf trees, but the main difference is that most of the trees here stay green all year long. The evergreen trees in this tropical rainforest replace their leaves gradually throughout the year as the leaves age and fall, so that the trees always look green and never have bare branches like the trees in a temperate deciduous forest. Because the climate here is the same all year round, plants do not need to slow down for cold winter weather, and the animals that live here always have a good supply of food all year, too.



Show Image 6A-4: Rainforest canopy

Take a look around. The trees in the rainforest are so tall that they grow as tall as thirteen-story buildings, *or as tall as very, very tall buildings in large cities* and some grow much taller than that! I'm standing in a tree right now, and as you can see, the trees grow so thickly and so close together here that, from above, you can see only a **canopy** of thick, green leaves. You can't see the forest floor at all. *In a tropical rainforest, the canopy is the top layer of the forest formed by the branches and leaves at the tops of the trees.*

Because the sun's light can't get through this canopy of leaves, everything under them is really dark. I've brought a flashlight to help me see down there.



Show Image 6A-5: Rain drop

The plants in the Amazon rainforest have adapted to this climate in many ways. Because it's so dark in the rainforest underneath the canopy, most plants have large leaves so they can catch as much light as possible. Many of the plants have waxy leaves with ends that are tapered *or that get smaller near the ends* to help the water drip off them, like the water running off my umbrella.

Support

Share images of things that are tapered to help students understand the shape of leaves on the plants.

Show Image 6A-6: Vines in the rainforest
Many types of vines grow in the rainforest. Vines are climbing plants that grow on trees or wind themselves around tree trunks. Many animals use the vines growing among the trees almost like sidewalks and ladders to cross from one tree to another.

The rainforest floor is a very shady place, which means it is a good habitat for mosses and fungi that don't need much sunlight. If you can believe it, there are even some plants that don't need any light at all to grow! They grow on the forest floor and get their energy from the rotting leaves instead of sunlight.

Challenge

Ask students to explain why mosses thrive on the floor of the rainforest.

Show Image 6A-7: Kapok tree
I'm way up in a particular type of tree found in the Amazon rainforest called a kapok [/kae*pok/] tree, so high that you won't be able to see me! The kapok tree is one of the tallest trees around. The kapok has a very long trunk, and its branches and leaves form a canopy over the plants and animals below, making it a good shelter for animals like birds, snakes, and monkeys.

Show Image 6A-8: Toucan, macaw, poison arrow frog
There are also many different kinds of animals that call the Amazon rainforest home. Many types of interesting and colorful birds, frogs, insects, reptiles, and other animals live in the trees and other plants of the tropical rainforest. These huge toucans use their large beaks to cut fruit from branches and to eat lizards, as well as other birds. *[Point to the toucan on the right side in the image.]* Macaws, which are a kind of parrot, travel in groups and use their hooked beaks to break into hard nuts and fruits. *[Point to the macaws.]* And you don't want to get too close to the poison arrow frog, which has poisonous skin to protect it from its predators.

Show Image 6A-9: Squirrel monkey
I'm back in the kapok tree, one of the very tallest trees in the forest, to see what kinds of animals call this habitat home.

Check for Understanding

Vocabulary: What is a habitat? *(a place where plants and animals live that has food, water, and shelter)*

Over there I can see a squirrel monkey. The squirrel monkey is a very friendly little animal, and it shares a lot of things in common with the squirrels that live in the temperate deciduous forests. The squirrel monkey is very small and has a very long, thin tail that it uses to help balance. It has strong legs that it uses to jump and run, and claws that help it climb up and down trees and vines. In fact, squirrel monkeys are so good at traveling by leaping and running along branches that they hardly ever touch the forest floor.

Show Image 6A-10: Squirrel monkey eating
The squirrel monkey is an omnivore. *What is an omnivore?* (an animal that eats both plants and other animals) It eats insects, fruits, and flowers, and spends most of its time during the day moving around the forest to find food. The squirrel monkey has excellent eyesight, which is useful for finding small insects, fruit, and berries growing among the green leaves of the tropical rainforest trees. Squirrel monkeys live in large groups, making it harder for their predators—eagles and snakes—to get them. Now, this monkey is acting a little strange, and experience has told me that this kind of behavior usually means there's trouble on the way. Aha, yes, look who's coming—some kind of snake. Snakes also tend to eat rats, so I'm going to climb a bit higher and take a look from a distance.

Show Image 6A-11: Boa constrictor

Wow, look at the size of this snake! It's a boa constrictor, one of many kinds of snakes that live in the Amazon rainforest. It's a pretty big snake; this one is about thirteen feet long! *[Provide students an example of something that is thirteen feet long.]* Boas can have slightly different coloring and patterns *or repeated shapes or designs* on their skin, but they are well camouflaged in the trees, plants, and vines of the forest.

Show Image 6A-12: Boa constrictor showing jawline

This boa constrictor, like all snakes, is a carnivore. It eats other animals such as bats, which are its favorite food, rodents (yes, rats included!), lizards, birds, and even the small squirrel monkeys. The boa constrictor is mostly nocturnal, so it comes out to hunt when it's getting dark, like now.

Snakes can eat animals that are much bigger than they are. This boa's jaws open very, very wide, so that when it finds an animal to eat, even animals such as birds and squirrel monkeys, it will be able to swallow it whole.

Show Image 6A-13: Jaguar

The boa constrictor is not the only carnivore in the rainforest. In fact, it will have to watch out that it doesn't become dinner for a hungry jaguar, like this one. Jaguars look a lot like leopards—they have tan fur with dark spots—but they are bigger than leopards, with shorter tails and legs, and bigger heads and paws. This jaguar is about seven feet long and probably weighs around two hundred pounds.

Show Image 6A-14: Jaguar hunting
Jaguars are very well adapted to living in the rainforest. They have very sensitive hearing and an excellent sense of smell. A jaguar can see very well during the day and at night. All these things make it easier for it to find, **stalk**, and catch its prey. Stalk *means to follow in a slow, quiet way in order to hunt and catch.*

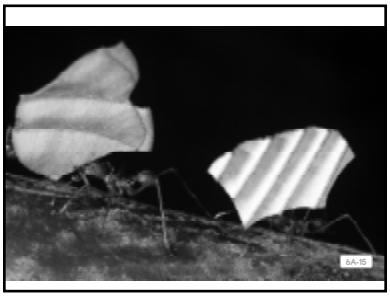
Support

The word *stalk* can also mean the stem of a plant, or the part of the plant that supports it and carries nutrients to the rest of the plant.

I can barely hear the jaguar moving through the forest. That's because its paws are covered with very thick fur with pads on the bottom. Because they can travel so quietly, jaguars don't have to run far to catch their prey. So, instead of having long legs for running, they have short, strong legs that are good for pouncing on *or suddenly attacking* other animals from the ground, from trees, or in the water.

A jaguar spends most of the day resting and goes out to hunt at night. It's also very good at climbing trees, which means I should get out of here before it's able to sniff me out!

I've moved to forest floor, near the bottom of the kapok tree, because there's one last, very interesting animal I want to show you. We'd better hurry—it's getting dark, and I may have to use my flashlight to show you.



Show Image 6A-15: Leafcutter ants
These are leafcutter ants. These ants burrow underground and make nests in groups called **colonies**. Different ants in the colony have different responsibilities. There are worker ants, soldier ants, and their queen. The worker ants are traveling to the kapok tree nearby where they will use their sharp jaws to bite off pieces of the leaves to bring back to the nest.

Did you know that ants can carry up to ten times their own body weight? That's pretty amazing, isn't it? The soldier ants are there to protect the worker ants on their way to and from the nest. These ants spend most of their lives working for food! Nature is amazing, isn't it?

Well, it's really quite dark now, and my fur has been sticking to me since we got here, so I think it's time to leave the hot and humid Amazon rainforest. We've learned a lot about this exotic habitat, its climate, and the plants and animals that have their homes here. Now we will go somewhere really different.

COMPREHENSION QUESTIONS (10 MIN.)

1. **Inferential.** What is a tropical rainforest? *(a forest that stays warm, wet and green all of the time and has many different types of plants and animals)*
   - **Inferential.** Why is it dark on the ground or floor of a tropical rainforest? *(The canopy made by the leaves of the tall trees blocks most of the sunlight.)*
2. **Inferential.** How have the plants adapted to live in the tropical rainforest? *(They reach for the sunlight or need little sunlight; they have large leaves to collect the sunlight; they have waxy leaves to allow runoff of water; the trees have large roots.)*

Show Image 6A-11: Boa constrictor

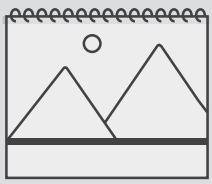
3. **Inferential.** What animal is this? *(boa constrictor)* What food does a boa constrictor eat in the tropical rainforest? *(It eats small animals.)* Is the boa constrictor a carnivore, herbivore, or omnivore? *(carnivore)* Where do you think the boa constrictor might find shelter in the tropical rainforest? *(in the trees, under plants on the forest floor)*
4. **Inferential.** What adaptations does a jaguar have in order to live in the tropical rainforest? *(The jaguar has sensitive hearing and an excellent sense of smell; its paws are covered with thick fur so that it can effectively and quietly hunt its prey.)*

Check for Understanding

Think-Pair-Share: You are going to identify similarities and differences between the Read-Alouds "Animals of the Tropical Rainforest Habitat" and "Animals of the Temperate Deciduous Forest Habitat."

How is the Read-Aloud about the tropical rainforest different from the Read-Aloud about the temperate deciduous forest? Make sure to answer using a complete sentence starting with "They are different because _____." *(Answers may vary.)*

Flip Book 6A-11



ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt students to recall words and phrases related to each forest habitat.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater details related to each forest habitat.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to each forest habitat.

ELPS 1.E; ELPS 4.G; ELPS 4.I

WORD WORK: CANOPY (5 MIN.)

1. In the Read-Aloud you heard that "the trees grow so thickly and so close together here that, from above, you can only see a canopy of thick, green leaves."
2. Say the word *canopy* with me.
3. A canopy is the top layer of the forest formed by the branches and leaves at the tops of the trees. A canopy is also something that hangs or spreads over something.
4. There is a canopy over the front doors of the store.
5. Have you ever seen a canopy? If so, where? What did the canopy cover? Can you think of times that it might be helpful to have a canopy? Try to use the word *canopy* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "I saw a canopy at . . ."]
6. What's the word we've been talking about?

Use a Making Choices activity for follow-up. I will name two things. You will decide which one is similar to a canopy. Remember, a canopy is above a person or an object in order to cover it. To answer, say "_____ is like a canopy."

- the roof on a front porch or the floor of a house *(The roof on a front porch is like a canopy.)*
- a tent or a doormat *(A tent is like a canopy.)*
- a tree's roots or a tree's branches and leaves *(A tree's branches and leaves are like a canopy.)*
- an umbrella or rain boots *(An umbrella is like a canopy.)*

Lesson 6: Animals of the Tropical Rainforest Habitat

Application

20M

Language: Students will identify and use the conjunction *but*.

TEKS 1.7.F

Writing: Students will write about characteristics of the tropical rainforest habitat.

TEKS 1.12.B

SYNTACTIC AWARENESS ACTIVITY (5 MIN.)

Conjunction: *But*

- Remind students that a conjunction is a kind of word used to connect words and phrases.
- Remind students they have learned about the conjunctions *and* and *or*.
- Review that *and* is used to join words and phrases that have ideas that are alike. Review that *or* is used to join words and phrases that are choices.
- Explain that the conjunction *but* is used to join words and phrases that are different, or opposite.
- Read aloud the following excerpt from the Read-Aloud, Note that you will emphasize the word *but* as you read.

  Jaguars look a lot like leopards—they have tan fur with dark spots—*but* they are bigger than leopards, with shorter tails and legs, and bigger heads and paws. This jaguar is about seven feet long and probably weighs around two hundred pounds.

- Note that in this excerpt, the word *but* is used to talk about differences between jaguars and leopards.
- Explain that the word *but* is used a lot when talking about differences. Share the following example with students:
  - Drawing and painting are both fun, but painting is a little messier.
- Explain that the word *but* tells us that we are talking about differences, or opposites, when comparing drawing and painting.
- Share the following example with students:
  - My sister and I look a lot alike, but she is shorter.

TEKS 1.7.F Respond using newly acquired vocabulary as appropriate; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

- Explain that the word *but* tells us that we are talking about the difference between my sister and I.
- Tell students you will read them some sentences about two things. With a partner, have students talk about how the two things are different using the word *but*. Explain you will call on student pairs to share what they discussed. Remind students to answer in complete sentences.
  - Dogs and cats are both animals, *but* dogs are . . .
  - Apples and bananas are both fruit, *but* apples are . . .
  - Kindergartners and first graders are both students, *but* first graders are . . .

HABITAT JOURNAL (15 MIN.)

- Direct students' attention to Habitat Poster 5 that you displayed and note that it is a picture of a tropical rainforest habitat.
- Engage students in a discussion of the tropical rainforest habitat, using the characteristic cards and the following as a guide:
  - Climate: warm, wet, humid
  - Water: heavy rain
  - Ground: very shaded, covered with mosses and fungi
  - Plants: very tall trees, kapok trees, vines, mosses
  - Animals: toucans, macaws, squirrel monkeys, boa constrictors, jaguars, leafcutter ants
  - Adaptations: trees gradually replace leaves throughout the year; plants have large leaves to catch as much light as possible; leaves are waxy and tapered; squirrel monkey has strong legs for jumping and claws for climbing; jaguars have sensitive hearing and an excellent sense of smell
- Have students turn to the next blank page in their Habitat Journal and write "Rainforest" at the top. You may wish to write "Rainforest" on the board or chart paper for them to copy.
- Ask students to write 1 or 2 sentences about what they learned about the tropical rainforest habitat. Then ask students to draw pictures to go with their sentences.
- Circulate around the room, offering guidance and support as needed.
- As students finish their tropical rainforest habitat journal entry, have them share their writing with a partner.

End Lesson

ENGLISH LANGUAGE LEARNERS

Language

Connecting Ideas

Beginning
Repeat the sentence frame and have students orally complete it to join two ideas that are different.

Intermediate
Have students add details to complete the sentence frame to join two ideas that are different.

Advanced/ Advanced High
Have students create a detailed sentence joining two ideas that are different.

ELPS 3.C

Support

Have students draw first, then describe their drawings as a basis for dictating a sentence.

Challenge

Have students write three or more sentences about the tropical rainforest habitat.

LESSON

7

ANIMALS AND HABITATS: THE WORLD WE SHARE

Animals of the Freshwater Habitat

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will identify different habitats.

TEKS 1.1.C

Reading

Students will identify characteristics of the freshwater habitat.

TEKS 1.6.G; TEKS 1.7.C

Language

Students will demonstrate understanding of the Tier 2 word *float*.

TEKS 1.3.B

Students will demonstrate understanding of the phrase "a fish out of water."

TEKS 1.3.B

Writing

Students will write about characteristics of the freshwater habitat.

TEKS 1.12.B

FORMATIVE ASSESSMENT

Habitat Journal — Students will write and draw about characteristics of the freshwater habitat.

TEKS 1.12.B

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.7.C** Use text evidence to support an appropriate response; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group/ Small Group	10 min.	❑ globe ❑ Habitat Posters 1–5 (Flip Book) ❑ board/chart paper ❑ green, blue, and black markers ❑ Flip Book: 7A-1
Essential Background Information or Terms			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❑ Flip Book: 7A-2–7A-11
"Animals of the Freshwater Habitat"			
Comprehension Questions			
Word Work: *Float*			
This is a good opportunity to take a break.			
Application (20 min.)			
Sayings and Phrases: "A Fish Out of Water"	Whole Group/ Independent	20 min.	❑ Habitat Poster 6 (Flip Book) ❑ characteristic cards ❑ Habitat Journal
Habitat Journal			

ADVANCE PREPARATION

Application

- Display Habitat Poster 6.

Note to Teacher

Try to find opportunities to use the saying "a fish out of water" when it applies to situations in the classroom.

Universal Access

- You may wish to gather additional images of freshwater habitats and the animals that live there.

CORE VOCABULARY

amphibious, adj. able to live both in water and on land
Example: Our frog tank has areas of dry land and water for swimming because frogs are amphibious.
Variation(s): none

float, v. to stay on top of the water without sinking
Example: The children watched their toy boats float in the bathtub.
Variation(s): floats, floated, floating

freshwater, adj. related to water that is not salty
Example: Every summer our family goes to a freshwater pond to swim.
Variation(s): none

gills, n. the parts of the body that fish and other underwater animals use to breathe
Example: When we went to the aquarium, we saw the trout's large gills on the side of its body as it swam by.
Variation(s): gill

waterproof, adj. keeps water out
Example: I wore waterproof gloves to keep my hands dry while moving wood into the back of the truck in the rain.
Variation(s): none

Vocabulary Chart for "Animals of the Freshwater Habitat"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	amphibious *(anfibio/a)* freshwater gills waterproof		
Multiple Meaning		float *(flotar)*	
Sayings and Phrases			

Lesson 7: Animals of the Freshwater Habitat

Introducing the Read-Aloud

10M

Speaking and Listening: Students will identify different habitats.

TEKS 1.1.C

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

- Show students the globe, and remind them that the globe shows both the land and water that make up our planet, Earth.

Check for Understanding

Point and Say It: Identify what the blue parts are on a globe. *(water)* Identify what the parts that aren't blue are on a globe. *(land)*

- Direct students' attention to the Habitat Posters on display.
- Ask students to try to name all of the different habitats they have learned about so far. Record their responses on the board or chart paper. [Use a black marker if using chart paper and white or yellow chalk if using the board.] *(Arctic tundra, Arctic Ocean, desert, savanna, temperate deciduous forest, tropical rainforest)*
- Remind students that they may not be able to read all of these words by themselves, but you are writing them down so you don't forget.
- Tell students that you are going to read the name of each habitat, and as you do so, ask them to tell you whether the habitat is primarily a land habitat or a water habitat. If it is a land habitat, use a green marker/chalk to circle the name of the habitat; if it is a water habitat, use the blue marker/chalk to circle the name of the habitat.
- After going through the list of habitats, ask students to identify how many land habitats and how many water habitats have been discussed so far. *(land–5; water–1)*

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language.

- Ask students what they notice about the difference in number between land and water habitats learned about so far. *(They have learned about more land habitats than water habitats.)*
- Ask students to identify the one water habitat they have learned about so far. *(Arctic Ocean)*

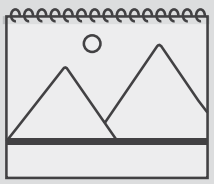
ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN.)

- Tell students that today they are going to learn about another water habitat: a freshwater habitat.
- Explain that fresh water is water that does not have very much salt in it; it is often water that people can drink.
- Explain that a freshwater habitat is different from the water habitat found in the Arctic Ocean, which is called a saltwater habitat.
- Explain that the water found in oceans is salty and therefore not for drinking.

Show Image 7A-1: Examples of freshwater habitats

- Tell students that this image shows different kinds of freshwater habitats, such as rivers, streams, lakes, and ponds.
- Show students the globe, and point out some examples of freshwater habitats, such as major rivers and lakes.
- Ask students to think of examples of freshwater habitats in their area or that they have seen before in other places. *(Answers may vary.)*

Flip Book 7A-1



ENGLISH LANGUAGE LEARNERS

Language

Selecting Language Resource

Beginning
Have students verbally share key words and phrases related to an example of a freshwater habitat they have encountered.

Intermediate
Have students verbally craft a complete sentence related to an example of a freshwater habitat they have encountered.

Advanced/ Advanced High
Have students verbally craft a detailed sentence related to an example of a freshwater habitat they have encountered.

ELPS 3.F

Lesson 7: Animals of the Freshwater Habitat

Read-Aloud

30M

Reading: Students will identify characteristics of the freshwater habitat.

TEKS 1.6.G; TEKS 1.7.C

Language: Students will demonstrate understanding of the Tier 2 word *float*.

TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen for the different kinds of plants and animals in a freshwater habitat.

"ANIMALS OF THE FRESHWATER HABITAT" (15 MIN.)

Show Image 7A-2: Rattenborough fishing off a dock

Hello again! Glad you could join me. I thought that we needed a real change, so I've come off dry land to a place where it's wet all the time—a lake. A lake is an area of water that is surrounded by land *or has land all around it*. There is a lot of water in the world; in fact, water covers most of the earth's surface. But, only a tiny part of the world's water is fresh water, the kind of water you and I can drink because it has very little salt in it.

Show Image 7A-3: Examples of freshwater habitats

Fresh water is found in streams, rivers, lakes, and ponds. The water in these streams, rivers, lakes, and ponds comes from rain and from melting ice and snow. Isn't it amazing to think that the water from the drinking fountain at school or from the faucets in your house all comes from rain?

TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; **TEKS 1.7.C** Use text evidence to support an appropriate response; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.

Show Image 7A-4: Edge of lake with water lilies

I'm here at the water's edge *or where the water and land meet* to explore this lake and the plants and animals that call this **freshwater** habitat home. Freshwater habitats have many kinds of fish, birds, insects, and other animals. Standing here, I can see an enormous *or very big* leaf in the water. Let me climb onto it so we can get a closer look.

This is a water lily leaf. *[Point to the water lilies in the picture.]* A water lily is a plant that lives in water near the edges of ponds and lakes. Plants are important in freshwater habitats because they make oxygen for animals to breathe; plants are also food for the animals to eat, and they can provide shelter to protect animals from their predators. *Remember, a predator is an animal that hunts other animals.* The leaves of the water lily are very large, round, and green, and they **float** on the surface of the water. *If the leaves float on the surface of the water, that means they stay on top of the water; they don't sink.*

Show Image 7A-5: Water lilies, deer, porcupine, beaver, turtles, and ducks

The water lily is well adapted for living in this habitat. Like the kapok tree in the rainforest, the lily's large leaves let it get as much sunlight as it needs for food and energy.

Lilies are also food for many animals, believe it or not. Animals—like deer, porcupines, beavers, and turtles—all eat the leaves, whereas ducks and geese like to eat the roots. Some animals, like fish and frogs, use the lily leaves as hiding places, and the flowers bring bees and other insects. I am going to float around the edge of the lake on this water lily leaf, but I'm going to have to leave soon because this pesky turtle will not leave my leaf alone!

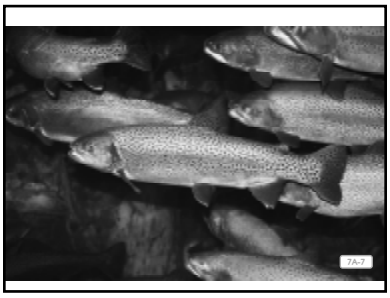
Challenge

Ask students to explain why the turtle won't leave Rattenborough's lily leaf alone.

Show Image 7A-6: Cattails, muskrat, geese, moose, elk

I've pushed out from the edge of the lake a little, and already I can see another kind of plant that lives here. It's called a cattail, and it gets its name from the unusual way it looks. Thankfully for me, it doesn't have much to do with real cats! Cattails have long, thin stems with foot-long, furry flower spikes at the top that turn from green in the early summer to brown in the fall. The flower spike feels soft and furry and looks a little like a cat's tail, but I think it looks more like a hot dog! *Does it look like a cat's tail to you?* The plants can reach up to nine feet in height, which lets them get as much sunlight as they need.

As with water lilies, some animals use cattails for food and shelter. *[Point to each animal as you talk about it.]* Muskrats and geese like to eat the roots of the cattail, and the juicy green shoots are a favorite of moose and elk. *Moose and elk, like caribou, are part of the deer family.* Many kinds of birds make their homes among the cattails. It's very hard to see anything in there because cattails grow so thickly, so it's a good place for birds to build their nests and to lay and hatch their eggs. Predators like snakes and frogs also live among the cattails and search for animals like birds and insects for food. I think I'm going to move on now. As you know, I'm not very good with snakes.



Show Image 7A-7: Rainbow trout

Come with me beneath the water, and let's take a look at what's under there. Here are some nice-looking rainbow trout. Fish can only live in water, and they breathe underwater using **gills** on the sides of their bodies. Gills take in oxygen from the water around them. Fish have strong tails that they use for swimming and fins that they use for steering and balance.

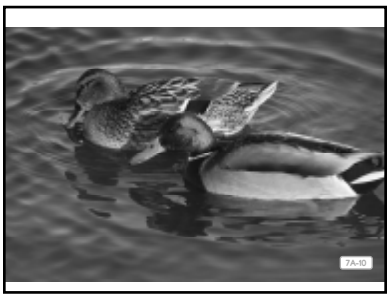
The rainbow trout is a carnivore. *Remember, a carnivore is an animal that eats other animals.* It eats other water animals like insects, other fish, and sometimes shellfish. It even eats some small land animals like mice if it gets the chance, so I'm sure it wouldn't mind a nibble of rat! Rainbow trout like to live in rivers, but some prefer the deeper water of big lakes.

Show Image 7A-8: Bullfrog *What do you see in this image?*
I enjoyed exploring beneath the surface of the water, and now I'm going to rest on a lily pad again. While I'm drying off a bit, let me show you a kind of frog called a bullfrog that I can see sitting at the water's edge. Frogs are **amphibious**, which means they live both in the water and on land. Bullfrogs are the largest kind of frog found in North America, and they can grow more than half a foot long and weigh more than a pound. That's a really big frog!

The bullfrog gets its name from the loud, cow-like noise it makes. *A male cow is called a bull. What sound does a cow make?* I bet birds and turtles would be pretty surprised to know that a frog can make such a loud sound! Pretty neat, huh? This bullfrog is resting now, but it will come out to hunt when it gets dark. Bullfrogs eat a lot of different kinds of food. They are carnivores, so they eat small fish, snakes, birds, and insects like this dragonfly that's buzzing about my head.

Show Image 7A-9: Adult dragonfly *This is an adult dragonfly.* Adult *means grown up.*
Adult dragonflies are flying insects with long bodies and wings. Dragonflies live around lakes, streams, and other freshwater habitats because they lay their eggs in water. Adult dragonflies eat other insects like mosquitoes, flies, and bees.

The dragonfly uses its long wings to hover around in the air *or stay in one place while flying* where it catches its food. It has to be careful because the bullfrog isn't the only one that likes to eat dragonflies. Birds and turtles like to eat them, too.



Show Image 7A-10: Ducks
The water is getting a little rough out here. Ah, that's why. Here come some birds that like to eat insects. These are a kind of duck called mallards. Ducks are birds and can live both in and out of water, but it's the water where they spend most of their time. Like all birds, ducks—like these mallards—are covered in feathers.

Did you know that ducks' feathers are **waterproof**? *If something is waterproof, it keeps water out.* Ducks rub special oil from their tails all over their feathers. Because oil and water don't mix, water drips right off the ducks without getting their feathers wet.

Show Image 7A-11: Duck looking for food
Ducks float on the surface of the water and have large, webbed feet to help them paddle. They dip their heads under the water and use their beaks, which are called bills, to search for food at the bottom of the lake. *Here the word* bills *refers to ducks' beaks.* Mallards eat grasses and seeds from plants, and small animals like insects, worms, snails, frogs, and small fish.

Well, we've had a good look around this freshwater habitat, but I have to get off this lily leaf before these ducks knock me off! There's another kind of water habitat, and we're going to have a look at it next time. I hope you'll join me. Now, if you'll excuse me, I have to start my long trip back to shore!

Support

The word *bills* can also refer to pieces of paper money or documents listing money owed to a business, such as the electric company. Refer to Poster 4M in the Flip Book for additional support of the multiple meanings of *bills*.

COMPREHENSION QUESTIONS (10 MIN.)

1. **Literal.** Is most of the earth's water fresh water or salt water? *(salt water)*

Check for Understanding

Think-Pair-Share: Describe a freshwater habitat. Make sure that you cite specifics from the Read-Aloud to support your answer. *(Answers may vary, but should include: there are many kinds of fish, birds, insects, and other animals; there are plants that make oxygen for animals to breathe and that serve as food and shelter for animals, etc.)* What are some examples of freshwater habitats? *(rivers, streams, lakes, and ponds)*

2. **Literal.** What are some plants that live in freshwater habitats? *(water lilies, cattails)*
   - **Literal.** What animals live in freshwater habitats? *(fish, including rainbow trout; birds, including ducks; insects, including dragonflies, bees, mosquitoes, and flies; frogs, including bullfrogs; deer; porcupines; beavers; turtles; muskrats; geese)*
3. **Inferential.** How are dragonflies adapted to live in a freshwater habitat? *(Dragonflies lay their eggs in water. They eat insects that live in freshwater habitats, like mosquitoes, flies, and bees.)*

Check for Understanding

Think-Pair-Share: Why are water lilies so important in freshwater habitats? Make sure that you cite specifics from the Read-Aloud to support your answer. *(They provide oxygen for animals to breathe, and food for them to eat. The leaves are hiding places for animals, like fish and frogs, and the flowers attract bees and other insects.)*

ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt and support students to recall words and phrases related to water lilies and the freshwater habitat.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater detail related to water lilies and the freshwater habitat.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to water lilies and the freshwater habitat.

ELPS 1.E; ELPS 4.G; ELPS 4.I

WORD WORK: FLOAT (5 MIN.)

1. In the Read-Aloud, you heard, "The leaves of the water lily are very large, round, and green, and they float on the surface of the water."
2. Say the word *floa*t with me.
3. If things float on water, that means they stay on top of the water; they do not sink.
4. In the summer, I like to float in the pool.
5. What other things float in water? Try to use the word *float* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "My bath toys float in the bathtub."]
6. What's the word we've been talking about?

Use a Making Choices activity for follow-up. I am going to describe a situation. If it is an example of something that does float, say, "That floats." If it is an example of something that does not float, say, "That does not float."

- The leaf fell from the tree and landed on the surface of the water. *(That floats.)*
- Harry threw the rock, and it sank to the bottom of the pond. *(That does not float.)*
- The boat rocked gently back and forth on top of the waves. *(That floats.)*
- The dolphin dove deep into the ocean. *(That does not float.)*
- There are many pennies under the water at the bottom of the water fountain. *(They do not float.)*

Lesson 7: Animals of the Freshwater Habitat

Application

20M

Language: Students will demonstrate understanding of the phrase "a fish out of water."

TEKS 1.3.B

Writing: Students will write about characteristics of the freshwater habitat.

TEKS 1.12.B

SAYINGS AND PHRASES: A FISH OUT OF WATER (5 MIN.)

- Ask students if they have ever heard the saying "a fish out of water."
- Have students repeat the saying after you.
- Ask what would happen to a fish that was out of water. *(The fish would not be in its usual environment or place. It would be very uncomfortable, and it would be difficult for the fish to survive very long out of water. Fish can only breathe underwater, using gills, so being out of the water would be bad for a fish.)*
- Explain that the saying "a fish out of water" is used to talk about people who aren't in their usual place, or who are in an uncomfortable situation. People would survive if they weren't in their usual place or in familiar circumstances, but they might feel a little uncomfortable or strange.
- With a partner, have students discuss how they would feel in the following situations:
  - You are the only person who forgot to wear shoes to school.
  - You started attending a new school and didn't know anyone else in your class.
- Explain that students might feel like "a fish out of water" in these situations because they weren't experiencing things they were used to.
- Ask students to think of other examples of when people might feel uncomfortable in a new or different environment. *(Answers may vary.)*

ENGLISH LANGUAGE LEARNERS

Speaking and Listening

Offering Opinions

Beginning
Provide students with sentence frames using a small set of learned phrases (e.g., "I think . . . would be like 'a fish out of water.'").

Intermediate
Provide students with sentence frames using an expanded set of learned phrases (e.g., "I think . . . would be like 'a fish out of water' because . . .").

Advanced/ Advanced High
Provide minimal guidance and support for open responses.

ELPS 3.G

TEKS 1.3.B Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

HABITAT JOURNAL (15 MIN.)

- Direct students' attention to Habitat Poster 6 that you displayed and note that it is a picture of a freshwater habitat.
- Engage students in a discussion of the freshwater habitat, using the characteristic cards and the following as a guide:
  - Climate: varies because they are all over the world
  - Water: rain, melting snow and ice
  - Ground: land by the water's edge, otherwise mostly covered with water
  - Plants: water lilies, cattails
  - Animals: turtles, beavers, rainbow trout and other fish, bullfrogs and other frogs, ducks, geese, snakes
  - Adaptations: water lily has large leaves that float on the water's surface and take in a lot of sunlight; fish have gills for breathing underwater; frogs are amphibious; dragonflies have long wings for hovering to catch food; ducks have waterproof feathers and large, webbed feet for paddling
- Have students turn to the next blank page in their Habitat Journal and write "Freshwater" at the top. You may wish to write "Freshwater" on the board or chart paper for them to copy.
- Ask students to write 1 or 2 sentences about what they learned about the freshwater habitat. Then ask students to draw pictures to go with their sentences.
- Circulate around the room, offering guidance and support as needed.
- As students finish their freshwater habitat journal entry, have them share their writing with a partner.

End Lesson

Support

Have students draw first, then describe their drawings as a basis for dictating a sentence.

Challenge

Have students write three or more sentences about the freshwater habitat.

LESSON

8

ANIMALS AND HABITATS: THE WORLD WE SHARE

Animals of the Saltwater Habitat

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will distinguish between fresh water and salt water.

TEKS 1.1.A; TEKS 1.1.C

Reading

Students will identify characteristics of the saltwater habitat.

TEKS 1.6.E; TEKS 1.6.G

Language

Students will demonstrate understanding of the Tier 2 word *shallow*.

TEKS 1.3.B

Writing

Students will write about characteristics of the saltwater habitat.

TEKS 1.12.B

FORMATIVE ASSESSMENT

Habitat Journal — Students will write and draw about characteristics of the saltwater habitat.

TEKS 1.12.B

TEKS 1.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 1.1.C** Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.12.B** Dictate or compose informational texts, including procedural texts.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	❑ characteristic cards (optional) ❑ Flip Book: 8A-1–8A-14 ❑ globe
Essential Background Information or Terms			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❑ world map or globe ❑ board/chart paper (optional) ❑ wooden incline block or wedge (optional)
"Animals of the Saltwater Habitat"			
Comprehension Questions			
Word Work: *Shallow*			
This is a good opportunity to take a break.			
Application (20 min.)			
Habitat Journal	Independent	20 min.	❑ Habitat Poster 7 (Flip Book) ❑ characteristic cards ❑ Habitat Journal

ADVANCE PREPARATION

Read-Aloud

- Locate a wooden incline block or wedge in order to demonstrate the meaning of the word *slopes*. If you do not have this item, be prepared to draw a picture on the board or chart paper to demonstrate the meaning of *slopes*.

Application

- Display Habitat Poster 7.

Universal Access

- You may wish to gather additional images of saltwater habitats and the animals that live there to share with students.

CORE VOCABULARY

plankton, n. very small animals or plants that drift in salt water or fresh water
Example: The blue whale eats a type of animal plankton called krill.
Variation(s): none

regeneration, n. the process of regrowing a missing body part
Example: If one of the starfish's arms is cut off, regeneration allows the starfish to grow a new arm.
Variation(s): none

shallow, adj. not deep
Example: He swam in the shallow end of the pool because he was just learning how to swim.
Variation(s): shallower, shallowest

slopes, v. slants upward or downward; not flat
Example: A hill that slopes downward is good for sledding.
Variation(s): slope, sloped, sloping

valleys, n. areas of low land in between two areas of high land
Example: There are many valleys between peaks in the mountain range.
Variation(s): valley

Vocabulary Chart for "Animals of the Saltwater Habitat"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	plankton *(plancton)* regeneration *(regeneración)* valleys *(valle)*	slopes	
Multiple Meaning		shallow	
Sayings and Phrases	in time		

Start Lesson

Lesson 8: Animals of the Saltwater Habitat

Introducing the Read-Aloud

10M

Speaking and Listening: Students will distinguish between fresh water and salt water.

TEKS 1.1.A; TEKS 1.1.C

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

Check for Understanding

Vocabulary: What is fresh water? *(water that animals and people can drink because it has very little salt in it)*

ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt and support students to recall words and phrases related to characteristics of the freshwater habitat.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater detail related to characteristics of the freshwater habitat.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to characteristics of the freshwater habitat.

ELPS 1.E; ELPS 4.G; ELPS 4.I

- Ask students to share what they have learned about a freshwater habitat. You may wish to use the characteristic cards to promote a discussion:
  - Climate: varies because they are all over the world
  - Water: rain, melting snow and ice
  - Ground: land by the water's edge, otherwise mostly covered with water
  - Plants: water lilies, cattails
  - Animals: turtles, beavers, rainbow trout and other fish, bullfrogs and other frogs, ducks, geese, snakes
  - Adaptations: water lily has large leaves that float on the water's surface and take in a lot of sunlight; fish have gills for breathing underwater; frogs are amphibious; dragonflies have long wings for hovering to catch food; ducks have waterproof feathers and large, webbed feet for paddling

TEKS 1.1.A Listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses; **TEKS 1.1.C** Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language.

ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN.)

- Tell students that they are going to learn about the other water habitat called a saltwater habitat.
- Remind them that they have already learned about one particular saltwater habitat when they studied the Arctic Ocean habitat.
- Help students locate the Arctic Ocean on the globe.
- Explain that for many years, only four oceans were recognized—the Arctic, Pacific, Atlantic, and Indian—all saltwater habitats. Explain that some years ago, however, the Southern Ocean, which lies along the coastline of Antarctica, was designated as the fifth ocean.
- Show and name these oceans on the globe.
- Point out where you live in comparison with the oceans.
- Ask students which ocean is the closest to you and which is the farthest away. *(Answers may vary.)*

Lesson 8: Animals of the Saltwater Habitat

Read-Aloud

30M

Reading: Students will identify characteristics of the saltwater habitat.

TEKS 1.6.E; TEKS 1.6.G

Language: Students will demonstrate understanding of the Tier 2 word *shallow*.

TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully to find out more about oceans and saltwater habitats.

"ANIMALS OF THE SALTWATER HABITAT" (15 MIN.)

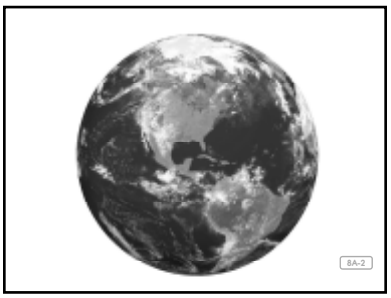
Show Image 8A-1: Rattenborough in a boat

Welcome to the last habitat that we are going to explore. In the last Read-Aloud, we explored freshwater habitats. Now, we're going to learn about another kind of water habitat—a saltwater habitat. Saltwater habitats, as you could guess from their name, contain lots of salt. This means that we can't use salt water for drinking. Would you like to drink a cup of salty water? No thanks!

Check for Understanding

Recall: What did you learn about salt in *The History of the Earth*? *(It is a mineral found in the earth and can be used with food or to help melt snow and ice in the winter to make roads safe.)*

TEKS 1.6.E Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.



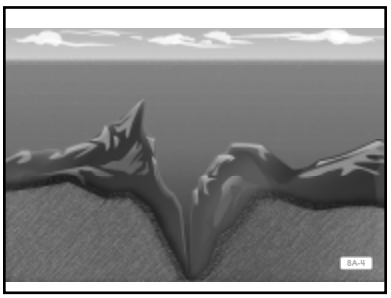
Show Image 8A-2: Planet Earth

It's hard to imagine, but more of the earth is covered in water than is covered with land. Most of that water is salt water in oceans and seas. Oceans are huge areas of salt water that stretch all around our planet, and they are home to almost half of the world's species of animals and millions of different plants. The water in the ocean comes from rain as well as from rivers and streams that flow into the ocean. Seas are smaller areas of salt water that have land around them or around part of them.

Show Image 8A-3: Coastline

I've come to the largest ocean, the Pacific, to show you a bit more about ocean habitats and the plants and animals that live in them. *[Point to the Pacific Ocean on a world map or globe.]* I'm standing on a beach looking out at the water. You can see that the waves are crashing onto the beach. This beach, and any land that runs alongside the ocean, is called the coastline, or shoreline. Now, you may think that when you are standing on the land looking at the water, that the land stops where the water starts. It certainly looks that way. But let me get my trusty scuba gear out and walk into the water.

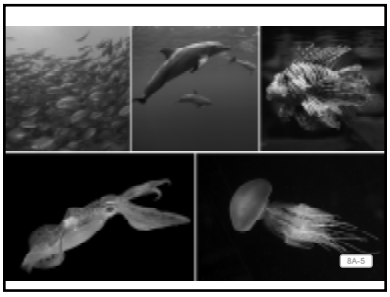
Now that I'm in here, I'm still standing on land; it's just that the land is under the water. The land **slopes** downward the farther I go out into the water, which means the water is getting deeper and deeper. *[Visually demonstrate with an object, such as a wooden incline block or wedge, or illustrate on the board, what the word* slopes *means.]*



Show Image 8A-4: Ocean floor

The interesting thing about the ocean floor, which is the land under the ocean water, is that it isn't flat. As on land, the earth beneath the ocean waters has both mountains and **valleys**. *Mountains are areas of land that are very high where the land comes to its highest point. Valleys are areas of low land between two areas of high land.* This makes some areas of water in the ocean deeper than others.

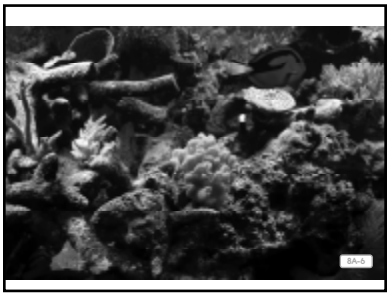
The Pacific Ocean is full of both plant and animal life, but not all of them share the same space. The conditions under the water are very different in various places. Some parts are deep, and some are **shallow**. Shallow *is the antonym, or opposite, of* deep*—in other words, not deep.* There are cool parts, and there are warm parts; some are dark, and some are full of light.



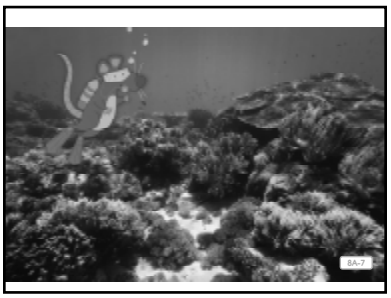
Show Image 8A-5: Sealife
There are plants and animals in nearly every part of the ocean—some in the deep, open waters far from the land, and some in the shallow waters closer to the shore. Some animals, like turtles, jellyfish, and crabs, live closer to the shore where it's shallower and warmer.

Some animals like it better near the surface of the water, and others prefer to live down at the very bottom of the ocean on the deep ocean floor. They have all had to adapt to the conditions of their habitats. For instance, the animals that live in the deeper parts of the ocean have had to adapt to total darkness, because the sun's light just can't reach that deep.

Some fish, like the devilfish, have very large mouths and sharp teeth so that they can catch their prey as easily as possible. Other sea creatures have feelers on their bodies that help them feel where their food is. And some animals make their own light with special chemicals in their bodies, like when you carry a flashlight in the dark!

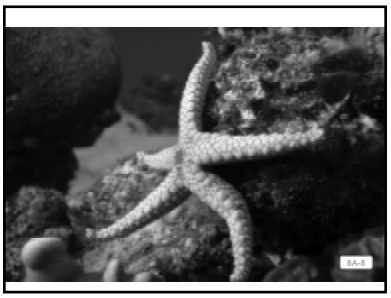


Show Image 8A-6: Coral reef
I have now arrived at a special part of a saltwater habitat called a coral reef, which is made up of many tiny animals called corals. Corals stay in one place all their adult lives. They have stomachs and mouths and even skeletons! These skeletons can be on the inside or outside of the coral animals and are also called coral. When the coral animal dies, its skeleton remains in place and other coral animals will come and live on top of the old skeletons. The colony in which the coral lives is called a coral reef. *So a coral reef has both coral animals and the skeletons of those animals.*



Show Image 8A-7: Rattenborough scuba diving

I'm here in the Pacific Ocean at a coral reef. In addition to the coral, there are many other kinds of animals around a reef! I have found everything from fish and shellfish, to octopi and sharks, to snails and turtles. Octopi *is the plural of* octopus—*one octopus, but many octopi.*



Show Image 8A-8: Starfish

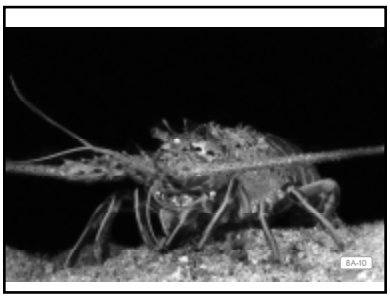
Here is an animal that lies in and around this coral reef and whose name most of you can probably guess based on its shape. It's a starfish! This starfish, also known as a seastar, has five arms, which make it look like a star. Although it is called a starfish, it's not actually a fish. It belongs to a group of animals that have a spiny skin all over their bodies. If I touch the starfish, I can feel that its body is covered with tiny, hard bumps that help protect it from predators, such as sharks, manta rays, and other fish. *What is a predator?* (an animal that eats other animals) Starfish are also able to protect themselves in another amazing way: if another animal actually catches and bites off one of the starfish's arms, the starfish will not die, and it can still escape! In time, a new arm will grow back to replace the missing arm! When an animal regrows a missing body part, it's called **regeneration**.

Show Image 8A-9: Starfish on ocean floor

The starfish doesn't swim. It crawls very slowly along the ocean floor using hundreds of tiny tube feet. These feet attach to whatever the starfish is crawling over. As it crawls along the floor, the starfish is always on the lookout for food. This starfish's prey includes fish, snails, clams, oysters, and crabs.

Challenge

Ask students to explain why lobsters' hard shell stops most other animals from trying to eat them.



Show Image 8A-10: Lobster

Here is another animal that lives in salt water. This shellfish is called a lobster. Lobsters live on the ocean floor in openings between rocks. Their hard shell stops most other animals from trying to eat them. Lobsters have many legs that they use for crawling about, and they use antennae on their head to feel their way along the murky ocean floor. I have to watch out for that lobster's claws! They are called pincers, and they are very strong! The lobster uses them to defend itself against its prey, and to catch and crush its own food.

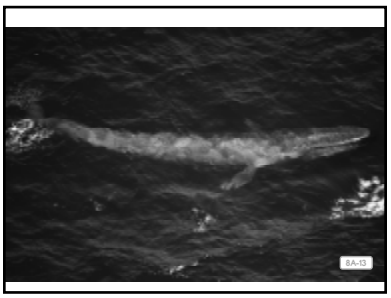
Lobsters are carnivores; they eat fish, worms, and other shellfish. I'm going to move out of the way of this lobster before I get squeezed!

Show Image 8A-11: Hammerhead shark

Looks like I moved right into the path of another predator. This is a hammerhead shark. If you take a look, you can see how the hammerhead got its name. Its head is very thick, and it looks like a hammer from above, with an eye and a nostril on each end.
The hammerhead shark is a large fish, growing up to twenty feet long and weighing over five hundred pounds. That's about the same weight as ten first graders! Hammerheads like to live in warm waters, so they are mostly found near the coast where the waters are shallow and warmer.

Show Image 8A-12: Shark swimming near reef

Sharks are carnivores. The hammerhead's favorite food is a fish called a ray, but it also likes to eat octopus, lobster, crab, and fish, including other sharks. Most sharks have smooth and slender bodies, which help them to swim fast. Their mouths are full of sharp teeth to help them catch their prey.



Show Image 8A-13: Blue whale

Let's go back up to the surface. There's a sea animal I'm sure you'll want to see, but we have to travel farther out to sea away from the coral reef and into deeper water to see it. This amazing creature is the biggest animal in the world. It's a blue whale! Blue whales have blue-gray skin and are covered in a layer of blubber that helps keep them warm in the frigid ocean depths. *What is blubber?* (Blubber is a layer of fat that some animals have under their skin that keeps them warm.) Blue whales are so big that they can weigh as much as twenty-five elephants! In fact, blue whales are the biggest animals known to have lived on earth—even bigger than dinosaurs!

Show Image 8A-14: Blue whale blowhole

The blue whale spends all its time living in deep water, but unlike fish, it can't breathe underwater because it does not have gills. It needs to breathe air just like we do. The blue whale can hold its breath and stay under the water for as long as thirty minutes before eventually coming up for air. It breathes using blowholes on the top of its head. Sometimes, when it does come up for air, it breathes out a huge fountain of water from the blowholes.

Blue whales are carnivores. They eat lots of food to build up their blubber during the summer months when food is easy to find. Blue whales eat teeny, tiny sea creatures called **plankton**. The plankton that blue whales eat are small shrimp-like shellfish that are about the size of your little finger. It's incredible to think that the biggest animal on Earth eats one of the smallest animals on Earth.

The ocean is so huge and deep that we could spend all year looking at the plants and animals that live there and still not see them all. In fact, there are still many living things in the ocean that people—and adventurous rats—have not even discovered yet. I hope you've enjoyed learning about the animals in this saltwater habitat in the Pacific Ocean. We still have one more stop to make on our worldwide tour of habitats. I'll see you next time!

Support

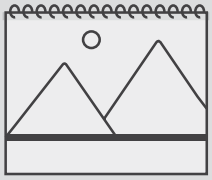
Remind students of the other animals they have learned about that have blubber: walruses, seals, and polar bears.

COMPREHENSION QUESTIONS (10 MIN.)

Check for Understanding

Compare/Contrast: How is a saltwater habitat different from a freshwater habitat? *(The water in a saltwater habitat contains salt, which is not suitable for people or animals to drink; saltwater habitats are in oceans, which are very large bodies of water, whereas freshwater habitats are in much smaller bodies of water like ponds, lakes, and rivers.)*

Flip Book 8A-9



1. **Inferential.** How would you describe the ocean floor? Is it flat and level, or does it go up and down? *(It goes up and down, or slopes, just like land outside of the oceans; it has mountains and valleys.*)
2. **Inferential.** Describe the types of animals that live in this saltwater habitat called the Pacific Ocean. *(starfish: shaped like a star; hammerhead shark: head shaped like a hammer; lobster: lives on the ocean floor; etc.)* Do the animals that you learned about that live in the Arctic Ocean—walruses and polar bears—also live in the Pacific Ocean? *(no)* Why not? *(The climate and other conditions are different.)*
3. **Inferential.** What are some of the ways that animals have adapted to he Pacific Ocean saltwater habitat? *(large mouths and sharp teeth to catch prey; feelers to find food in the dark; special chemicals in their bodies to make light; etc.)*

Show Image 8A-9: Starfish on ocean floor

4. **Literal.** What animal is this? *(starfish)* Starfish eat fish, snails, clams, oysters, and crabs. Is the starfish a carnivore, omnivore, or herbivore? *(carnivore)* You heard about starfish and regeneration. What does regeneration mean? *(It can regrow parts of its body.)*
5. **Evaluative.** How is the Pacific Ocean saltwater habitat similar to the Arctic Ocean saltwater habitat? *(They are both saltwater habitats.)* How are the two saltwater habitats different? *(The Arctic Ocean is too cold for many creatures to live in for very long and is covered with a lot of ice whereas the Pacific Ocean has many animals; the floor of the Pacific Ocean is in total darkness so animals have had to adapt to living there.)*

ENGLISH LANGUAGE LEARNERS

Reading

Reading/Viewing Closely

Beginning
Prompt students to recall words and phrases related to each saltwater habitat.

Intermediate
Provide moderate support in eliciting phrases and ideas with greater details related to each saltwater habitat.

Advanced/ Advanced High
Provide minimal support in eliciting key details related to each saltwater habitat.

ELPS 1.E; ELPS 4.G; ELPS 4.I

WORD WORK: SHALLOW (5 MIN.)

1. In the Read-Aloud today you heard, "The conditions under the water are very different in various places. Some parts are deep, and some are shallow; there are cool parts, and there are warm parts; some are dark, and some are full of light."
2. Say the word *shallow* with me.
3. If something is shallow, it is not deep.
4. The water in the mud puddle is shallow.
5. Can you think of places where you have seen shallow water? Try to use the word shallow when you talk about it. [Ask two or three students. If necessary guide and/or rephrase students' answers, "The water in the _____ is shallow."]
6. What's the word we've been talking about?

Use an Antonyms activity for follow-up. The opposite, or antonym, of *shallow* is *deep*. Listen to the following examples. If I describe something that is shallow, say "That is shallow." If I describe something that is deep, say "That is deep."

- a cup of water *(That is shallow.)*
- measuring down to the bottom of the ocean *(That is deep.)*
- a baby pool *(That is shallow.)*
- a bathtub *(That is shallow.)*
- digging down to the inner core of the earth *(That is deep.)*

Lesson 8: Animals of the Saltwater Habitat

Application

20M

Writing: Students will write about characteristics of the saltwater habitat.

TEKS 1.12.B

HABITAT JOURNAL

- Direct students' attention to Habitat Poster 7 that you displayed and note it is a picture of a saltwater habitat.
- Engage students in a discussion of the saltwater habitat, using the characteristic cards and the following as a guide:
  - Climate: varies depending on where on the earth it is
  - Water: all saltwater, which is not suitable for drinking
  - Ground: land covered with water and slopes downward from the shore; ocean floor, which has mountains and valleys
  - Plants: different kinds [not specified in Read-Aloud, just broad category]
  - Animals: turtles, jellyfish, crabs, devilfish, corals, octopi, starfish, lobsters, sharks, blue whales, plankton
  - Adaptations: animals able to live in total darkness on the ocean floor; animals have feelers on their bodies to feel for food; some animals make their own light with special chemicals in their bodies; starfish can regenerate body parts and are covered in tiny, hard bumps; lobsters have hard shells and antennae for feeling along the ocean floor; blue whales have blubber for living in cold, deep water and blowholes for coming to the surface to breathe
- Have students turn to the next blank page in their Habitat Journal and write "Saltwater" at the top. You may wish to write "Saltwater" on the board or chart paper for them to copy.

TEKS 1.12.B Dictate or compose informational texts, including procedural texts.

- Ask students to write 1 or 2 sentences about what they learned about the saltwater habitat. Then ask students to draw pictures to go with their sentences.
- Circulate around the room, offering guidance and support as needed.
- When students finish their saltwater habitat journal entries, put them in small groups.
- In small groups, have students discuss which habitat is the most interesting and why. Encourage them to use evidence from their Habitat Journal and from Read-Alouds to support their opinions.

End Lesson

Challenge

Have students write three or more sentences about the saltwater habitat.

Support

Have students draw first, then describe their drawings as a basis for dictating a sentence.

ENGLISH LANGUAGE LEARNERS

Language

Supporting Opinions

Beginning
Provide students with a simple sentence frame and a word bank (e.g., "I think the _____ habitat is the most interesting because . . ." and words like *adapted*, *different*, *unique*, *animals*, *climate*, *water*.).

Intermediate
Provide students with an open sentence frame (e.g., "I think the _____ habitat is the most interesting because . . .").

Advanced/ Advanced High
Provide minimal support for open responses and encourage students to use detailed sentences.

ELPS 1.E; ELPS 3.G

LESSON

9

ANIMALS AND HABITATS: THE WORLD WE SHARE

Habitat Destruction and Endangered Species

PRIMARY FOCUS OF LESSON

Speaking and Listening

Students will describe animal adaptations.

TEKS 1.1.C; TEKS 1.6.D

Reading

Students will explain why and how habitat destruction can cause extinction.

TEKS 1.6.E; TEKS 1.6.G; TEKS 1.6.H

Language

Students will demonstrate understanding of the Tier 2 word *destroy*.

TEKS 1.3.B

Reading

Students will create a graphic organizer to record information about endangered species.

TEKS 1.7.C; TEKS 1.7.E

FORMATIVE ASSESSMENT

Activity Page 9.1

Idea Web Students will create an idea web about endangered species.

TEKS 1.7.C; TEKS 1.7.E

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.D** Create mental images to deepen understanding with adult assistance; **TEKS 1.6.E** Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.6.H** Synthesize information to create new understanding with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings; **TEKS 1.7.C** Use text evidence to support an appropriate response; **TEKS 1.7.E** Interact with sources in meaningful ways such as illustrating or writing.

LESSON AT A GLANCE

	Grouping	Time	Materials
Introducing the Read-Aloud (10 min.)			
What Have We Already Learned?	Whole Group	10 min.	
Essential Background Information or Terms			
Read-Aloud (30 min.)			
Purpose for Listening	Whole Group	30 min.	❏ U.S. map ❏ Flip Book: 9A-1–9A-8
"Habitat Destruction and Endangered Species"			
Comprehension Questions			
Word Work: *Destroy*			
This is a good opportunity to take a break.			
Application (20 min.)			
Idea Web: Endangered Species	Whole Group/ Partner	20 min.	❏ Activity Page 9.1 ❏ board/chart paper (optional)

ADVANCE PREPARATION

Application

- Prepare the beginning of an idea web on the board or chart paper. In the middle of the board or chart paper, draw a large hexagon and write *Endangered Species* in it.

Note to Teacher

There are many endangered species on the earth but in this lesson, students will learn specifically about how the bald eagle was saved. Be sure students understand that there are many endangered species and that the bald eagle's challenges are just one example of struggles that many endangered species experience, not all of which are saved.

Universal Access

- You may wish to gather images of a variety of endangered and extinct species to share with students.
- You may also wish to gather images and examples of habitat destruction.

CORE VOCABULARY

destroy, v. to completely ruin
Example: It would destroy the forest if someone cut down all the trees.
Variation(s): destroys, destroyed, destroying

endanger, v. to put in a dangerous situation
Example: A forest fire would endanger all of the animals that make the forest their home.
Variation(s): endangers, endangered, endangering

endangered species, n. a group of living things that could die out completely
Example: The bald eagle used to be an endangered species because there were very few alive and people were destroying its habitat.
Variation(s): none

extinction, n. the end of a species because all its members have died
Example: Dinosaurs once lived on earth but faced extinction because of changes to their habitat.
Variation(s): extinct, **adj.**

Vocabulary Chart for "Habitat Destruction and Endangered Species"

Type	Tier 3 Domain-Specific Words	Tier 2 General Academic Words	Tier 1 Everyday Speech Words
Vocabulary	extinction *(extinción)*	destroy *(destruir)* endanger	
Multiple Meaning			
Sayings and Phrases	final installment believe it or not make way for to tell the truth home, sweet home endangered species		

Start Lesson

Lesson 9: Habitat Destruction and Endangered Species

Introducing the Read-Aloud

10M

Speaking and Listening: Students will describe animal adaptations.

TEKS 1.1.C; TEKS 1.6.D

WHAT HAVE WE ALREADY LEARNED? (5 MIN.)

Check for Understanding

Vocabulary: What does it mean if an animal or plant is adapted to its habitat? *(the animal or plant is able to live and survive in that habitat; it can survive in the climate, with the food and water sources, or lack thereof, and can find shelter)*

- Tell students that it takes plants and animals a long time to adapt to their environment.
- Have them name several animals or plants they have learned about in the Read-Alouds and describe how they are well-adapted to their habitat and surroundings. *(Answers may vary, but should include appropriate descriptions of adaptations.)*

TEKS 1.1.C Share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language; **TEKS 1.6.D** Create mental images to deepen understanding with adult assistance.

ESSENTIAL BACKGROUND INFORMATION OR TERMS (5 MIN.)

- Tell students that the next Read-Aloud is about what happens to living things when their habitats change.
- Ask them what they think would happen to an animal or plant if its surroundings changed. *(Answers may vary.)*
- Tell them to imagine, for example, what would happen if it got hot in the Arctic and all the snow and ice melted. Ask them the following follow-up questions:
  - Would the muskox's heavy fur coat help it in the hot weather?
  - Would the Arctic hare's white coat still help it blend in?
  - Would walruses and seals still have a use for all that blubber?
  - Blubber, heavy fur, and camouflage are all ways that Arctic animals have adapted to cold weather. Could any of these adaptations make it hard to live in the new, hot weather? Why or why not?

ENGLISH LANGUAGE LEARNERS

Language

Offering Opinions

Beginning
Provide students with sentence frames using a small set of learned phrases (e.g., "I think it would be hard for animals to live there.").

Intermediate
Provide students with sentence frames using an expanded set of learned phrases (e.g., "I think animals would . . .")

Advanced/ Advanced High
Provide minimal support and guidance for open responses.

ELPS 1.E; ELPS 3.G

Lesson 9: Habitat Destruction and Endangered Species

Read-Aloud

30M

Reading: Students will explain why and how habitat destruction can cause extinction.

TEKS 1.6.E; TEKS 1.6.G; TEKS 1.6.H

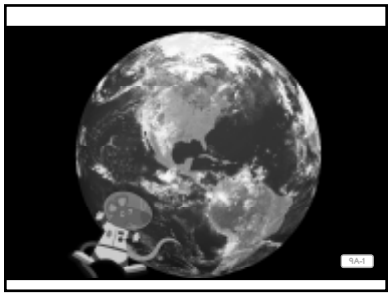
Language: Students will demonstrate understanding of the Tier 2 word *destroy*.

TEKS 1.3.B

PURPOSE FOR LISTENING

- Tell students to listen carefully to find out how habitat changes have affected the bald eagle.

"HABITAT DESTRUCTION AND ENDANGERED SPECIES" (15 MIN.)



Show Image 9A-1: Rattenborough in astronaut suit

Rattenborough here, delivering the final installment of our exciting habitats adventure. We have traveled all around the world, looking at some of the different habitats where plants and animals live. A lot of those habitats, such as the Arctic and the Sonoran Desert, have climates to which you and I would have a tough time adapting. *Remember that* climate *means the type of weather a place has over a long period of time. How would you have a tough time adapting to the Arctic? To the desert?* As we've seen, however, there are different living things in each habitat we have visited.

Because some living things are so well adapted to the specific conditions of their specific habitats, any large change in their surroundings could make it hard for them to survive. Just think what would happen if it got even a little colder in the desert: some of those animals who are so good at keeping cool wouldn't know how to stay warm. Or what if it stopped raining in the rainforest? What would happen to all of those plants that need lots of water? Or what if something happened to disrupt the food chain of a certain animal? If that animal relied on a certain type of plant or animal to eat, and that food source was taken out of the habitat, that animal would no longer have food it needs to survive.

TEKS 1.6.E Make connections to personal experiences, ideas in other texts, and society with adult assistance; **TEKS 1.6.G** Evaluate details to determine what is most important with adult assistance; **TEKS 1.6.H** Synthesize information to create new understanding with adult assistance; **TEKS 1.3.B** Use illustrations and texts the student is able to read or hear to learn or clarify word meanings.

Sometimes habitats change because the temperature or the weather changes, but unfortunately, people often affect habitats as well. Whether they realize it or not, people can make it very difficult for plants and animals to survive.

Show Image 9A-2: Humans affecting the earth

From cutting down trees or starting forest fires, to dumping dangerous waste and chemicals into our rivers—people's actions can **endanger** lots of species of plants and animals. *To endanger plants and animals means to put them in a dangerous situation. So, people's actions can harm, or even kill, lots of plants and animals.*

Sometimes people's actions **destroy** entire habitats. *To destroy something means to completely ruin it.* For example, someone walking in a forest might light a match and drop it, and then the whole forest might burn. *Here the word* match *means a thin piece of wood with a special tip that produces a fire.* Even if they were not harmed by the fire itself, many animals that used to live in trees would no longer have a place to live. When they lose their homes, animals find it much harder to continue to live in a particular habitat. If they can't find new places to live, the animals will not survive. After a while, there will be fewer and fewer of these kinds of animals alive in the wild. When that happens, we say they have become an **endangered species**. *A species is a group of living things that have similar characteristics. So an endangered species is a group of living things that could die out completely.* We say these species are endangered for a very good reason: they are in danger of **extinction**. Extinction *means the end of a species because all its members have died.* An animal or plant that is extinct has died out and does not exist anywhere in the world anymore.

Support

The word *match* can also refer to a contest between two or more players or teams. For additional support, refer to Poster 5M in the flip book for multiple meanings of *match*.

Challenge

Ask students what they learned about the reason some scientists think dinosaurs are extinct.

Check for Understanding

Recall: What did you learn about in *The History of the Earth* that are extinct? *(dinosaurs)*

Show Image 9A-3: Bald eagle in tree

I'm on a mission to tell you about one animal that can teach us a lot about endangered species and how to save them. I have come here to Washington State, in the northwestern part of the United States, to show you an amazing bird called a bald eagle. *[Point to Washington state on a U.S. map.]* Look up at that tree there, and you will see one of these eagles perched on the very top branch. You may recognize the bald eagle because it is one of the national symbols of our country. Drawings of the eagle appear as a symbol on American money and in many other places. Believe it or not, the bald eagle was almost extinct in the United States several years ago! If that had happened, there would be no bald eagles still living. So, we're grateful to be able to spot this bald eagle today.

Show Image 9A-4: Bald eagle in flight

Bald eagles are scavengers, but they also eat rats and other small animals, so I'd better stay out of the way. *What is a scavenger?* (an animal that eats meat and waste left by other animals) I think that the bald eagle looks very grand, don't you? *This statement means the bald eagle looks impressive or is admired because of its size and importance.* It is covered with dark brown feathers, and its head and tail are both white. Bald eagles are some of the largest birds living in this country. They can grow up to three feet tall, which is almost as tall as a first grader! Wow—this one has just taken off into the air, and you can see that it has huge wings. In fact, their wings can spread to about eight feet in length. While this eagle is flying around, let me tell you more about these special birds.

Show Image 9A-5: Housing development

There used to be thousands of bald eagles in the United States. But farmers started to hunt them because they thought the eagles were killing their farm animals. Eventually, people started to cut down the trees in which the eagles built their nests to make way for roads, houses, and shopping malls.

Do you think it caused problems when people cut down trees that the eagles used to build their nests in? Why or why not? With fewer places for them to make their homes, eagles found it harder and harder to survive, and they started to die out. Soon, there weren't very many bald eagles left in the whole United States. People started to notice that there were fewer and fewer bald eagles, and they decided to find out why.

Check for Understanding

Offering Opinions: Why do you think the eagles were dying out? *(Answers may vary, but should include the idea that there weren't many places for bald eagles to make their homes so they couldn't survive.)*

Scientists began to study the eagles, and they discovered two things. *When scientists discover things, they learn new information.* The first was that a lot of eagles didn't have enough room to build their nests. Eagles do not like to live in the same area as other eagles, so they build their nests far away from each other. They like places that are very peaceful, and they need huge, strong trees that can hold nests big enough for the adults and their babies to live.

The scientists discovered that the eagles didn't have enough room in the areas where they had been living because people were chopping down trees in order to build more roads and buildings. People were destroying the bald eagles' habitat.

Show Image 9A-6: Farmers spraying pesticide

The other thing that scientists found out was that something bad was getting into the bald eagles' food supply. Farmers sometimes use chemicals to keep bugs from eating their crops. One chemical, though, made the eggs that the eagles laid much thinner and easier to break. Because of this, many eagle eggs were breaking before they could hatch. No one knew before then that the chemical was hurting the eagles, but it was.

Show Image 9A-7: Bald eagle eggs

Luckily, the scientists found out which chemical was harming the eagles' eggs. Using the scientists' information, the United States government made laws to protect the bald eagle and its habitat so that the eagles' food no longer contained the harmful chemical. Thanks to these laws, more eagles were born, and the numbers of eagles started to rise again. *What two things were hurting bald eagles?* Now, bald eagles have made an amazing comeback *or are once again a thriving species*, but people must always be careful to protect their habitat.

Show Image 9A-8: Bald eagle nest

This bald eagle has returned to its nest up in that tree. Maybe it has some chicks up there that it needs to feed, or maybe it's just trying to keep warm. It is pretty chilly!

And speaking of returning to the nest, I'm afraid it's time for me to go home now. I've really enjoyed our trip around the world's habitats, and I hope that you have, too! Mrs. Rattenborough and my kids miss me, and to tell the truth, it's been a dangerous expedition for me. I'll be glad to get out of danger and into the safety of my lovely home under the steps. Home, sweet home—or maybe I should say, "Habitat, sweet habitat!"

COMPREHENSION QUESTIONS (10 MIN.)

Check for Understanding

Vocabulary: What is an endangered species? *(a group of living things that could die out completely)* What is extinction? *(the end of a species because all of its members have died)*

1. **Inferential.** What can cause a habitat to change? *(changes in temperature, changes in weather, people's actions)*
   - **Inferential.** Why do changes in an animal's habitat make it hard for the animals to survive? *(Animals are already so well adapted to the habitat they live in. They can't adapt or make changes to the new conditions of their habitat.)*
2. **Inferential.** How do people affect habitats? *(People can hurt habitats by building cities and roads, cutting down trees, etc. People can protect habitats by making careful laws about where to build, and by avoiding chemicals that harm animals like the bald eagle.)*
3. **Inferential.** What reasons are given in the Read-Aloud to support the statement that eagles were becoming endangered? *(Eagles didn't have enough space to build their nests, and a chemical in their food supply was making their eggs very breakable.)*
4. **Evaluative.** Why it is important to protect animals' habitats? *(Answers may vary.)*

ENGLISH LANGUAGE LEARNERS

Language

Support Opinions

Beginning
Provide students with a simple sentence frame and a word bank (e.g., "It is important to protect animals' habitats because . . ." and words like *survive*, *adapted*, *endangered species*, *save*, *extinct*.).

Intermediate
Provide students with an open sentence frame (e.g., "It is important to protect animals' habitats because . . .").

Advanced/ Advanced High
Provide minimal support for open responses and encourage students to use detailed sentences.

ELPS 1.E; ELPS 3.G

WORD WORK: DESTROY (5 MIN.)

1. In the Read-Aloud today you heard, "Sometimes people's actions destroy entire habitats."
2. Say the word *destroy* with me.
3. To destroy something means to completely ruin it.
4. If I built a big tower of blocks, I could destroy it by knocking it over.
5. What are some ways you can help to NOT destroy a habitat? Try to use the word *destroy* when you talk about it. [Ask two or three students. If necessary, guide and/or rephrase students' responses: "By doing _____, I will not destroy a habitat."]
6. What's the word we've been talking about?

Use a Making Choices activity for follow-up. I am going to give you several examples of people doing things. If the action describes someone destroying something, say, "That would destroy _____." If it does not, say "That would not destroy _____."

- tearing up your homework *(That would destroy my homework.)*
- coloring in a coloring book *(That would not destroy the coloring book.)*
- shaking hands with a new friend *(That would not destroy our hands.)*
- throwing a glass on the floor *(That would destroy the glass.)*
- throwing a sandwich into a puddle *(That would destroy the sandwich.)*

Lesson 9: Habitat Destruction and Endangered Species

Application

20M

Reading: Students will create a graphic organizer to record information about endangered species.

TEKS 1.7.C; TEKS 1.7.E

IDEA WEB: ENDANGERED SPECIES

- Remind students an idea web is a way to organize information about a certain topic. The topic is listed in the middle of the idea web. Additional information about the topic is added using smaller circles connected to the main circle.
- Remind students that they created an idea web about minerals in *The History of the Earth*.
- Have students turn to Activity Page 9.1 and also direct their attention to the idea web you started on the board or chart paper. Explain that the middle of this idea web says *Endangered Species*.

Activity Page 9.1

Check for Understanding

Use Evidence: Explain to students that they will be writing an opinion about whether or not endangered species should be protected.

Tell students that they need to use evidence from the Read-Alouds and the world around them to support their opinion.

Explain to students that their first sentence should state their opinion: "Endangered species should be protected around the world." Their sentences that follow should support and give evidence for their opinion. "The endangered species should be protected because they are important to their habitats. Other plants and animals depend on them."

On the back of Activity Page 9.1, have students write their opinion about whether or not endangered species should be protected.

TEKS 1.7.C Use text evidence to support an appropriate response; **TEKS 1.7.E** Interact with sources in meaningful ways such as illustrating or writing.

- Explain that students will work with a partner to create an idea web with information they have learned about endangered species.
- Model for students how to add an idea to the idea web. Draw a line from the middle circle to a blank space. Then add a new circle at the end of the line and write the new idea in that circle.
- Have students add the new idea to Activity Page 9.1.
- Then, pair students to add more information to the idea web on Activity Page 9.1.
- When students have completed their webs, allow pairs to share their webs. Have students discuss similarities and differences between webs.

End Lesson

ENGLISH LANGUAGE LEARNERS

Writing

Writing

Beginning
Have students dictate facts and ideas about habitats using familiar vocabulary to a teacher to be recorded on the idea web.

Intermediate
Have students dictate facts and ideas about habitats using familiar vocabulary to a peer to be recorded on the idea web.

Advanced/ Advanced High
Have students write facts and ideas using familiar vocabulary on the idea web.

ELPS 5.F

Grade 1 | Knowledge 7

Domain Review

NOTE TO TEACHER

You should spend one day reviewing and reinforcing the material in this domain. You may have students do any combination of the activities provided, in either whole-group or small-group settings.

CORE CONTENT OBJECTIVES ADDRESSED IN THIS DOMAIN

Students will:

- Explain what a habitat is
- Explain why living things live in habitats to which they are particularly suited
- Identify characteristics of the Arctic tundra habitat
- Identify characteristics of the Arctic Ocean habitat
- Explain how Arctic animals have adapted to Arctic habitats
- Identify characteristics of the desert habitat
- Explain how desert animals have adapted to the desert habitat
- Classify animals based on the types of foods they eat (herbivore, carnivore, omnivore)
- Identify characteristics of the grassland habitat
- Explain how grassland animals have adapted to the grassland habitat
- Identify characteristics of the temperate deciduous forest habitat
- Explain how temperate deciduous forest animals have adapted to the temperate deciduous forest habitat
- Identify characteristics of the tropical rainforest habitat
- Explain how tropical rainforest animals have adapted to the tropical rainforest habitat
- Identify characteristics of the freshwater habitat
- Explain that salt water covers most of the earth and is found in oceans
- Describe the landscape of the ocean floor

- Describe ocean life as diverse
- Explain why and how habitat destruction can cause extinction
- Explain why the bald eagle is no longer an endangered species

REVIEW ACTIVITIES

Image Review

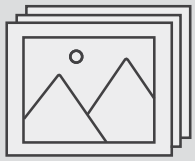
- Show the Flip Book images from any Read-Aloud again, and have students discuss the Read-Aloud using the images.

Image Card Review

Materials: Image Cards 12–26

- In your hand, hold Image Cards 16–26 fanned out like a deck of cards.
- Ask a student to choose a card but not show it to anyone else in the class. The student must then perform an action or give a clue about the picture they are holding.
- For example, for the hammerhead shark, the student may describe the habitat the hammerhead shark lives in, what it eats, and what it looks like. The rest of the class will guess what animal or plant is being described. Proceed to another card when the correct answer has been given.

Image Cards 12–26



Domain-Related Trade Book or Student Choice

Materials: Trade book

- Read a trade book to review a particular habitat.
- You may also choose to have the students select a Read-Aloud to be heard again.

Key Vocabulary Brainstorming

Materials: board/chart paper

- Give students a key domain concept or vocabulary word such as *destroy*.
- Have them brainstorm everything that comes to mind when they hear the word. Record their responses on the board or chart paper for reference.

Class Book: Habitats

Materials: paper, drawing tools

- Tell the class or a group of students that they are going to make a class book to help them remember what they have learned in this domain. Have the students brainstorm important information about the last two habitats they have just learned about (freshwater habitat and saltwater habitat). Then have them brainstorm important information about habitat destruction. Have each student choose one idea to draw a picture of and then write a caption for the picture. Bind the pages to make a book to put in the class library for students to read again and again.

Habitats

- Show students the Habitat Posters for each of the habitats they have learned about.
- Ask students to describe the characteristics of animals that live there. Extend this by asking students what would happen if a specific animal then had to move to another environment.
- As a challenge, you may wish to do the same activity with examples of other habitats not included in the domain.

The Oceans

Materials: World map or globe

- Help students locate and identify the Arctic, Pacific, Atlantic, Indian, and Southern Oceans.
- Remind students that water covers most of Earth.
- Ask students to identify whether the water in oceans is salt water or fresh water.

Grade 1 | Knowledge 7

Domain Assessment

This domain assessment evaluates each student's retention of domain and academic vocabulary words and the core content targeted in *Animals and Habitats: The World We Share*. The results should guide review and remediation the following day.

There are two parts to this assessment. You may choose to do the parts in more than one sitting if you feel this is more appropriate for your students. Part I (vocabulary assessment) is divided into two sections: the first assesses domain-related vocabulary, and the second assesses academic vocabulary. Part II of the assessment address the core content targeted in *Animals and Habitats: The World We Share*.

PART I TEKS 1.7.F

Activity Page DA.1

Directions: I am going to ask a question using a word you have heard in the Read-Alouds and the domain. First I will say the word and then ask a question about it. If the answer to the question is *yes*, circle the thumbs up. If the answer to the question is *no*, circle the thumbs down. I will ask each question two times.

1. **Habitat:** Is the ocean the deer's natural habitat? *(thumbs-down)*
2. **Shelter:** During a thunderstorm, can sitting in a car provide shelter from the storm? *(thumbs-up)*
3. **Scavenger:** Are rats scavengers that will eat leftover parts of food left by other animals? *(thumbs-up)*
4. **Tundra:** Is the tundra a very hot and dry habitat? *(thumbs-down)*
5. **Carnivore:** Does a carnivore eat only other animals? *(thumbs-up)*
6. **Herbivore:** Does an herbivore eat both plants and other animals? *(thumbs-down)*
7. **Omnivore:** Does an omnivore eat only plants? *(thumbs-down)*
8. **Climate:** Is the climate of a place the type of weather it has over a long period of time? *(thumbs-up)*
9. **Temperate:** Is a temperate climate one that is not extremely hot or extremely cold? *(thumbs-up)*
10. **Fresh water:** Is fresh water the type of water found in oceans that you should not drink? *(thumbs-down)*

Directions: I am going to ask more questions using other words you have heard and practiced. First I will say the word and then ask a question about it. If the answer to the question is *yes*, circle the thumbs up. If the answer to the question is *no*, circle the thumbs down. I will ask each question two times.

11. **Camouflage:** Can I camouflage a piece of bright white paper by placing it on the grass? *(thumbs-down)*
12. **Adapted:** Have animals in the Arctic adapted to their habitat over time by developing ways to stay warm? *(thumbs-up)*
13. **Canopy:** Can you walk through the forest on top of the canopy created by the trees? *(thumbs-down)*
14. **Shallow:** When someone is just learning to swim, should they swim in the shallow water where it is not over their head? *(thumbs-up)*
15. **Destroy:** Would cutting down all the trees destroy a forest? *(thumbs-up)*

PART II (ACTIVITY PAGE DA-2) TEKS 1.6.G

Activity Page DA.2

Directions: I am going to read a statement about animals and their habitats. First, you will listen to the statement. Next, you will look at the pictures in the row and circle the correct answer(s).

1. Circle the three items that animals need in a habitat. *(food, water, shelter)*
2. Circle the foods that omnivores eat. *(crocodile, beans, grass)*
3. Circle the animal that is a predator. Put a check mark next to its prey. *(lion-circle, zebra-check mark)*
4. Circle the animal or animals that are carnivores. *(coyote, Arctic fox)*
5. Circle the animal or animals that are herbivores. *(Arctic hare, caribou)*
6. Circle the rainforest habitat. *(fourth picture)*
7. Circle the desert habitat. *(first picture)*
8. Circle the savanna habitat. *(third picture)*

Directions: Now I am going to read you some questions about animals and habitats. If the answer to the question is *yes*, circle the thumbs up. If the answer to the question is *no*, circle the thumbs down. I will ask each question two times.

9. When an animal is extinct, does that mean there are lots of them all over the world? *(thumbs-down)*
10. Would animals and plants that live in a freshwater habitat survive in a saltwater habitat? *(thumbs-down)*
11. Is it true that the bald eagle is no longer an endangered species? *(thumbs-up)*

Grade 1 | Knowledge 7

Culminating Activities

NOTE TO TEACHER

Please use these final two days to address class results of the Domain Assessment. We suggest you begin with the whole-class Read-Aloud activity to reinforce domain content. Based on the results of the Domain Assessment and students' formative assessments, you may wish to use the remaining time to provide remediation opportunities that target specific areas of weakness for individual students, small groups, or the whole class.

Alternatively, you may also choose to use this class time to extend or enrich students' experience with domain knowledge. A number of enrichment activities are provided in order to provide students with opportunities to enliven their experiences with domain concepts.

READ-ALOUD

- Tell students that today they will hear about an animal they have not yet discussed. Have students name animals it could be.
- Tell students the animal they will hear about is the slug.
- Explain that some people have strong feelings about slugs. Ask students to give a thumbs up or thumbs down to show how they feel about slugs.
- Tell students to listen to learn about the slug and its habitat and to see if this book changes their feelings about slugs in any way.
- Read the trade book *The Slug* by Elise Gravel.

1. Ask students to name some facts about slugs based on the text. *(They are mollusks, they have retractable tentacles, different kinds of slugs live on water or on land, etc.)*
2. Ask students to describe the land slug's habitat. *(It must live somewhere humid. That means the air is moist rather than dry.*
3. Have students pick a page of the text and compare the message conveyed by the page's words with the message conveyed by the page's illustrations.
4. Ask students to work with a partner to summarize the text. They should include the central idea and relevant details.

5. Ask students to consider whether their feelings about slugs have changed based on what they have learned about these animals. If their feelings have changed, have them explain the reason for that change.

REMEDIATION

You may choose to regroup students according to particular area of weakness, as indicated from Domain Assessment results.

Remediation opportunities include:

- targeting Review Activities
- revisiting lesson Applications
- rereading and discussing select Read-Alouds
- using the corresponding activities in the Language Studio

ENRICHMENT

Fresh Water vs. Salt Water

Materials: Clear container; water from a pond or other freshwater environment; salt; drinking water; two small drinking cups per student

Note: Do not allow students to drink the water from a pond or other freshwater environment you have brought in. Instead, have them drink the drinking water.

- Bring to class a clear container of water scooped from a pond, or other water that has been sitting outdoors in the open for at least two weeks.
- Use magnifying glasses, microscopes, or an overhead projector to allow students to observe some aquatic organisms.
- Then, mix a half-teaspoon of salt with one cup of water to simulate the salinity of ocean water.
- Pour a small amount of salt water into a drinking cup for a few students.
- Pour drinking water into the other drinking cup for each student.
- Consistent with your school's policies, have students dip a finger in the salt water and taste the water on their finger. Also have them take a small sip of the drinking water.

- Have them describe the difference in taste between salt water and fresh water.
- Explain that drinking large amounts of salt water is dangerous to the human body.

Oceans: Both Fun and Useful

Materials: World map

- Have students identify the oceans on a world map.
- Have them brainstorm ways that we use the ocean for fun and how we use it to help us get work done.

Ocean Habitat Mural

Materials: Long piece of blue paper; ocean pictures; scissors; drawing materials; glue or tape

- Have students make an ocean habitat mural using resources available in the classroom, such as ocean pictures from magazines, paints, and other art supplies.
- Using a long piece of blue paper, students may draw, paint, or color their part of the ocean to create a class mural. Instruct students to write or dictate a sentence under their section describing their part of the ocean.
- After it is finished, post the mural on the wall and have students act as docents to explain the ocean picture.
- Share this picture with other Grade 1 classrooms or with other classes in the school.
- Extend this activity by drawing other habitats and placing pictures of animals in the correct habitat.

Habitat Destruction

Materials: paper, writing tools

- As a writing activity, ask students to think about what happens when a habitat is destroyed.
- Also, have students think about what they can do to help protect the environment and the habitat of animals. You may wish to review the idea webs students created in Lesson 9 to give students a concrete example.

Image Cards 1–26

Idea Webs

Materials: Habitat Posters 1–7, Image Cards 1–26, paper, writing tools

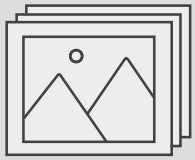
- Review the habitats studied using the Habitat Posters and Image Cards

- Have students work in pairs, small groups, or independently to create idea webs for individual habitats.
- Additionally, you may wish to have students work together as a whole class to create a large idea web for habitats in general.

Venn Diagrams

Materials: Habitat Posters 1–7, Image Cards 1–26, Venn diagrams, writing tools

Image Cards 1–26

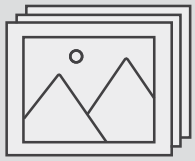


- Have students select two habitats to identify similarities and differences between using a 2-circle Venn diagram.
- You may wish to have students review their Habitat Journals, the Habitat Posters, and Image Cards to help them gather information.
- You may wish to have students work in pairs or small groups to complete the Venn diagram.

Food Chain

Materials: Image Cards 12–26, paper, drawing tools

Image Cards 12–26



- Divide students into four groups, one for each of the following habitats: forest, rainforest, freshwater habitat, saltwater habitat.
- Give students the Image Cards associated with their assigned habitat.
- Have students use the Image Cards to create a food chain (or more than one, if it exists) within that habitat. Students may find some food sources are missing from Image Cards. Students should create cards for those food sources to complete the food chain.
- Have each group present their food chain(s) to the class. Have students explain the pieces they added, as needed.
- After each group presents, remove one of the cards and discuss what they think will happen to the other plant(s) and animal(s) in the food chain. *(Answers may vary, but should include that living things will all be impacted because if one living thing loses a food source, it can't survive, meaning it can't serve as a food source for another living thing.)*
- You may wish to use the follow to promote a discussion:
  - Will all of them die, or could they find another source of food?
  - What else do could those animals could eat? For example, if the zebra is removed, what else do they think the lion could eat?
  - What happens if there are no replacements? Can the animals survive without anything to eat?

Habitat Journal

Materials: Habitat Journal, drawing and writing tools

- Review all journal entries by having students read their sentences about each habitat and describe their drawings.
- Have students add additional sentences about the last four habitats and add more details to their drawings.
- With a partner or in small groups, have students create sentences describing why each habitat is unique.

Teacher Resources

Grade 1	Knowledge 7

Teacher Guide

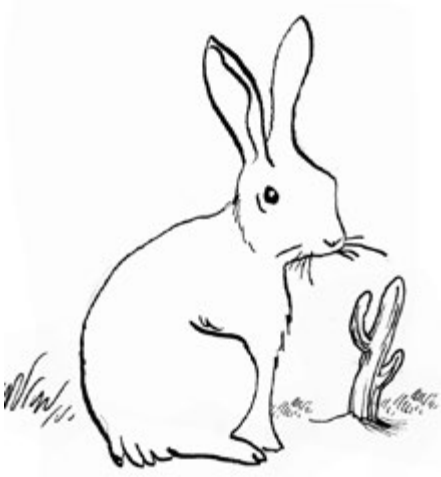
Grade 1 | Knowledge 7

Teacher Resources

In this section you will find:

- Animal Cards
- Activity Book Answer Key
- Texas Essential Knowledge and Skills Correlation Chart
- English Language Proficiency Standards Correlation Chart

ANIMAL CARDS



ACTIVITY BOOK ANSWER KEY

NAME: _____

DATE: _____

PP.1 **Activity Page**

Knowledge 7

Directions: On one sheet of paper draw the Arctic habitat. On the second piece of paper draw the desert habitat. On the third sheet of paper draw the savanna habitat. Cut out the animals, and place them on the correct habitat.

Arctic

Arctic

Desert

Desert

Savannah

Savannah

NAME: _____

DATE: _____

9.1 **Activity Page**

Knowledge 7

Sample Completed Idea Web

Directions: Create an idea web with information you learned about habitats.

Endangered Species

natural habitat change

- weather
- temperature

habitat changes due to people

- cutting down trees
- forest fires
- dumping or using dangerous waste and chemicals

extinction

- when nothing is done to help endangered species

bald eagle

- were hunted
- had few places to make their homes
- scientists discovered problems
- bald eagle was saved and is now thriving

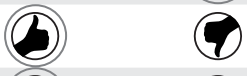
NAME: _____

DATE: _____

DA.1 **Assessment**

Knowledge 7

Directions: Listen to your teacher's instructions.

1. 
2. 
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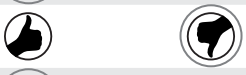
4. 
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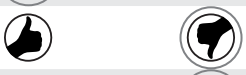
6. 
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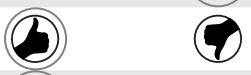
8. 
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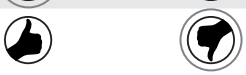
10. 

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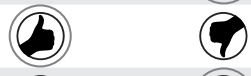
12. 
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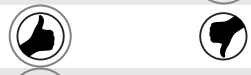
14. 
15. 

NAME: _____

DATE: _____

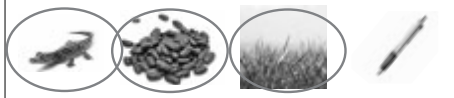
DA.2 **Assessment**

Knowledge 7

Directions: Listen to the teacher's instructions.

1.

2.



3.

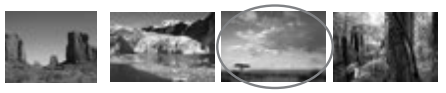
4.

5.

6.

7.

8.



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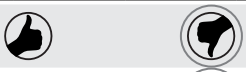

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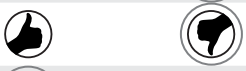

11.

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
(1) Developing and sustaining foundational language skills: listening, speaking, discussion, and thinking—oral language. The student develops oral language through listening, speaking, and discussion. The student is expected to:		
TEKS 1.1.A	listen actively, ask relevant questions to clarify information, and answer questions using multi-word responses	D7: p. 6, D7: p. 10, D7: p. 34, D7: p. 38, D7: p. 115, D7: p. 118
TEKS 1.1.B	follow, restate, and give oral instructions that involve a short, related sequence of actions	
TEKS 1.1.C	share information and ideas about the topic under discussion, speaking clearly at an appropriate pace and using the conventions of language	D7: p. 6, D7: p. 10, D7: p. 18, D7: p. 20, D7: p. 24, D7: p. 32, D7: p. 34, D7: p. 38, D7: p. 48, D7: p. 52, D7: p. 71, D7: p. 74, D7: p. 83, D7: p. 85, D7: p. 89, D7: p. 101, D7: p. 104, D7: p. 115, D7: p. 118, D7: p. 130, D7: p. 133
TEKS 1.1.D	Work collaboratively with others by following agreed-upon rules for discussion, including listening to others, speaking when recognized, and making appropriate contributions	
TEKS 1.1.E	develop social communication such as introducing himself/herself and others, relating experiences to a classmate, and expressing needs and feelings	
(2) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking—beginning reading and writing. The student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell. The student is expected to:		
(A) demonstrate phonological awareness by:		
TEKS 1.2.A.i	producing a series of rhyming words;	
TEKS 1.2.A.ii	recognizing spoken alliteration or groups of words that begin with the same spoken onset or initial sound	
TEKS 1.2.A.iii	distinguishing between long and short vowel sounds in one-syllable words	
TEKS 1.2.A.iv	recognizing the change in spoken word when a specified phoneme is added, changed, or removed	
TEKS 1.2.A.v	blending spoken phonemes to form one-syllable words, including initial and/or final consonant blends	
TEKS 1.2.A.vi	manipulating phonemes within base words	
TEKS 1.2.A.vii	segmenting spoken one-syllable words of three to five phonemes into individual phonemes, including words with initial and/or final consonant blends	
(B) demonstrate and apply phonetic knowledge by:		
TEKS 1.2.B.i	decoding words in isolation and in context by applying common letter-sound correspondences	
TEKS 1.2.B.ii	decoding words with initial and final consonant blends, digraphs, and trigraphs	
TEKS 1.2.B.iii	decoding words with closed syllables; open syllables; VCe syllables; vowel teams, including vowel digraphs and diphthongs; and r-controlled syllables	
TEKS 1.2.B.iv	using knowledge of base words to decode common compound words and contractions	
TEKS 1.2.B.v	decoding words with inflectional endings including *-ed*, *-s*, and *-es*	
TEKS 1.2.B.vi	identifying and reading at least 100 high-frequency words from a research-based list	

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
(C) demonstrate and apply spelling knowledge by:		
TEKS 1.2.C.i	spelling words with closed syllables, open syllables, VCe syllables, vowel teams, and r-controlled syllables	
TEKS 1.2.C.ii	spelling words with initial consonant digraphs	
TEKS 1.2.C.iii	spelling words using sound-spelling patterns	
TEKS 1.2.C.iv	spelling high-frequency words from a research-based list	
TEKS 1.2.D	demonstrate print awareness by identifying the information that different parts of a book provide	
TEKS 1.2.E	alphabetize a series of words to the first or second letter and use a dictionary to find words	
TEKS 1.2.F	develop handwriting by printing words, sentences, and answers legibly leaving appropriate spaces between words	
(3) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking—vocabulary. The student uses newly acquired vocabulary expressively. The student is expected to:		
TEKS 1.3.A	use a resource such as a picture dictionary or digital resource to find words	
TEKS 1.3.B	use illustrations and texts the student is able to read or hear to learn or clafify word meanings.	D7: p. 6, D7: p. 12, D7: p. 20, D7: p. 25, D7: p. 34, D7: p. 40, D7: p. 48, D7: p. 54, D7: p. 71, D7: p. 75, D7: p. 83, D7: p. 85, D7: p. 91, D7: p. 101, D7: p. 106, D7: p. 113, D7: p. 115, D7: p. 120, D7: p. 135
TEKS 1.3.C	identify the meaning of words with the affixes *-s, -ed*, and *-ing*	
TEKS 1.3.D	identify and use words that name actions, directions, positions, sequences, categories, and locations	
(4) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking—fluency. The student reads grade-level text with fluency and comprehension. The student is expected to use appropriate fluency (rate, accuracy, and prosody) when reading grade-level text.		
TEKS 1.4	use appropriate fluency (rate, accuracy, and prosody) when reading grade-level text	
(5) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking—self-sustained reading. The student reads grade-appropriate texts independently. The student is expected to self-select text and interact independently with text for increasing periods of time.		
TEKS 1.5	self-select text and interact independently with text for increasing periods of time.	
(6) Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to:		
TEKS 1.6.A	establish purpose for reading assigned and self-selected texts with adult assistance	
TEKS 1.6.B	generate questions about text before, during, and after reading to deepen understanding and gain information with adult assistance	
TEKS 1.6.C	make and correct or confirm predictions using text features, characteristics of genre, and structures with adult assistance	
TEKS 1.6.D	create mental images to deepen understanding with adult assistance	D7: p. 130, D7: p. 133

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
TEKS 1.6.E	make connections to personal experiences, ideas in other texts, and society with adult assistance;	D7: p. 20, D7: p. 25, D7: p. 34, D7: p. 38, D7: p. 40, D7: p. 48, D7: p. 52, D7: p. 71, D7: p. 74, D7: p. 115, D7: p. 120, D7: p. 130, D7: p. 135
TEKS 1.6.F	make inferences and use evidence to support understanding with adult assistance	
TEKS 1.6.G	evaluate details to determine what is most important with adult assistance	D7: p. 6, D7: p. 12, D7: p. 20, D7: p. 25, D7: p. 34, D7: p. 40, D7: p. 48, D7: p. 54, D7: p. 71, D7: p. 75, D7: p. 85, D7: p. 91, D7: p. 101, D7: p. 106, D7: p. 115, D7: p. 120, D7: p. 130, D7: p. 135
TEKS 1.6.H	synthesize information to create new understanding with adult assistance	D7: p. 130, D7: p. 135
TEKS 1.6.I	monitor comprehension and make adjustments such as re-reading, using background knowledge, checking for visual cues, and asking questions when understanding breaks down	
(7) Response skills: listening, speaking, reading, writing, and thinking using multiple texts. The student responds to an increasingly challenging variety of sources that are read, heard, or viewed. The student is expected to:		
TEKS 1.7.A	describe personal connections to a variety of sources	
TEKS 1.7.B	discuss rhyme, rhythm, repetition, and alliteration in a variety of poems	D7: p. 6, D7: p. 18
TEKS 1.7.C	use text evidence to support an appropriate response	D7: p. 20, D7: p. 24, D7: p. 101, D7: p. 106, D7: p. 130, D7: p. 142
TEKS 1.7.D	retell texts in ways that maintain meaning	
TEKS 1.7.E	interact with sources in meaningful ways such as illustrating or writing	D7: p. 6, D7: p. 18, D7: p. 20, D7: p. 32, D7: p. 130, D7: p. 142
TEKS 1.7.F	respond using newly acquired vocabulary as appropriate	D7: p. 85, D7: p. 99
(8) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts—literary elements. The student recognizes and analyzes literary elements within and across increasingly complex traditional, contemporary, classical, and diverse literary texts. The student is expected to:		
TEKS 1.8.A	discuss topics and determine theme using text evidence with adult assistance	
TEKS 1.8.B	describe the main character(s) and the reason(s) for their actions	
TEKS 1.8.C	describe plot elements including the main events, the problem, and the resolution, for texts read aloud and independently	
TEKS 1.8.D	describe the setting	
(9) Multiple genres: listening, speaking, reading, writing, and thinking using multiple texts—genres. The student recognizes and analyzes genre-specific characteristics, structures, and purposes within and across increasingly complex traditional, contemporary, classical, and diverse texts. The student is expected to:		
TEKS 1.9.A	demonstrate knowledge of distinguishing characteristics of well-known children's literature such as folktales, fables, fairy tales, and nursery rhymes;	
TEKS 1.9.B	discuss rhyme, rhythm, repetition, and alliteration in a variety of poems	
TEKS 1.9.C	discuss elements of drama such as characters and setting	

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
(D) recognize characteristics and structures of informational text, including:		
TEKS 1.9.D.i	the central idea and supporting evidence with adult assistance	D7: p. 34, D7: p. 40, D7: p. 48, D7: p. 54
TEKS 1.9.D.ii	features and simple graphics to locate or gain information	D7: p. 6, D7: p. 12, D7: p. 20, D7: p. 25
TEKS 1.9.D.iii	organizational patterns such as chronological order and description with adult assistance	
TEKS 1.9.E	recognize characteristics of persuasive text with adult assistance and state what the author is trying to persuade the reader to think or do	
TEKS 1.9.F	recognize characteristics of multimodal and digital texts	
(10) Author's purpose and craft: listening, speaking, reading, writing, and thinking using multiple texts. The student uses critical inquiry to analyze the authors' choices and how they influence and communicate meaning within a variety of texts. The student analyzes and applies author's craft purposefully in order to develop his or her own products and performances. The student is expected to:		
TEKS 1.10.A	discuss the author's purpose for writing text	
TEKS 1.10.B	discuss how the use of text structure contributes to the author's purpose	
TEKS 1.10.C	discuss with adult assistance the author's use of print and graphic features to achieve specific purposes	
TEKS 1.10.D	listen to and experience first- and third- person texts	
TEKS 1.10.E	listen to and experience first- and third- person texts	
(11) Composition: listening, speaking, reading, writing, and thinking using multiple texts—writing process. The student uses the writing process recursively to compose multiple texts that are legible and uses appropriate conventions. The student is expected to:		
TEKS 1.11.A	plan a first draft by generating ideas for writing such as by drawing and brainstorming	
(B) develop drafts in oral, pictorial, or written form by:		
TEKS 1.11.B.i	organizing with structure	
TEKS 1.11.B.ii	developing an idea with specific and relevant details	
TEKS 1.11.C	Revise drafts by adding details in pictures or words.	
(D) edit drafts using standard English conventions, including:		
TEKS 1.11.D	edit drafts using standard English conventions	
TEKS 1.11.D.i	complete sentences with subject-verb agreement	
TEKS 1.11.D.ii	past and present verb tense	
TEKS 1.11.D.iii	singular, plural, common, and proper nouns	
TEKS 1.11.D.iv	adjectives, including articles	
TEKS 1.11.D.v	adverbs that convey time	
TEKS 1.11.D.vi	prepositions	
TEKS 1.11.D.vii	pronouns, including subjective, objective, and possessive cases	
TEKS 1.11.D.viii	capitalization for the beginning of sentences and the pronoun "I"	

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
TEKS 1.11.D.ix	punctuation marks at the end of declarative, exclamatory, and interrogative sentences	
TEKS 1.11.D.x	correct spelling of words with grade-appropriate orthographic patterns and rules and high-frequency words with adult assistance	
TEKS 1.11.E	publish and share writing	
(12) Composition: listening, speaking, reading, writing, and thinking using multiple texts—genres. The student uses genre characteristics and craft to compose multiple texts that are meaningful. The student is expected to:		
TEKS 1.12.A	dictate or compose literary texts, including personal narratives and poetry	
TEKS 1.12.B	dictate or compose informational texts, including procedural texts	D7: p. 34, D7: p. 46, D7: p. 48, D7: p. 62, D7: p. 71, D7: p. 83, D7: p. 85, D7: p. 99, D7: p. 101, D7: p. 113, D7: p. 115, D7: p. 128
TEKS 1.12.C	dictate or compose correspondence such as thank you notes or letters	
(13) Inquiry and research: listening, speaking, reading, writing, and thinking using multiple texts. The student engages in both short-term and sustained recursive inquiry processes for a variety of purposes. The student is expected to:		
TEKS 1.13.A	generate questions for formal and informal inquiry with adult assistance	
TEKS 1.13.B	develop and follow a research plan with adult assistance	
TEKS 1.13.C	identify and gather relevant sources and information to answer the questions with adult assistance	
TEKS 1.13.D	demonstrate understanding of information gathered with adult assistance	
TEKS 1.13.E	use an appropriate mode of delivery, whether written, oral, or multimodal, to present results	

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
(1) Cross-curricular second language acquisition/learning strategies. The ELL uses language learning strategies to develop an awareness of his or her own learning processes in all content areas. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:		
ELPS 1.A	use prior knowledge and experiences to understand meanings in English	D7: p. 16, D7: p. 18, D7: p. 24
ELPS 1.B	monitor oral and written language production and employ self-corrective techniques or other resources	
ELPS 1.C	use strategic learning techniques such as concept mapping, drawing, memorizing, comparing, contrasting, and reviewing to acquire basic and grade-level vocabulary	
ELPS 1.D	speak using learning strategies such as requesting assistance, employing non-verbal cues, and using synonyms and circumlocution (conveying ideas by defining or describing when exact English words are not known)	
ELPS 1.E	internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment	D7: p. 16, D7: p. 18, D7: p. 24, D7: p. 39, D7: p. 44, D7: p. 60, D7: p. 62, D7: p. 74, D7: p. 81, D7: p. 97, D7: p. 111, D7: p. 118, D7: p. 126, D7: p. 129, D7: p. 134, D7: p. 140
ELPS 1.F	use accessible language and learn new and essential language in the process	D7: p. 83, D7: p. 89
ELPS 1.G	demonstrate an increasing ability to distinguish between formal and informal English and an increasing knowledge of when to use each one commensurate with grade-level learning expectations	
ELPS 1.H	develop and expand repertoire of learning strategies such as reasoning inductively or deductively, looking for patterns in language, and analyzing sayings and expressions commensurate with grade-level learning expectations	
(2) Cross-curricular second language acquisition/listening. The ELL listens to a variety of speakers including teachers, peers, and electronic media to gain an increasing level of comprehension of newly acquired language in all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in listening. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:		
ELPS 2.A	distinguish sounds and intonation patterns of English with increasing ease	
ELPS 2.B	recognize elements of the English sound system in newly acquired vocabulary such as long and short vowels, silent letters, and consonant clusters	
ELPS 2.C	learn new language structures, expressions, and basic and academic vocabulary heard during classroom instruction and interactions	
ELPS 2.D	monitor understanding of spoken language during classroom instruction and interactions and seek clarification as needed	

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
ELPS 2.E	use visual, contextual, and linguistic support to enhance and confirm understanding of increasingly complex and elaborated spoken language	
ELPS 2.F	listen to and derive meaning from a variety of media such as audio tape, video, DVD, and CD-ROM to build and reinforce concept and language attainment	
ELPS 2.G	understand the general meaning, main point, and important details of spoken language ranging from situations in which topics, language, and contexts are familiar to unfamiliar	D7: p. 83
ELPS 2.H	understand implicit ideas and information in increasingly complex spoken language commensurate with grade-level learning expectations	
ELPS 2.I	demonstrate listening comprehension of increasingly complex spoken English by following directions, retelling or summarizing spoken messages, responding to questions and requests, collaborating with peers, and taking notes commensurate with content and grade-level needs	D7: p. 33
(3) Cross-curricular second language acquisition/speaking. The ELL speaks in a variety of modes for a variety of purposes with an awareness of different language registers (formal/informal) using vocabulary with increasing fluency and accuracy in language arts and all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in speaking. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. The student is expected to:		
ELPS 3.A	practice producing sounds of newly acquired vocabulary such as long and short vowels, silent letters, and consonant clusters to pronounce English words in a manner that is increasingly comprehensible	
ELPS 3.B	expand and internalize initial English vocabulary by learning and using high-frequency English words necessary for identifying and describing people, places, and objects, by retelling simple stories and basic information represented or supported by pictures, and by learning and using routine language needed for classroom communication	
ELPS 3.C	speak using a variety of grammatical structures, sentence lengths, sentence types, and connecting words with increasing accuracy and ease as more English is acquired	D7: p. 74, D7: p. 100
ELPS 3.D	speak using grade-level content area vocabulary in context to internalize new English words and build academic language proficiency	
ELPS 3.E	share information in cooperative learning interactions	
ELPS 3.F	ask and give information ranging from using a very limited bank of high-frequency, high-need, concrete vocabulary, including key words and expressions needed for basic communication in academic and social contexts, to using abstract and content-based vocabulary during extended speaking assignments	D7: p. 105
ELPS 3.G	express opinions, ideas, and feelings ranging from communicating single words and short phrases to participating in extended discussions on a variety of social and grade-appropriate academic topics	D7: p. 39, D7: p. 52, D7: p. 62, D7: p. 113, D7: p. 129, D7: p. 134, D7: p. 140

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
ELPS 3.H	narrate, describe, and explain with increasing specificity and detail as more English is acquired	D7: p. 11, D7: p. 16, D7: p. 18, D7: p. 24, D7: p. 26
ELPS 3.I	adapt spoken language appropriately for formal and informal purposes	
ELPS 3.J	respond orally to information presented in a wide variety of print, electronic, audio, and visual media to build and reinforce concept and language attainment	D7: p. 11, D7: p. 26, D7: p. 83
(4) Cross-curricular second language acquisition/reading. The ELL reads a variety of texts for a variety of purposes with an increasing level of comprehension in all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in reading. In order for the ELL to meet grade-level learning expectations across the foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. For kindergarten and grade 1, certain of these student expectations apply to text read aloud for students not yet at the stage of decoding written text. The student is expected to:		
ELPS 4.A	learn relationships between sounds and letters of the English language and decode (sound out) words using a combination of skills such as recognizing sound-letter relationships and identifying cognates, affixes, roots, and base words	
ELPS 4.B	recognize directionality of English reading such as left to right and top to bottom	
ELPS 4.C	develop basic sight vocabulary, derive meaning of environmental print, and comprehend English vocabulary and language structures used routinely in written classroom materials	
ELPS 4.D	use prereading supports such as graphic organizers, illustrations, and pretaught topic-related vocabulary and other prereading activities to enhance comprehension of written text	
ELPS 4.E	read linguistically accommodated content area material with a decreasing need for linguistic accommodations as more English is learned	
ELPS 4.F	use visual and contextual support and support from peers and teachers to read grade-appropriate content area text, enhance and confirm understanding, and develop vocabulary, grasp of language structures, and background knowledge needed to comprehend increasingly challenging language	
ELPS 4.G	demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs	D7: p. 33, D7: p. 44, D7: p. 52, D7: p. 60, D7: p. 81, D7: p. 97, D7: p. 111, D7: p. 118, D7: p. 126
ELPS 4.H	read silently with increasing ease and comprehension for longer periods	
ELPS 4.I	demonstrate English comprehension and expand reading skills by employing basic reading skills such as demonstrating understanding of supporting ideas and details in text and graphic sources, summarizing text, and distinguishing main ideas from details commensurate with content area needs	D7: p. 44, D7: p. 52, D7: p. 60, D7: p. 81, D7: p. 89, D7: p. 97, D7: p. 111, D7: p. 118, D7: p. 126

ENGLISH LANGUAGE PROFICIENCY STANDARDS - GRADE 1

Knowledge 7		Correlation—Teacher's Guide
ELPS 4.J	demonstrate English comprehension and expand reading skills by employing inferential skills such as predicting, making connections between ideas, drawing inferences and conclusions from text and graphic sources, and finding supporting text evidence commensurate with content area needs	
ELPS 4.K	demonstrate English comprehension and expand reading skills by employing analytical skills such as evaluating written information and performing critical analyses commensurate with content area and grade-level needs	
(5) Cross-curricular second language acquisition/writing. The ELL writes in a variety of forms with increasing accuracy to effectively address a specific purpose and audience in all content areas. ELLs may be at the beginning, intermediate, advanced, or advanced high stage of English language acquisition in writing. In order for the ELL to meet grade-level learning expectations across foundation and enrichment curriculum, all instruction delivered in English must be linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's level of English language proficiency. For kindergarten and grade 1, certain of these student expectations do not apply until the student has reached the stage of generating original written text using a standard writing system. The student is expected to:		
ELPS 5.A	learn relationships between sounds and letters of the English language to represent sounds when writing in English	
ELPS 5.B	write using newly acquired basic vocabulary and content-based grade-level vocabulary	
ELPS 5.C	spell familiar English words with increasing accuracy, and employ English spelling patterns and rules with increasing accuracy as more English is acquired	
ELPS 5.D	edit writing for standard grammar and usage, including subject-verb agreement, pronoun agreement, and appropriate verb tenses commensurate with grade-level expectations as more English is acquired	
ELPS 5.E	employ increasingly complex grammatical structures in content area writing commensurate with grade level expectations such as (i) using correct verbs, tenses, and pronouns/antecedents; (ii) using possessive case (apostrophe -s) correctly; and, (iii) using negatives and contractions correctly	
ELPS 5.F	write using a variety of grade-appropriate sentence lengths, patterns, and connecting words to combine phrases, clauses, and sentences in increasingly accurate ways as more English is acquired	D7: p. 33, D7: p. 47, D7: p. 143
ELPS 5.G	narrate, describe, and explain with increasing specificity and detail to fulfill content area writing needs as more English is acquired	

General Manager K-8 Humanities and SVP, Product

Alexandra Clarke

Chief Academic Officer, Elementary Humanities

Susan Lambert

Content and Editorial

Elizabeth Wade, PhD, Director,
Elementary Language Arts Content

Patricia Erno, Associate Director, Elementary ELA Instruction

Maria Martinez, Associate Director, Spanish Language Arts

Baria Jennings, EdD, Senior Content Developer

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Product and Project Management

Ayala Falk, Director, Business and Product Strategy,
K-8 Language Arts

Amber McWilliams, Senior Product Manager

Elisabeth Hartman, Associate Product Manager

Catherine Alexander, Senior Project Manager, Spanish Language Arts

LaShon Ormond, SVP, Strategic Initiatives

Leslie Johnson, Associate Director, K-8 Language Arts

Thea Aguiar, Director of Strategic Projects, K-5 Language Arts

Zara Chaudhury, Project Manager, K-8 Language Arts

Design and Production

Tory Novikova, Product Design Director

Erin O'Donnell, Product Design Manager

Texas Contributors

Content and Editorial

Sarah Cloos
Laia Cortes
Jayana Desai
Angela Donnelly
Claire Dorfman
Ana Mercedes Falcón
Rebecca Figueroa
Nick García
Sandra de Gennaro
Patricia Infanzón-Rodríguez
Seamus Kirst
Michelle Koral
Sean McBride
Jacqueline Ovalle
Sofía Pereson
Lilia Perez
Sheri Pineault
Megan Reasor
Marisol Rodriguez
Jessica Roodvoets
Lyna Ward

Product and Project Management

Stephanie Koleda
Tamara Morris

Art, Design, and Production

Nanyamka Anderson
Raghav Arumugan
Dani Aviles
Olioli Buika
Sherry Choi
Stuart Dalgo
Edel Ferri
Pedro Ferreira
Nicole Galuszka
Parker-Nia Gordon
Isabel Hetrick
Ian Horst
Ashna Kapadia
Jagriti Khirwar
Julie Kim
Lisa McGarry
Emily Mendoza
Marguerite Oerlemans
Lucas De Oliveira
Tara Pajouhesh
Jackie Pierson
Dominique Ramsey
Darby Raymond-Overstreet
Max Reinhardsen
Mia Saine
Nicole Stahl
Flore Thevoux
Jeanne Thornton
Amy Xu
Jules Zuckerberg

Other Contributors

Patricia Beam, Bill Cheng, Ken Harney, Molly Hensley, David Herubin, Sara Hunt, Kristen Kirchner, James Mendez-Hodes, Christopher Miller, Diana Projansky, Todd Rawson, Jennifer Skelley, Julia Sverchuk, Elizabeth Thiers, Amanda Tolentino, Paige Womack

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Contributors to Earlier Versions of These Materials

Susan B. Albaugh, Kazuko Ashizawa, Kim Berrall, Ang Blanchette, Nancy Braier, Maggie Buchanan, Paula Coyner, Kathryn M. Cummings, Michelle De Groot, Michael Donegan, Diana Espinal, Mary E. Forbes, Michael L. Ford, Sue Fulton, Carolyn Gosse, Dorrit Green, Liza Greene, Ted Hirsch, Danielle Knecht, James K. Lee, Matt Leech, Diane Henry Leipzig, Robin Luecke, Martha G. Mack, Liana Mahoney, Isabel McLean, Steve Morrison, Juliane K. Munson, Elizabeth B. Rasmussen, Ellen Sadler, Rachael L. Shaw, Sivan B. Sherman, Diane Auger Smith, Laura Tortorelli, Khara Turnbull, Miriam E. Vidaver, Michelle L. Warner, Catherine S. Whittington, Jeannette A. Williams.

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Expert Reviewer

Christine L. May

Writers

Ewa Beaujon

Illustrators and Image Sources

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ELEMENTARY LITERACY PROGRAM

Grade 1 | **Knowledge 7** | Teacher Guide

Animals and Habitats: The World We Share

ISBN 9781683919339

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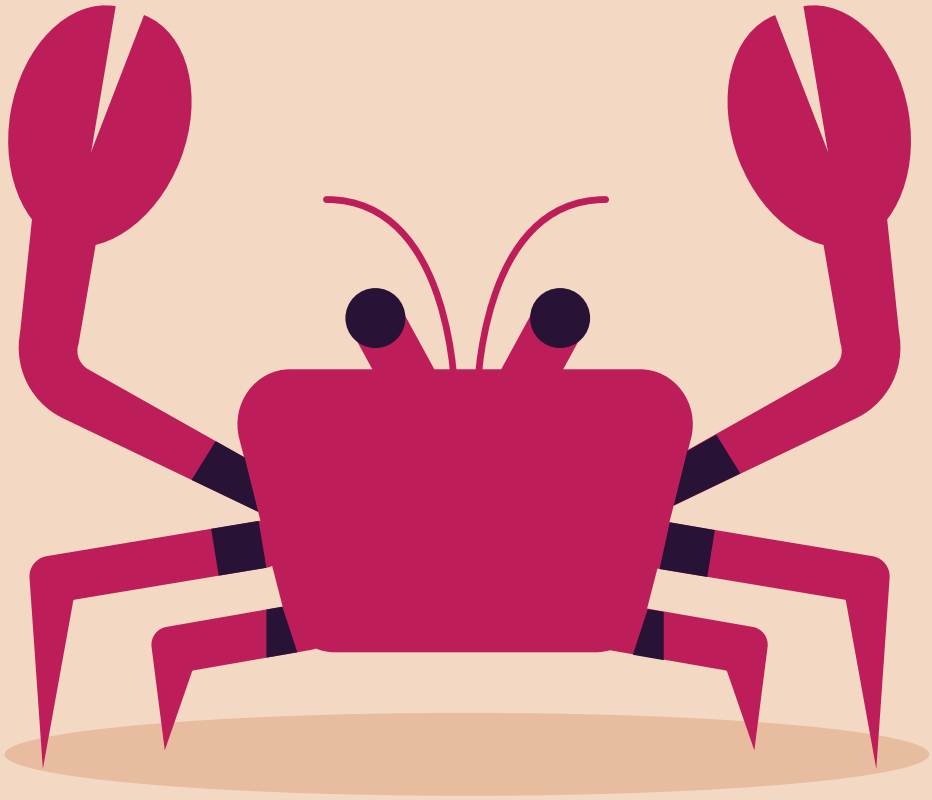

Grade 1

Knowledge 7 | Activity Book

Animals and Habitats: The World We Share

Grade 1 | Knowledge 7

Animals and Habitats:
The World We Share

Activity Book

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NAME: _____

DATE: _____

Directions: Write or draw the things you observed related to food and shelter in the habitat surrounding your school.

Food	***Shelter***

Dear Family Member,

Over the next several days, your student will be learning about many different types of habitats, including the desert habitat, the rainforest habitat, and several others. Your student will learn that an animal's habitat provides food, water, and shelter for that specific animal. Your student will also learn about the adaptations that plants and animals have made in order to survive in specific environments.

Below are some suggestions for activities that you may do at home to continue to enjoy learning about animals and their habitats.

1. Safari

In class, your student will go on a safari to look for plant and animal life around the school. Go on a safari with your student around your neighborhood. Point out the different types of plant and animal life. Discuss with your student how the plants and animals meet their basic needs in your neighborhood. Point out examples of food and shelter for different animals.

2. Habitat Terrarium

Simulate a small habitat at home by making a small terrarium. Use a small fish tank or some other clear container. (Plastic containers used for food would work well also.) Add one or two inches of soil, sprinkle some grass seed on the surface, and water it as needed. Cover the container with something that will allow the air to flow. (Cheesecloth works well.)

Once the grass has started growing, add small animals like grasshoppers. Observe the habitat for a few days, and talk with your student about how the animals' needs are being met or are not being met in the mini-habitat.

3. Words to Use

Below are several of the words that your student has been learning about and using. Try to use these words as they come up in everyday speech with your student.

- *habitat*—What kind of habitat do we live in?
- *shelter*—We need to find some shelter so we can get out of the rain!
- *herbivore*—A rabbit is a herbivore, because it only eats plants.
- *carnivore*—A lion is a carnivore, because it hunts and eats other animals.
- *omnivore*—A person is an omnivore if they eat both plants and animals.

4. Read Aloud Each Day

It is very important that you read to your student each day. The local library has many books on animals and habitats.

Be sure to let your student know how much you enjoy hearing about what they have learned at school.

Dear Family Member,

Over the past several days, your student has learned about the Arctic tundra and ocean, the desert habitat, and the savanna habitat. In the next few days, your student will learn about the temperate deciduous forest habitat, the rainforest habitat, the freshwater habitat, and the saltwater habitat. Your student will continue to learn about adaptations that plants and animals have made in order to survive in the specific habitats mentioned above. Your student will also learn about endangered species and the causes of extinction.

Below are some suggestions for activities that you may do at home to continue to enjoy learning about animals and habitats.

1. Habitats

Ask your student which of the habitats they like best and why. Discuss with your student what types of plants and animals live there and how those plants and animals are adapted to that habitat.

2. Animals and Habitats Drawing

Have your student draw a picture of one or several of the habitats they have learned about thus far. Talk with your student about the weather and climate of the habitat. Be sure your student includes the plants and animals that live in that habitat. Have your student think about what they would have to do to adapt to the climate, and then draw themselves in the picture with their adaptations.

3. Where in the World?

Use a world map or globe to locate each of the habitats your student has learned about thus far (Arctic [tundra and ocean], Sonoran Desert, East African Savanna). Show your student where you live in relation to each of these habitats.

4. Salt Water

In a few days, your student will be learning about the saltwater habitat. As preparation, you may want to help your student differentiate between salt water and fresh water. Mix a half-teaspoon of salt with one cup of water. Have your student dip their finger in the salt water and place it on their tongue. Then have them sip some drinking water. Discuss the difference in taste between the two.

Be sure to explain that people should not drink a lot of salt water because it is not good for their health.

5. Ocean or Saltwater Habitat Collage

Have your student make an ocean or saltwater collage. Have your student paint or color a piece of paper blue. Next, have them look through magazines or journals to find pictures of animals that live in the ocean. If no magazines or journals are available, have your student draw and cut out the animals from construction paper and glue them onto the blue paper.

6. Pollution and Habitat Destruction

Your student will be learning about how pollution can cause animals' habitats to be destroyed. The next time you are out with your student, point out examples of pollution. Have your student also look for examples of pollution.

7. Read Aloud Each Day

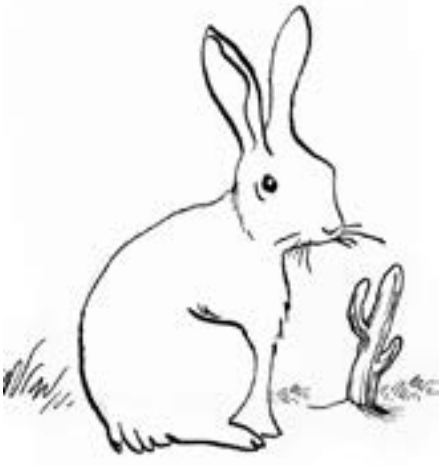
It is very important that you read to your student each day.

Be sure to let your student know how much you enjoy hearing about what they have learned at school.

NAME: _____

DATE: _____

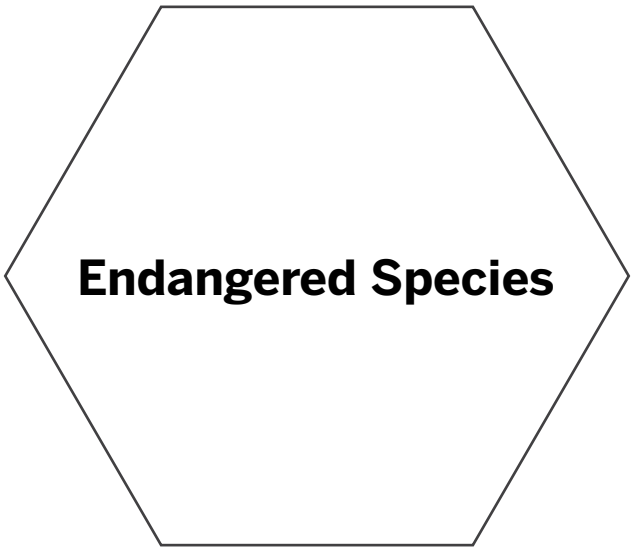
Directions: On one sheet of paper draw the Arctic habitat. On the second piece of paper draw the desert habitat. On the third sheet of paper draw the savanna habitat. Cut out the animals, and place them on the correct habitat.



NAME: _____

DATE: _____

Directions: Create an idea web with information you learned about endangered species.



NAME: _____

DATE: _____

DA.1 **Assessment**

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8.		
9.		
10.		

Directions: Listen to your teacher's instructions.

11.		
12.		
13.		
14.		
15.		

NAME: _____

DATE: _____

DA.2 **Assessment**

Directions: Listen to the teacher's directions and answer each question.

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2.				
3.				
4.				
5.				

6.




7.




8.




9.  

10.  

11.  

General Manager K-8 Humanities and SVP, Product

Alexandra Clarke

Chief Academic Officer, Elementary Humanities

Susan Lambert

Content and Editorial

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Knowledge 7

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Grade 1 | **Knowledge 7** | Activity Book

Animals and Habitats: The World We Share

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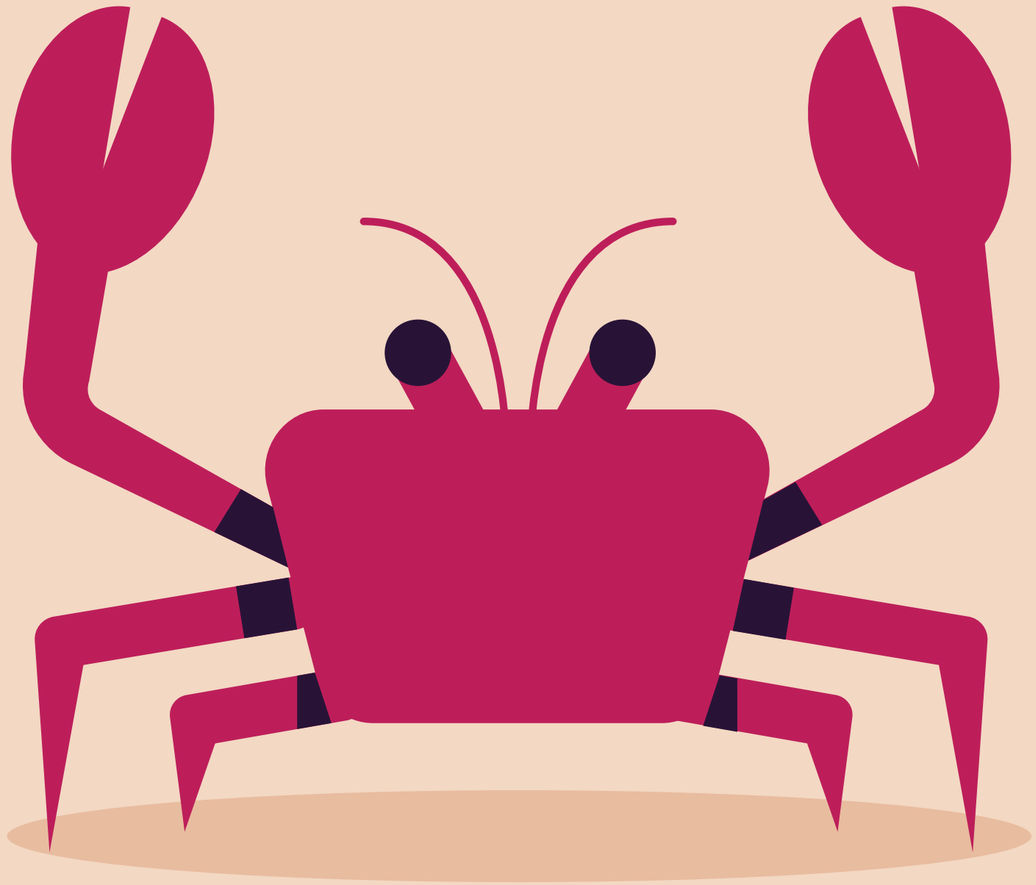

Grade 1

Knowledge 7 | Flip Book

Animals and Habitats: The World We Share

Grade 1 | Knowledge 7

Animals and Habitats:
The World We Share

Flip Book

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Writers

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Flip Book Introduction

This Flip Book contains images that accompany the Teacher Guide for *Animals and Habits: The World We Share*. The images are in sequential order. Each image is identified by its lesson number, Read-Aloud letter (A or B), and the number of the image within the particular Read-Aloud. For example, the first image in Read-Aloud 1A is numbered 1A-1. Once you have worked your way through the book to the last page, you will flip the entire book over to view the second half of the images.

Depending on your classroom configuration, you may need to have students sit closer to the flip book in order to see the images clearly.

1A-1

1A-2


1A-3

1A-4


1A-5

1A-6

1A-7

1A-9


North America
Europe
Asia
Africa
South America
Australia
Antarctica

2A-1

2A-2


2A-3

2A-5

2A-6


2A-7

2A-8

2A-9

2A-10

2A-11

2A-12

2A-13

3A-1


North America
Europe
Asia
Africa
South America
Australia
Antarctica

3A-2

3A-3

3A-4


3A-5

3A-6

3A-7

3A-9

3A-10

3A-11


North America
Europe
Asia
Africa
South America
Australia
Antarctica

4A-1

ЧА-2

ЧА-3


4A-4

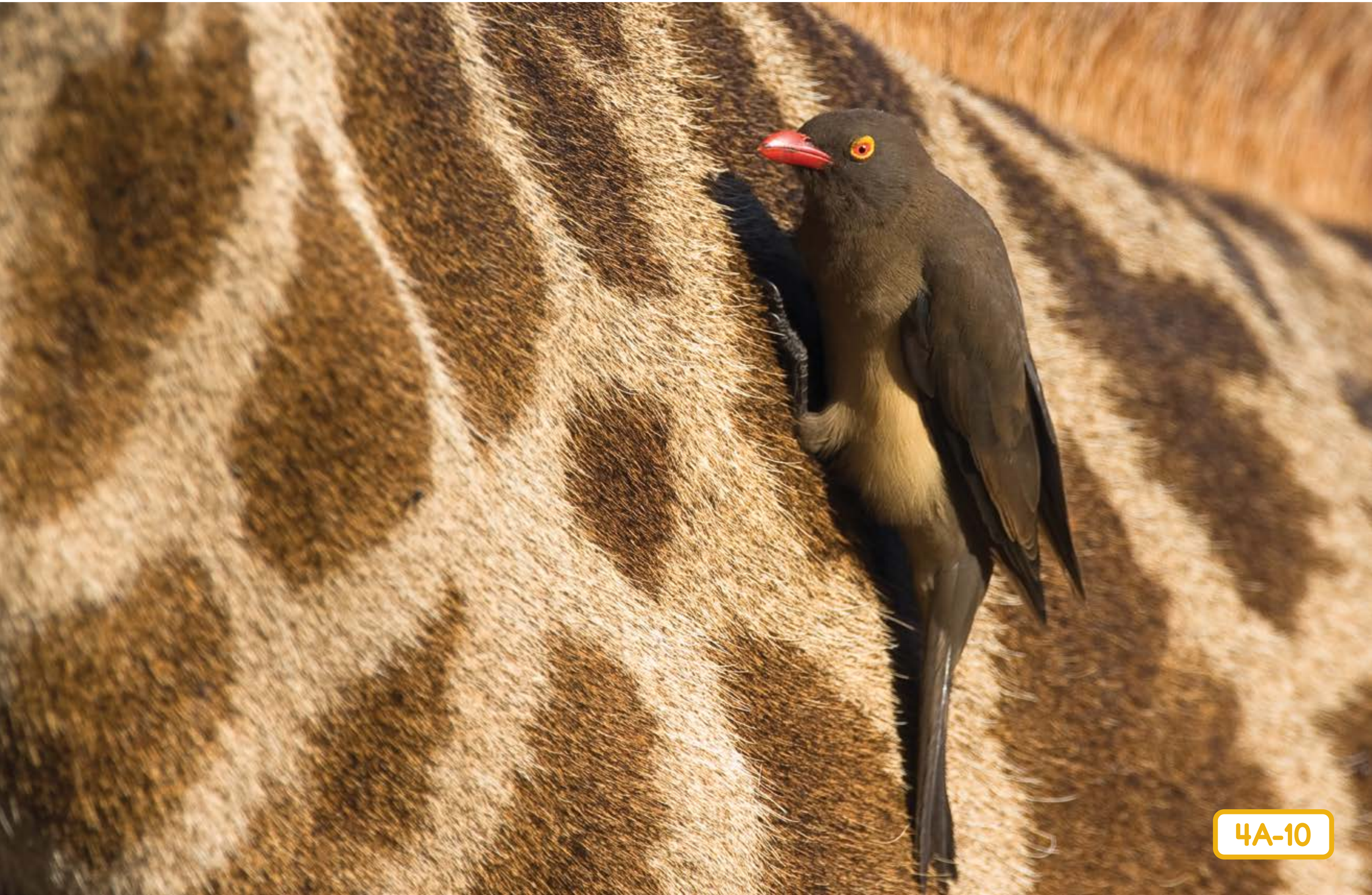

4А-5

ЧА-6

ЧА-7

ЧА-8

ЧА-9



4А-10

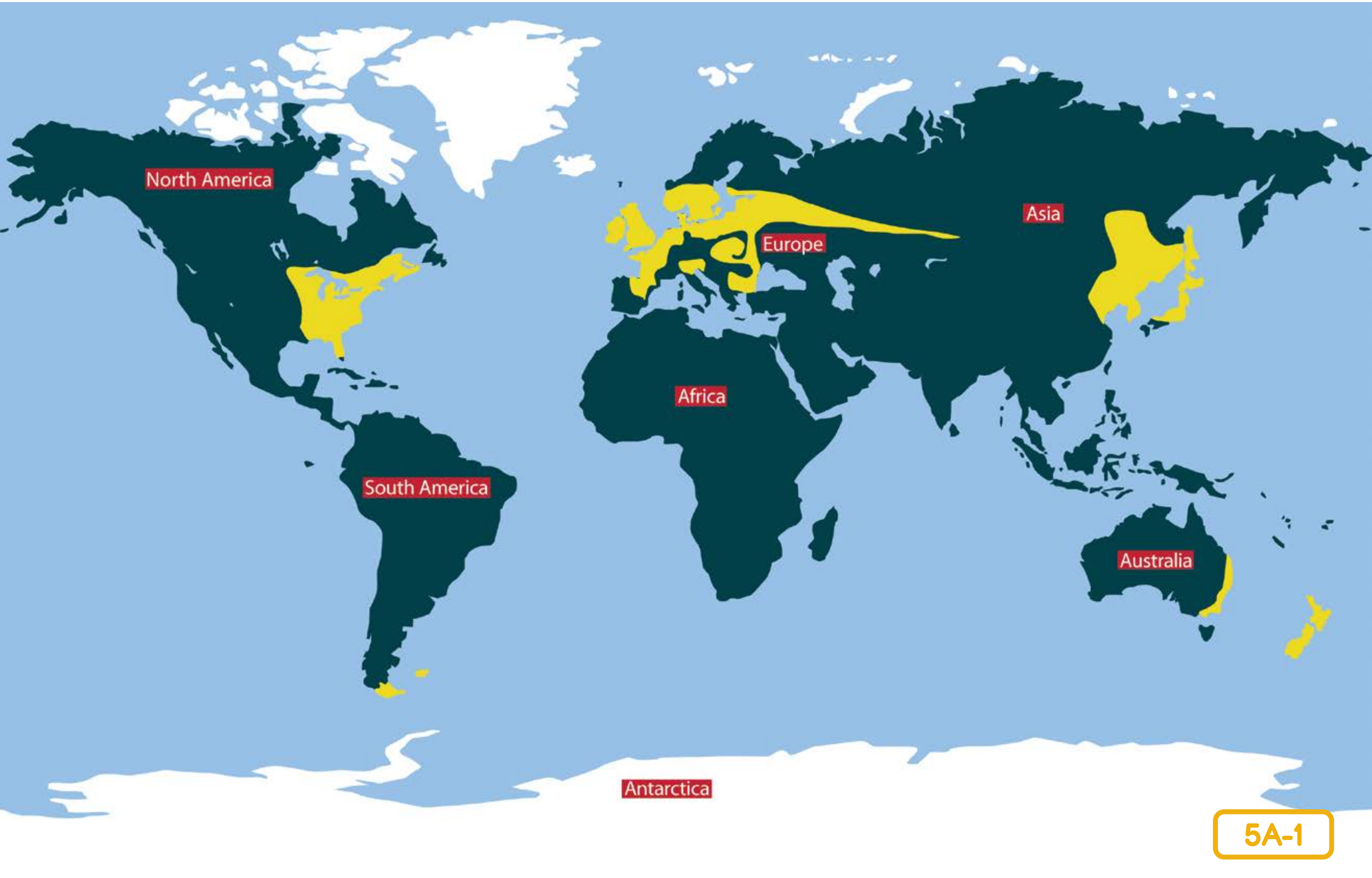
4A-11

4A-12

4А-13

4A-14

4A-15


North America
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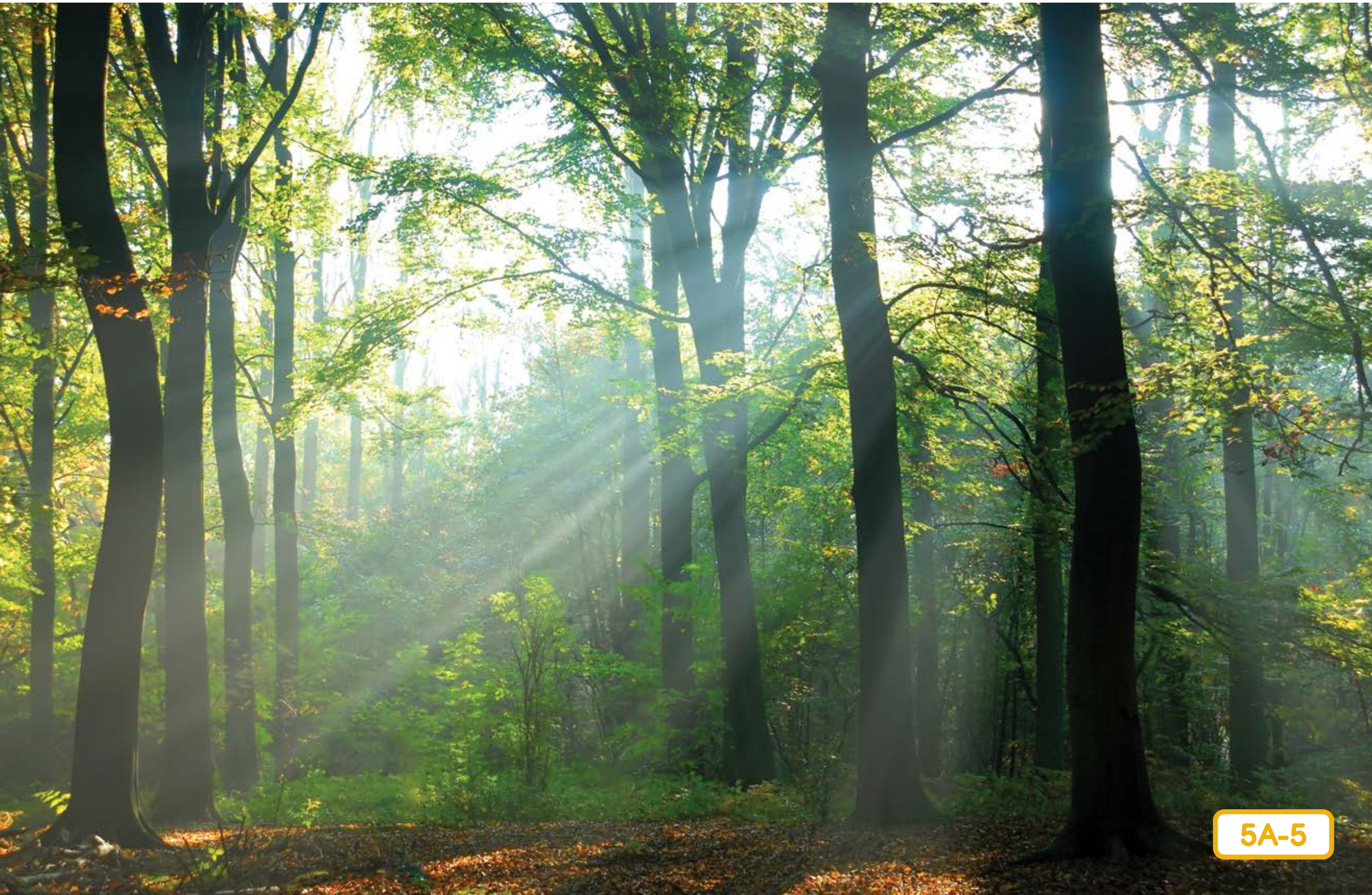
Asia
Africa
South America
Australia
Antarctica

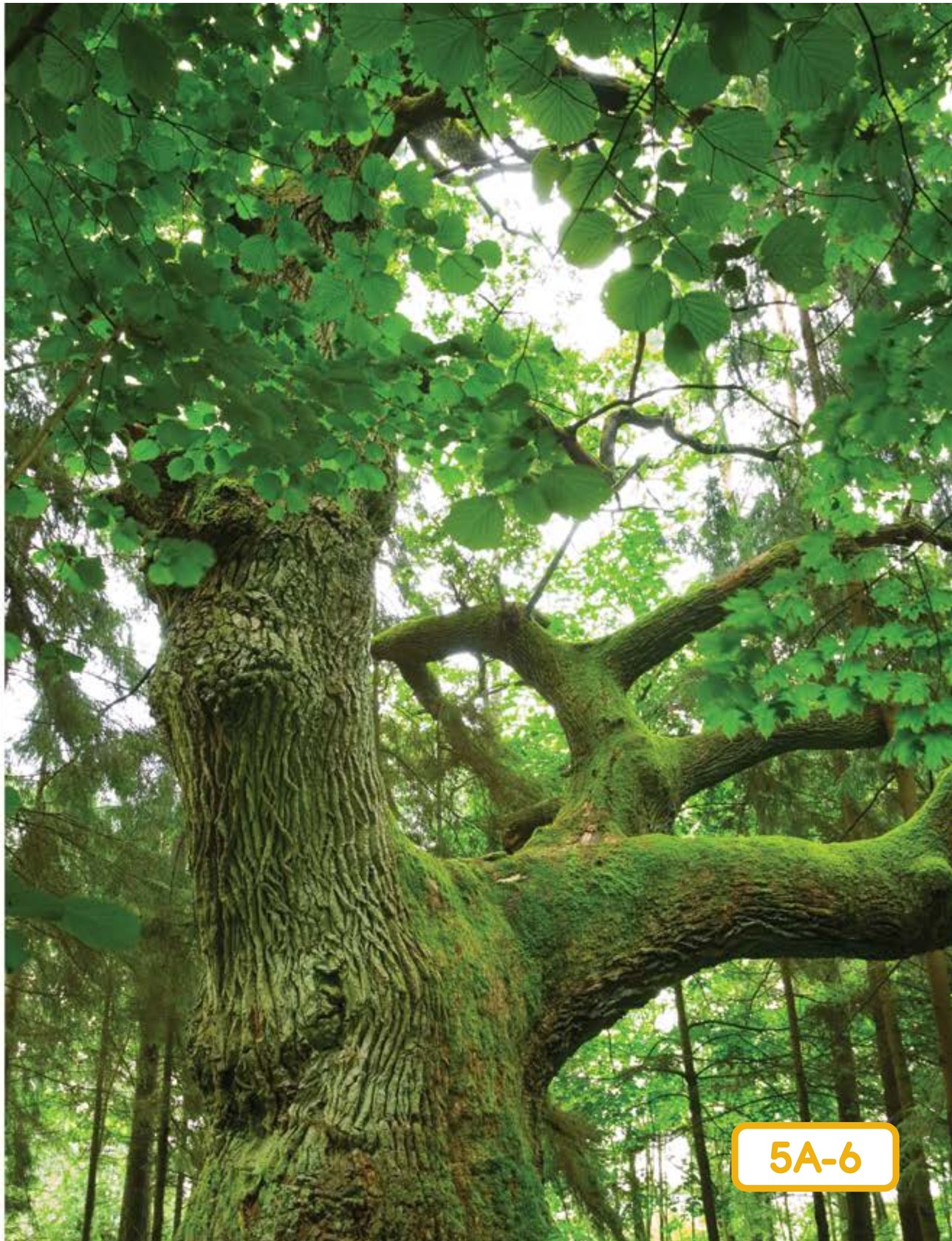
5A-1

5A-2

5A-3

5A-4





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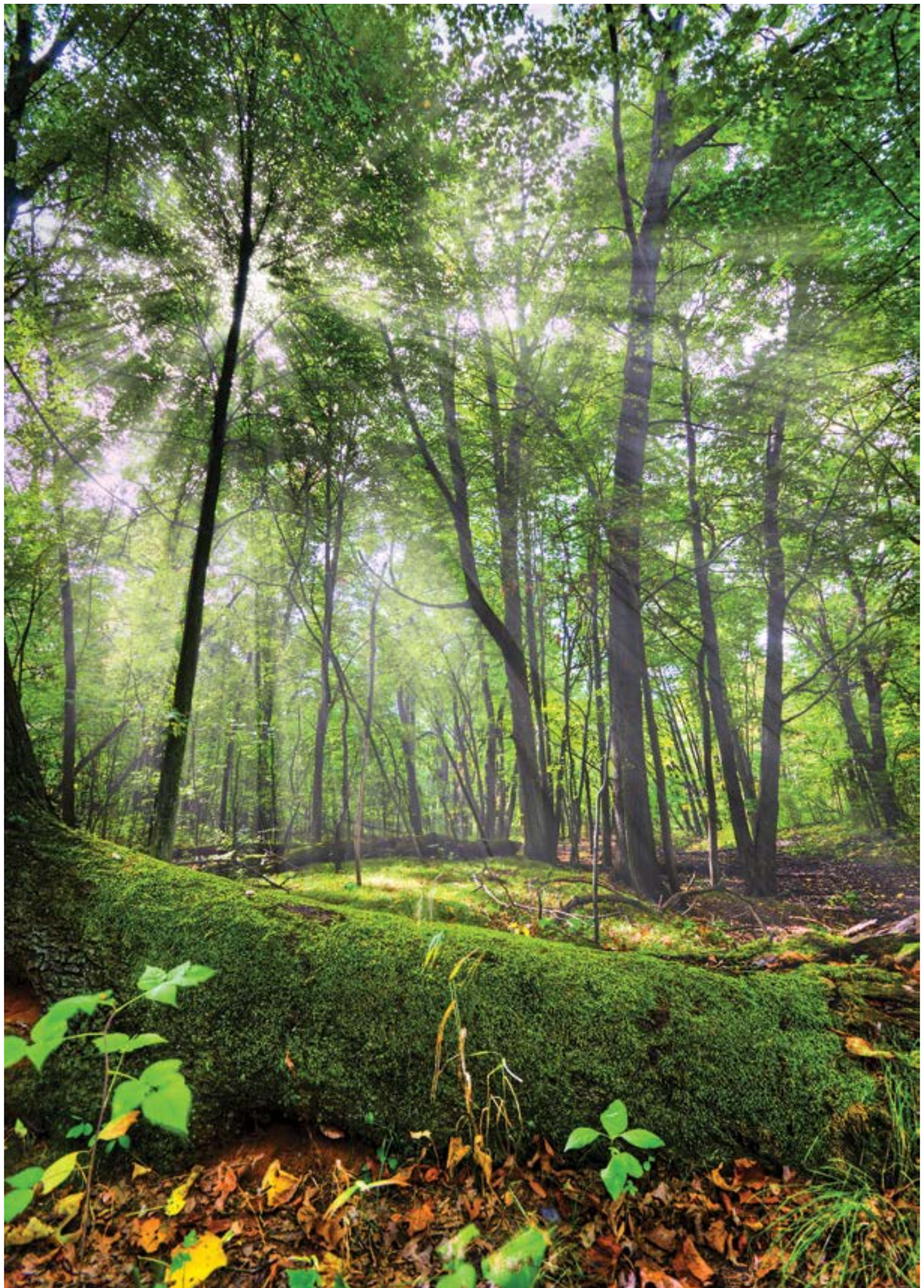
5A-8




5A-10

5A-11

5A-12

5A-13

5A-14


North America
Europe
Asia
Africa
South America
Australia
Antarctica

6A-1

6A-2

6A-3

6A-4

6A-5

6A-6

6A–7

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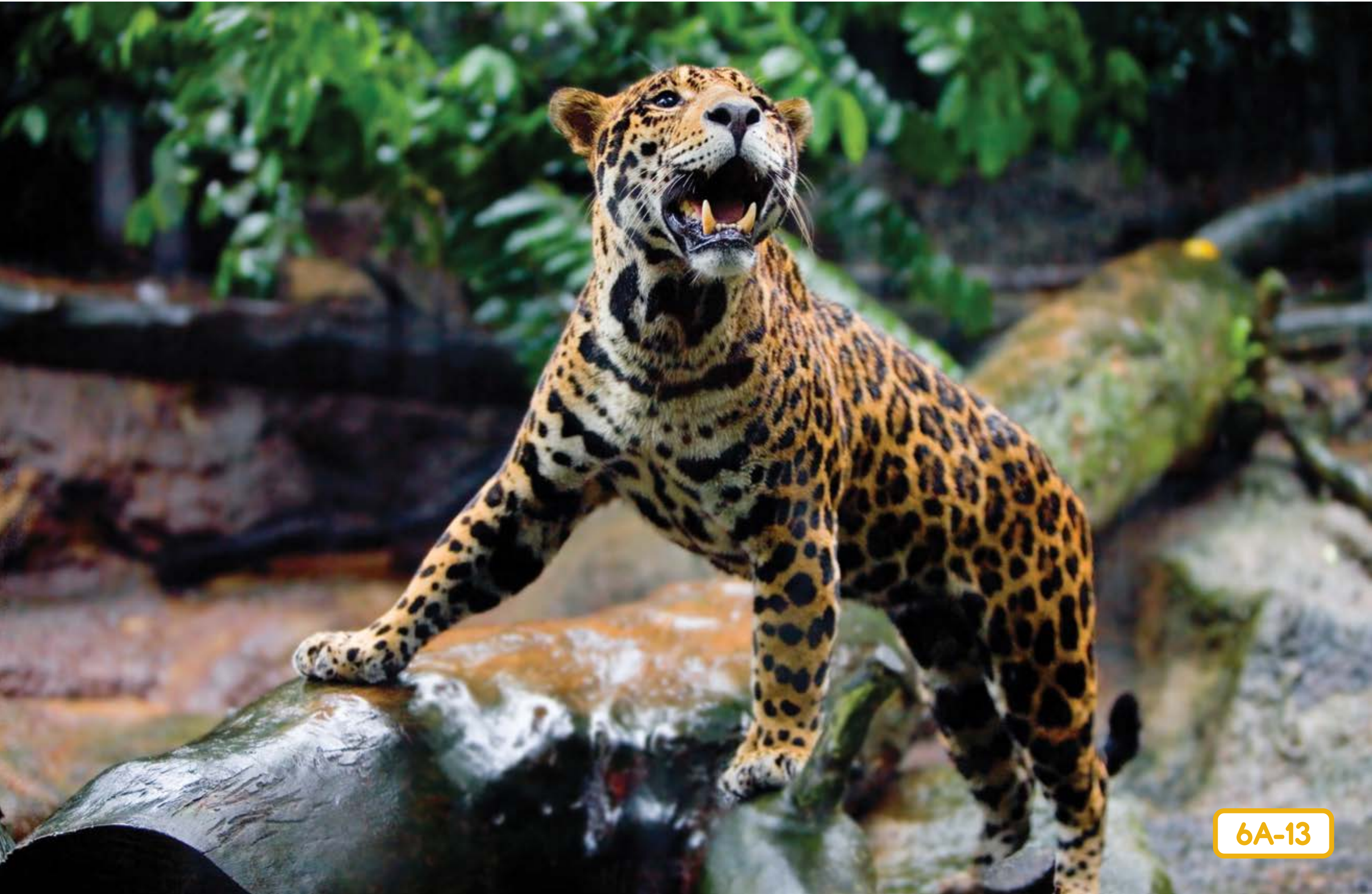
6A-9

6A-10

6A-12



6A-13

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6A-15

7A-1

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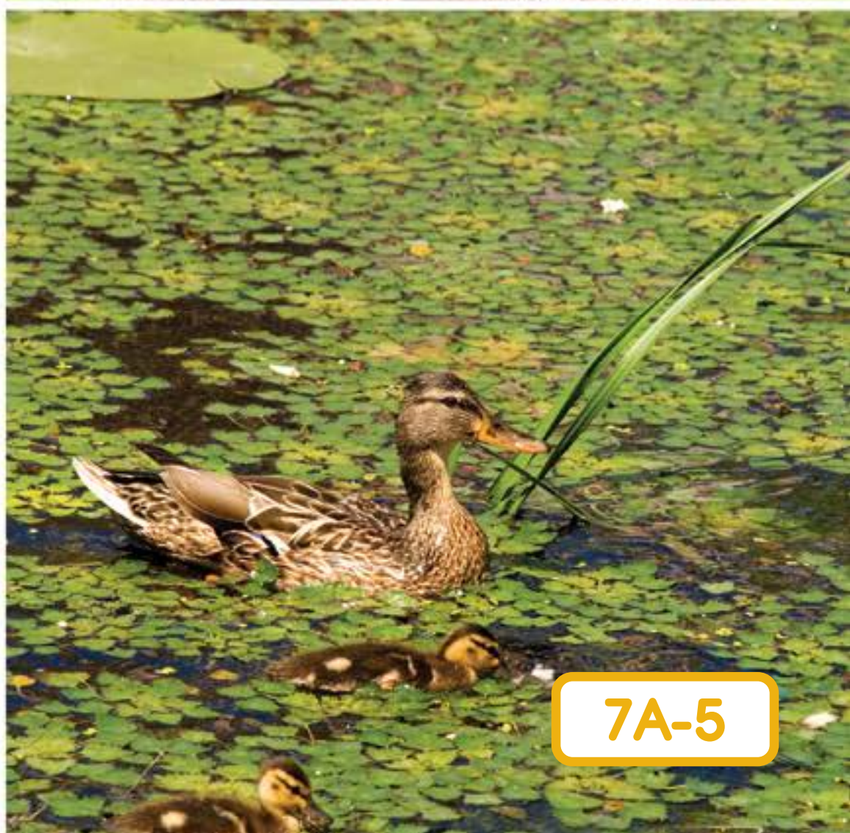
7A-4



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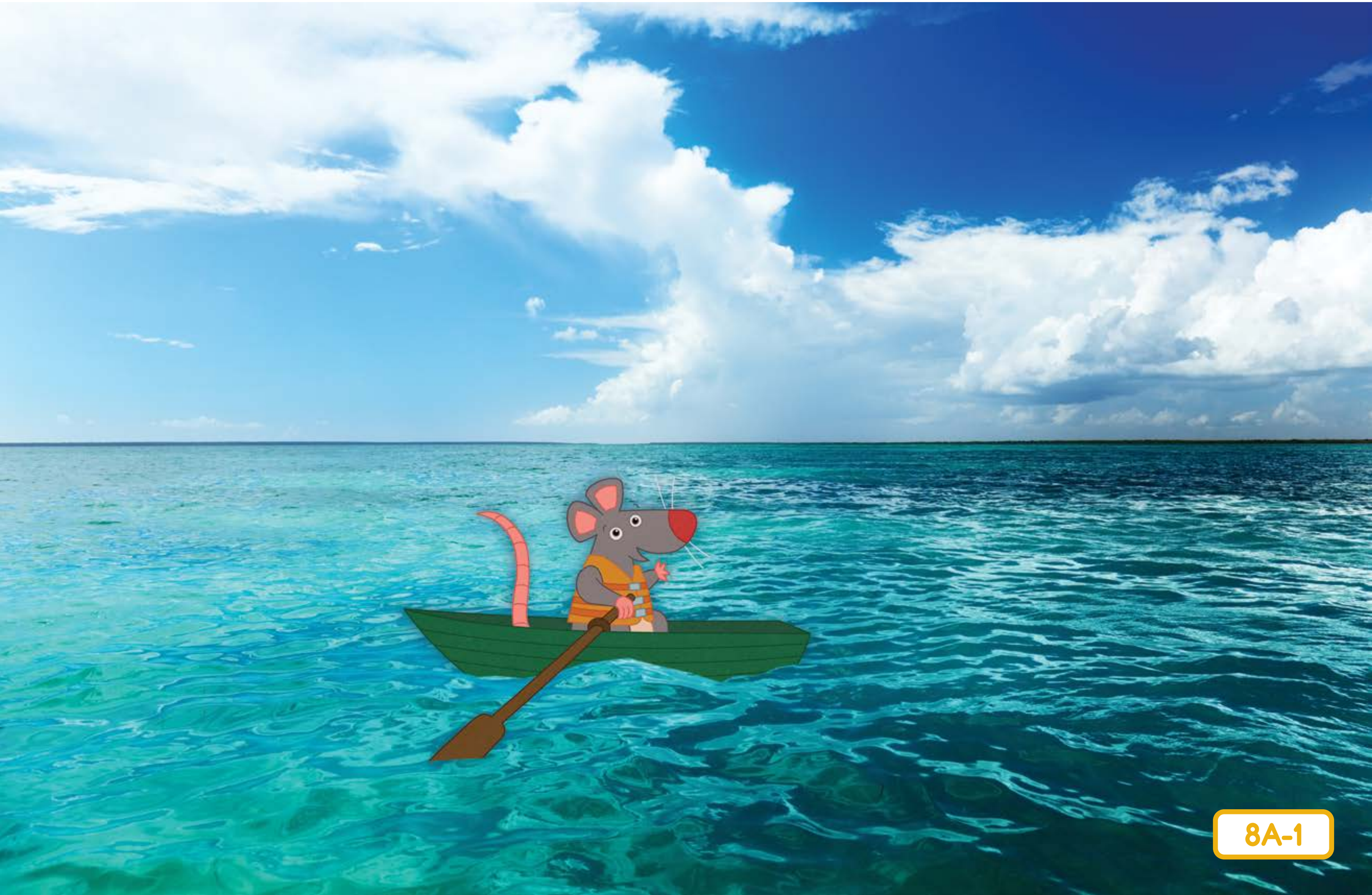
7A-10



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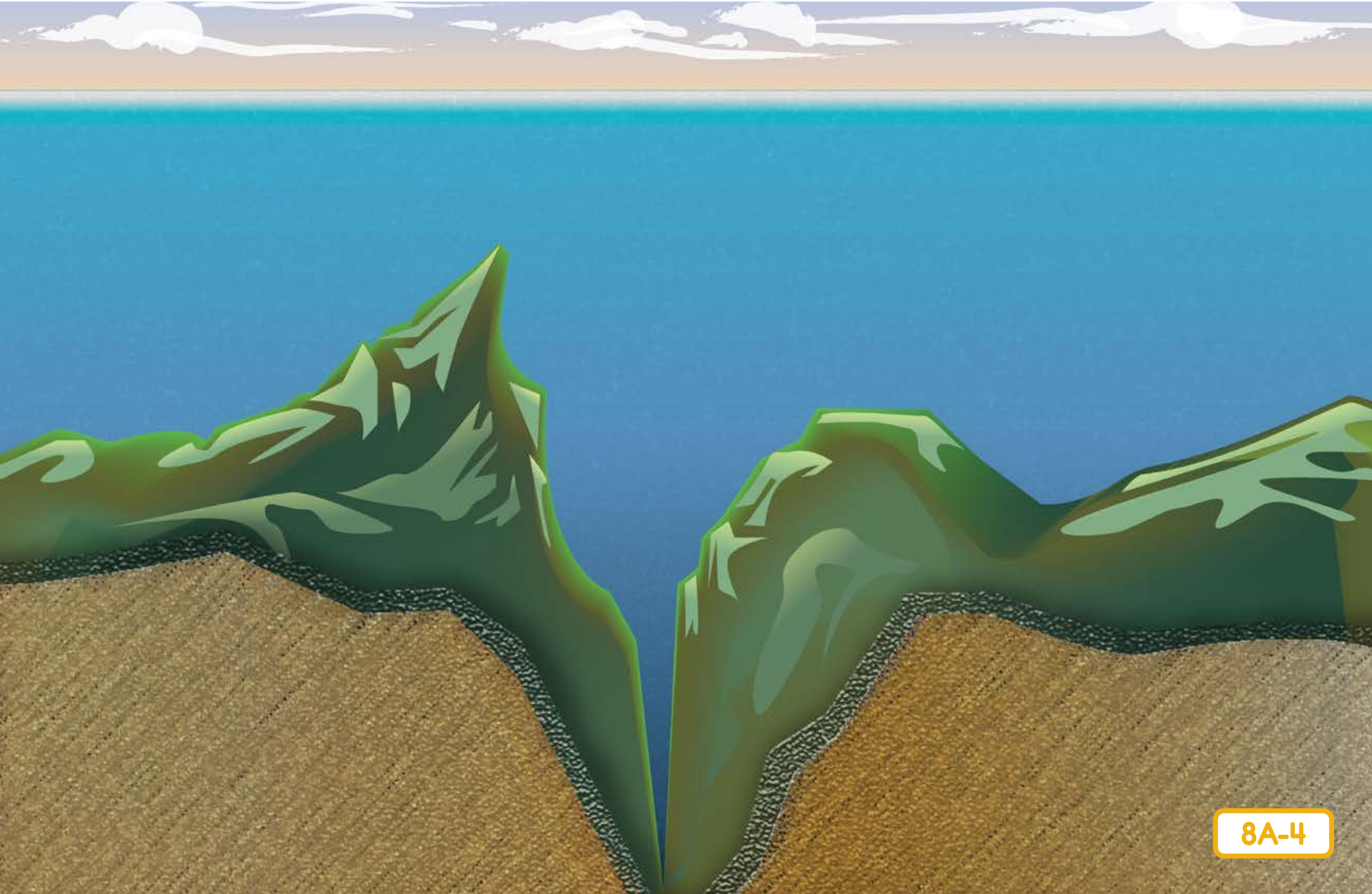


8A-4

8A-5

8A-9

8A-10

8A-11

8A-12

8A-13

8A-14

9A-2

9A-5

Grade 1 | Knowledge 7

Animals and Habitats:
The World We Share

Posters

Posters

The poster(s) in this Flip Book may be cut out and displayed on the classroom wall for the duration of the domain.

Animals and Habitats: The World We Share

Poster 1 of 7: The Arctic Tundra and Arctic Ocean

Animals and Habitats: The World We Share

Poster 2 of 7: The Sonoran Desert

Animals and Habitats: The World We Share

Poster 3 of 7: The East African Savanna

Animals and Habitats: The World We Share

Poster 4 of 7: The Temperate Deciduous Forest

Animals and Habitats: The World We Share

Poster 5 of 7: The Tropical Rainforest

Animals and Habitats: The World We Share

Poster 6 of 7: The Freshwater Habitat

Animals and Habitats: The World We Share

Poster 7 of 7: The Saltwater Habitat

Grade 1 | Knowledge 7

Animals and Habitats:
The World We Share

Multiple Meaning Word Posters

Multiple Meaning Word Posters

The poster(s) in this Flip Book may be cut out and displayed on the classroom wall for the duration of the domain.

1

2

Park (Poster 1M)

1. a piece of public land in or near a city that is kept free of houses and other buildings and can be used for pleasure and exercise *(noun)*
2. to leave a car, truck, motorcycle, etc., in a particular place *(verb)*

Animals and Habitats: The World We Share | **Multiple Meaning Word Poster 1 of 5**

1

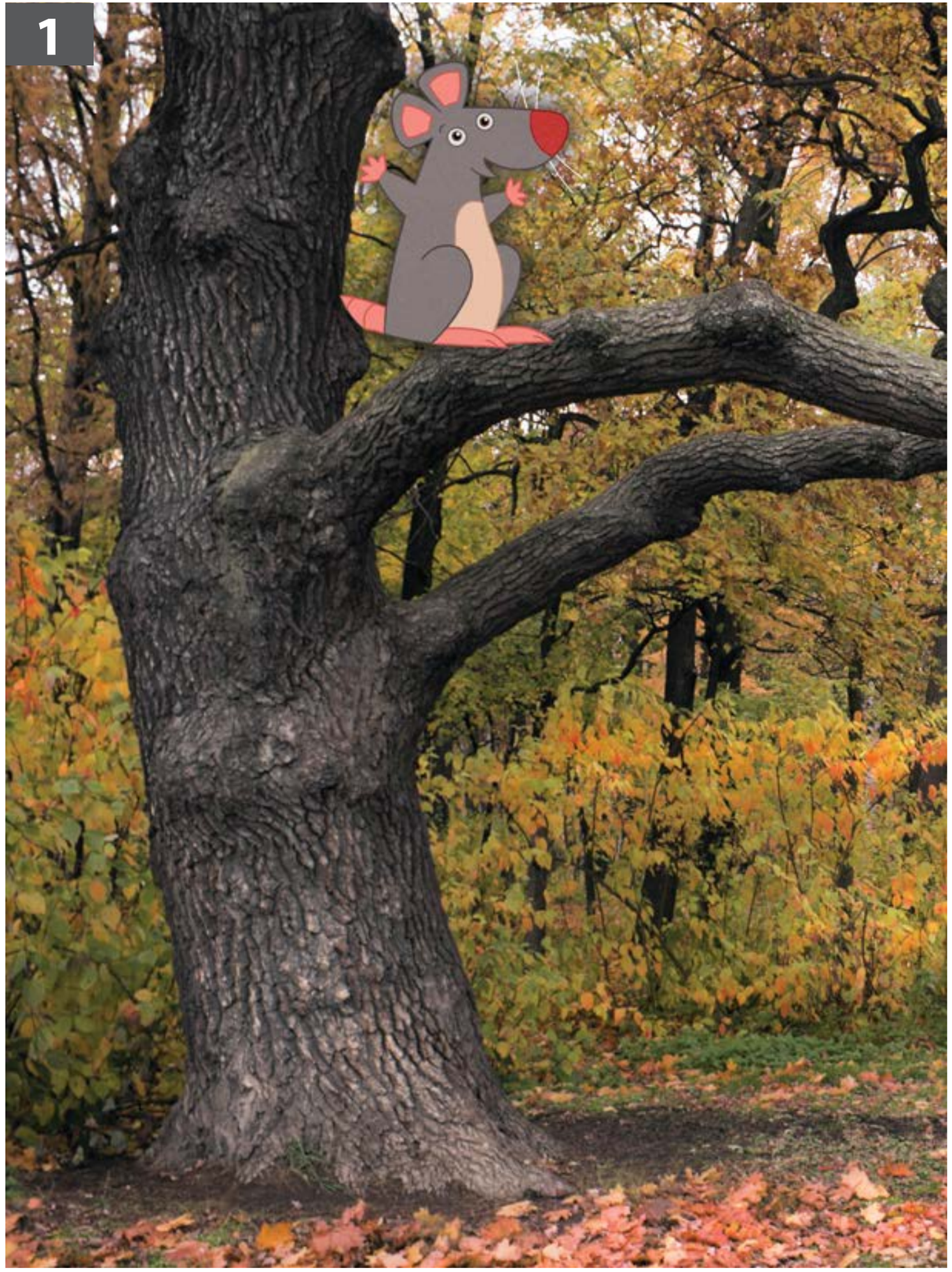
2

Fan (Poster 2M)

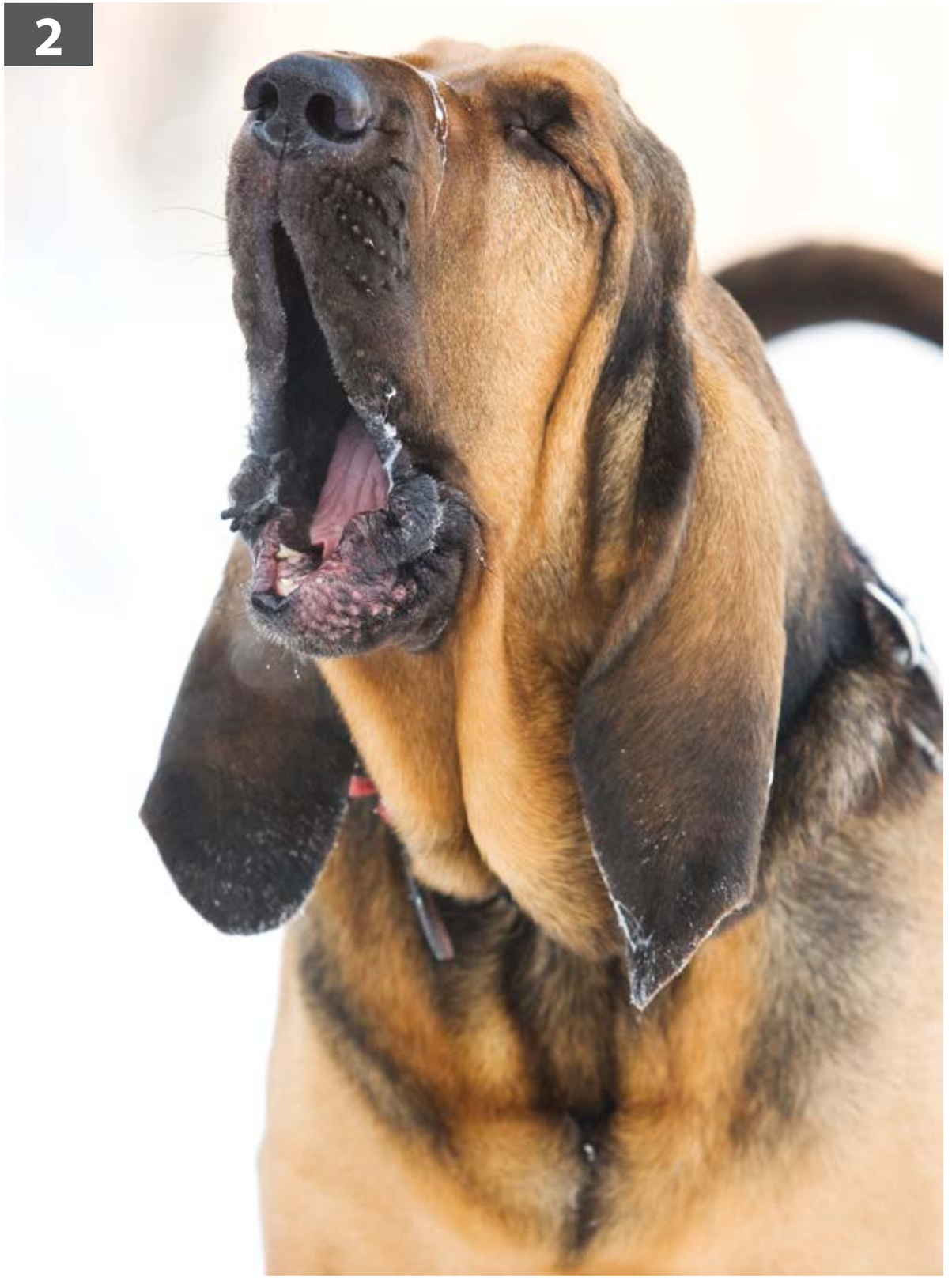
1. a person who likes and admires someone or something (such as a sport or sports team) in a very enthusiastic way *(noun)*
2. a machine or device that is used to move the air and make people or things cooler *(noun)*

Animals and Habitats: The World We Share | Multiple Meaning Word Poster 2 of 5

1



2



Bark (Poster 3M)

1. the outer covering of a tree *(noun)*
2. the sound dogs make *(noun)*

Animals and Habitats: The World We Share | Multiple Meaning Word Poster 3 of 5

1

2

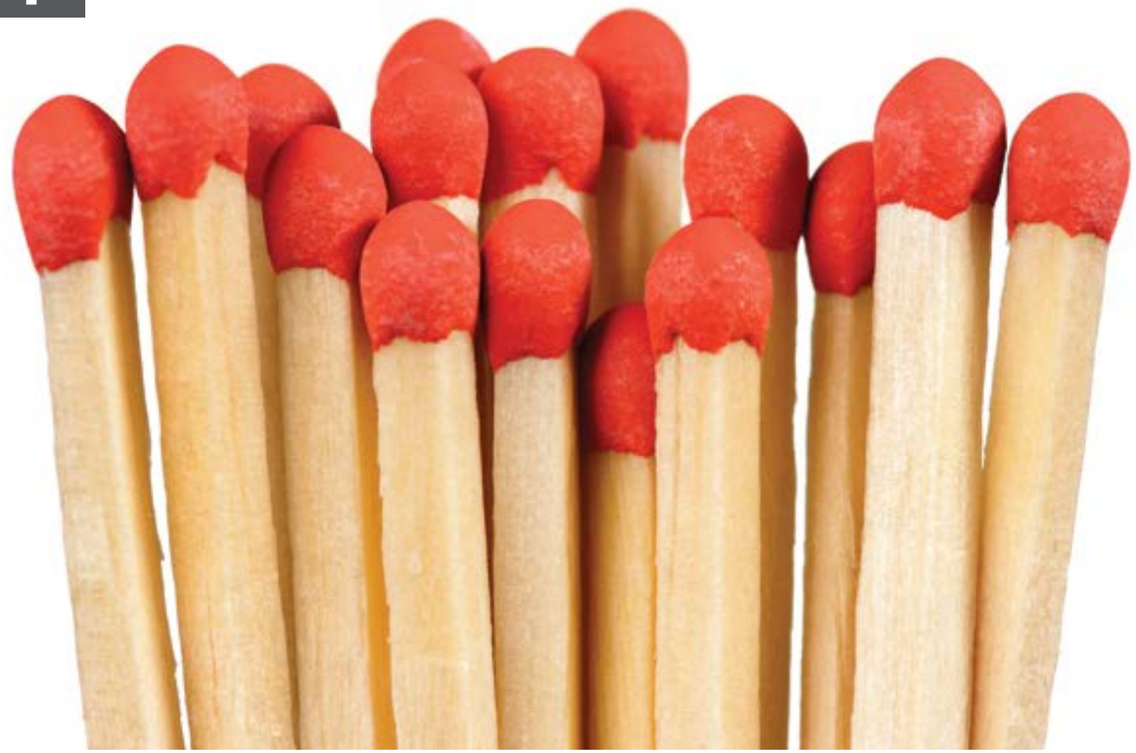
3

Bills (Poster 4M)

1. beaks of birds *(noun)*
2. pieces of paper money *(noun)*
3. documents that say how much money you owe for something you have bought or used *(noun)*

Animals and Habitats: The World We Share | Multiple Meaning Word Poster 4 of 5

1



2

3

Match (Poster 5M)

1. a short, thin piece of wood or thick paper with a special tip that produces fire when it is scratched against something else *(noun)*
2. a contest between two or more players or teams *(noun)*
3. to make or see a connection or relationship between two things *(verb)*

Animals and Habitats: The World We Share | Multiple Meaning Word Poster 5 of 5

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Grade 1 | **Knowledge 7** | Flip Book

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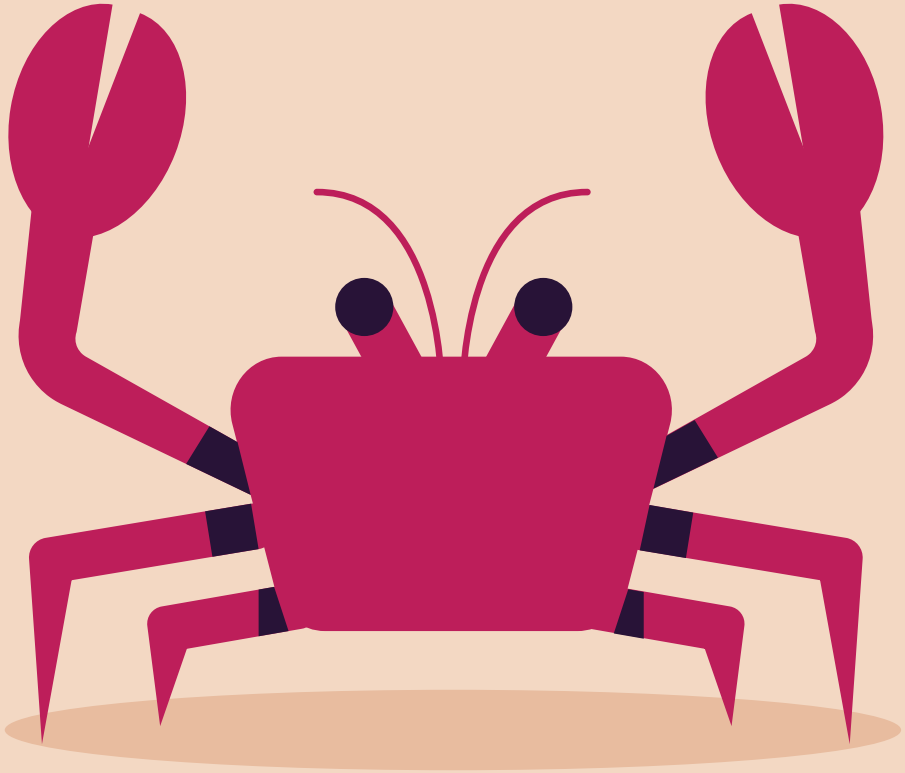

Grade 1

Knowledge 7 | Image Cards

Animals and Habitats: The World We Share

ISBN 9781643837925

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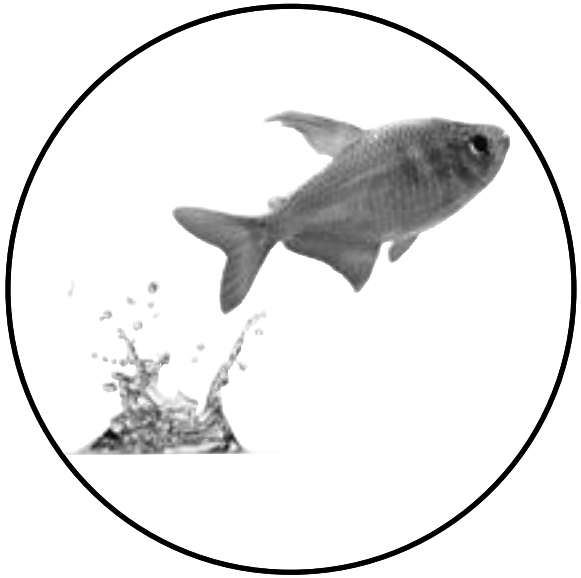

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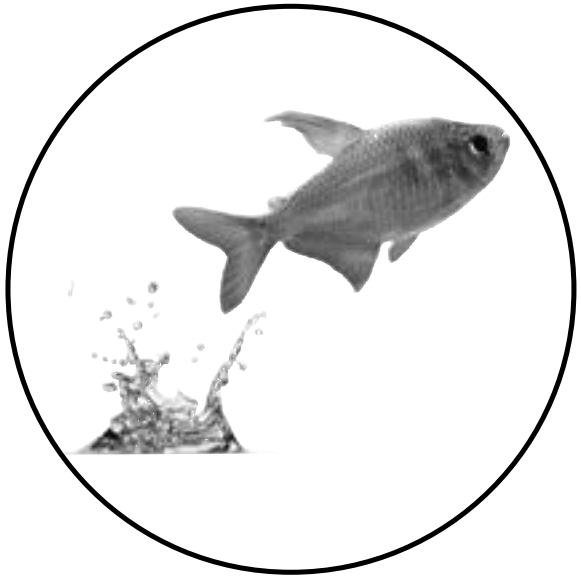

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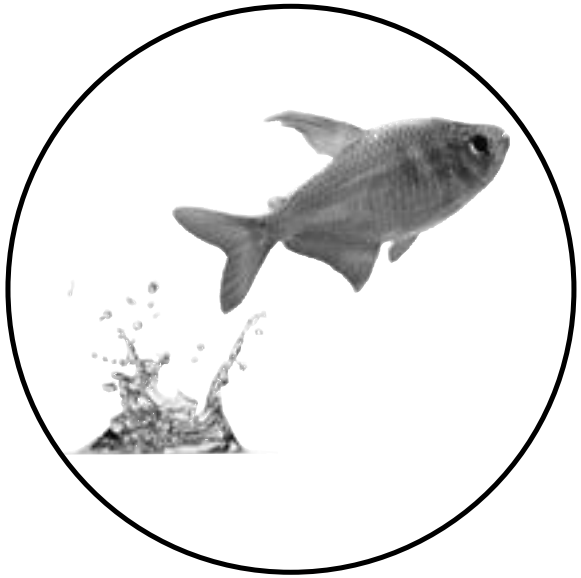

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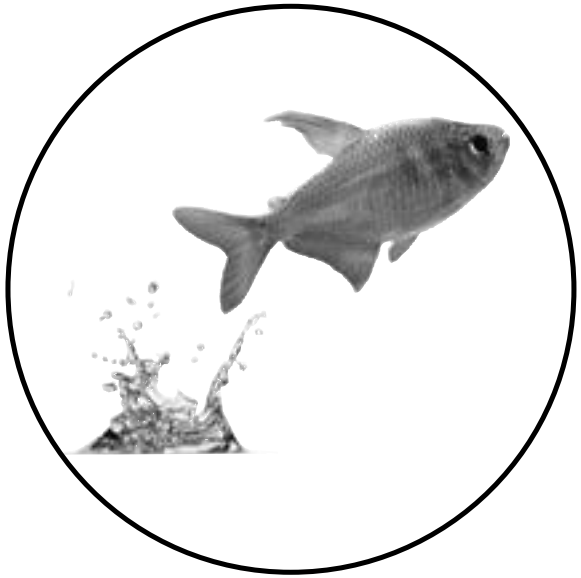

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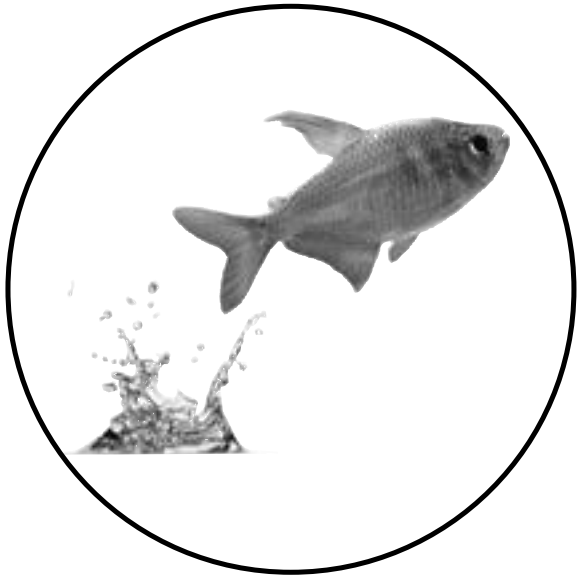

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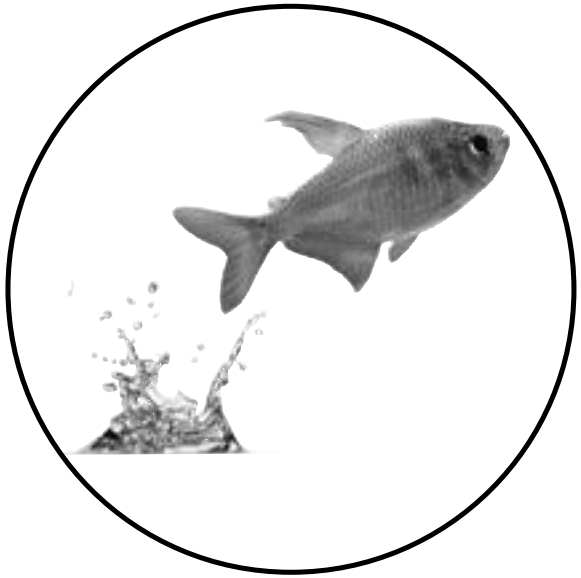

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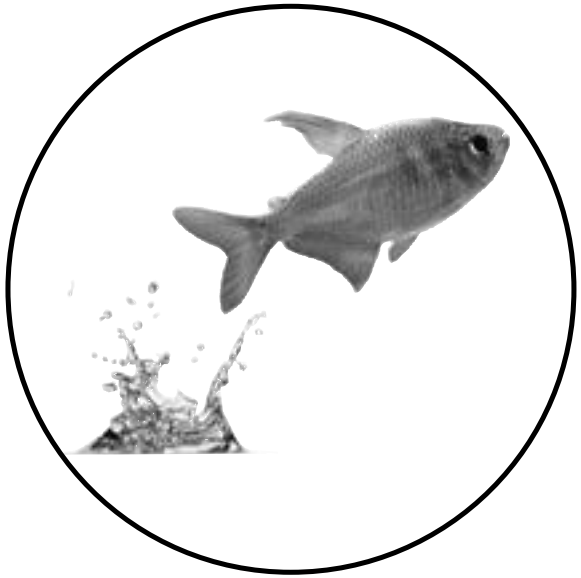

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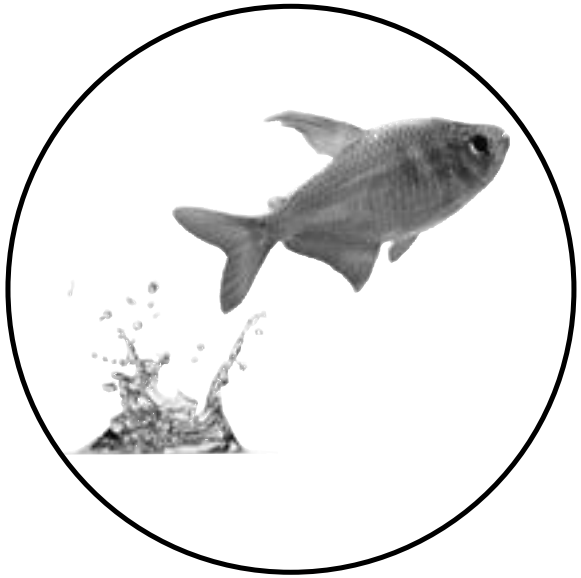

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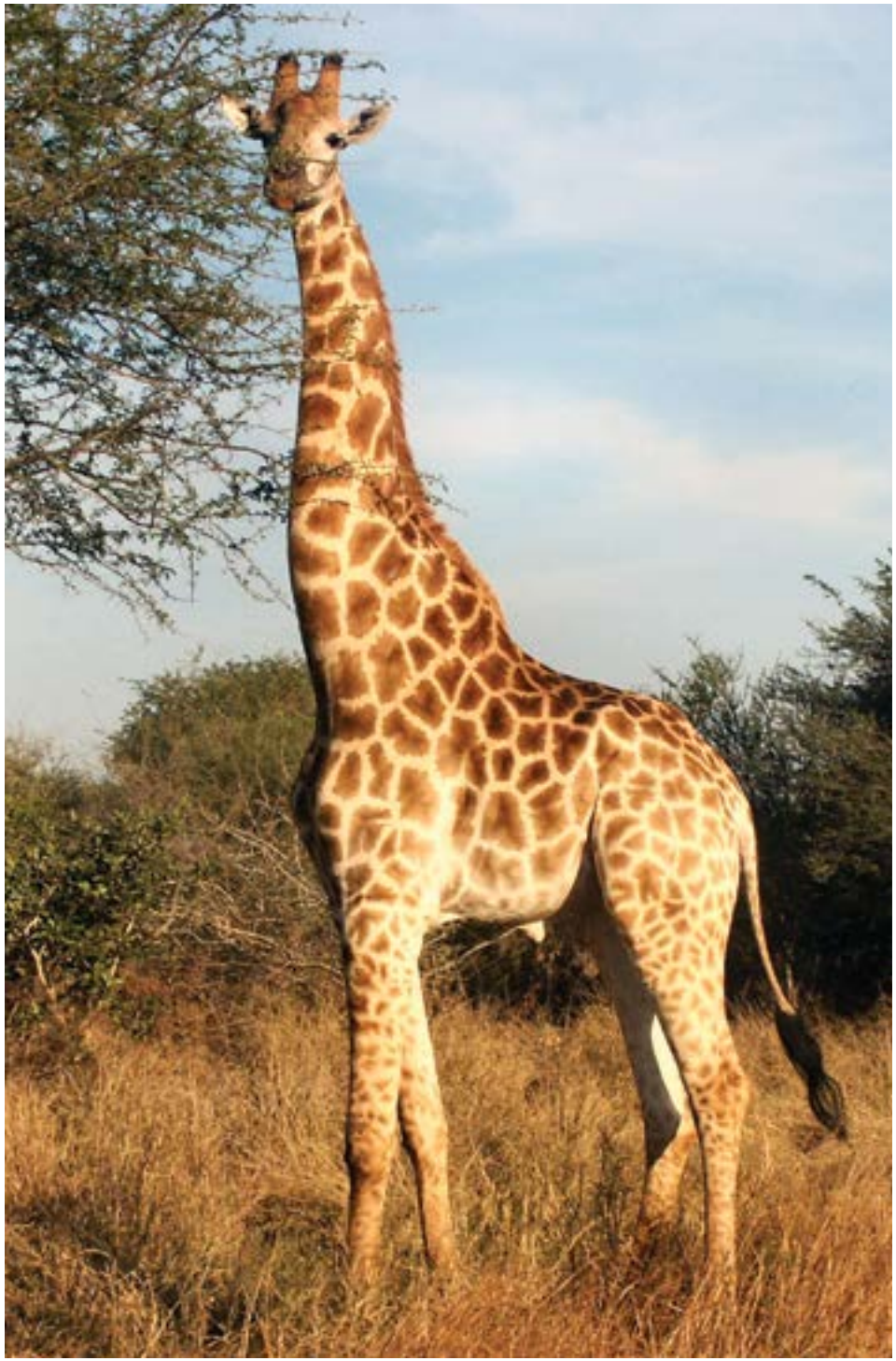

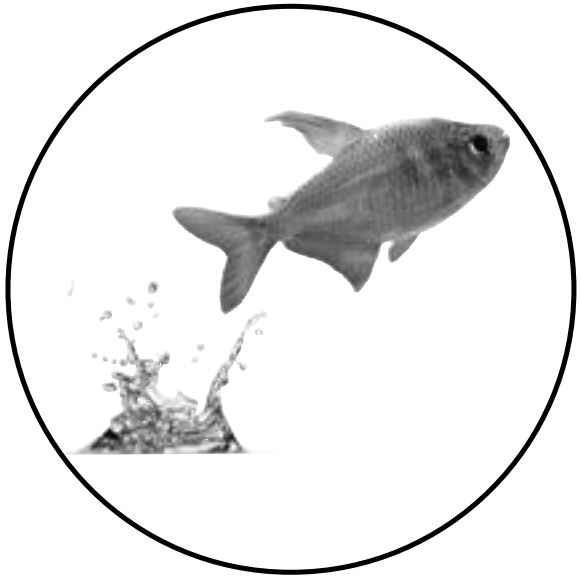

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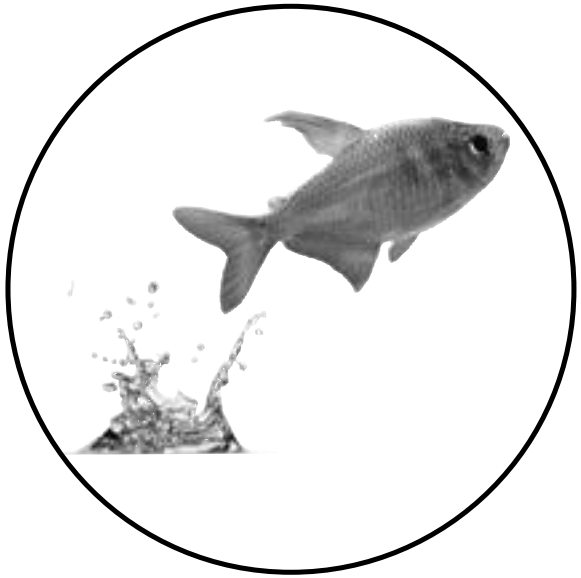

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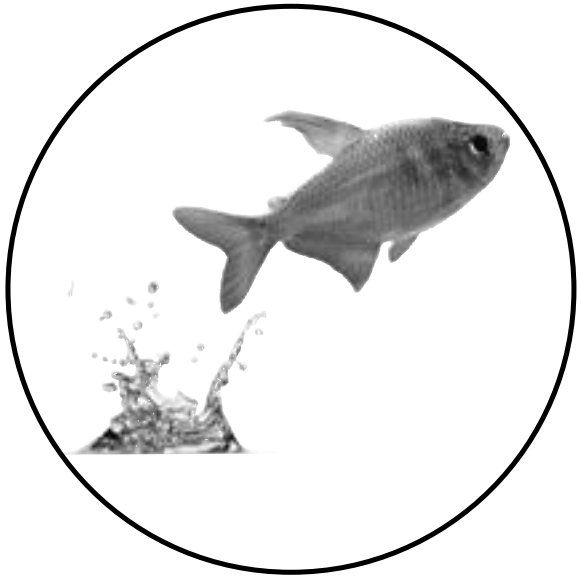

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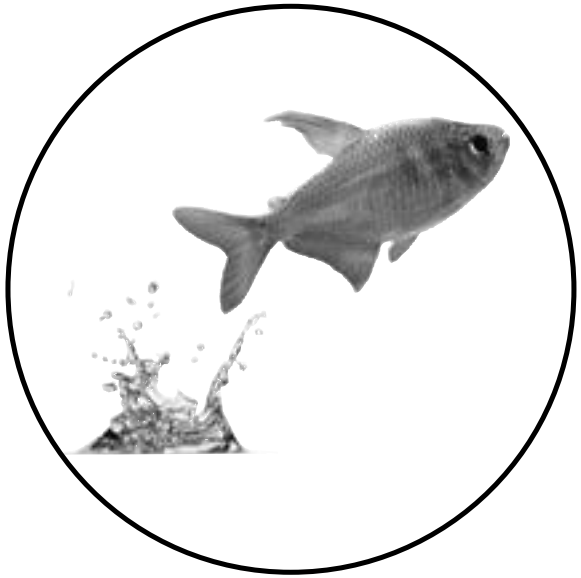

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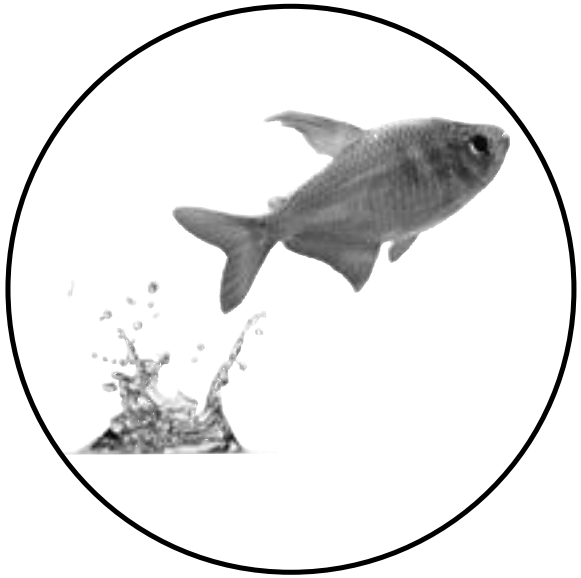

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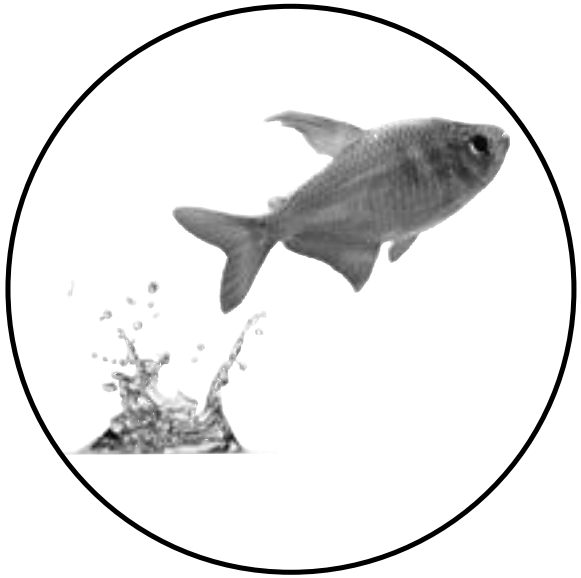

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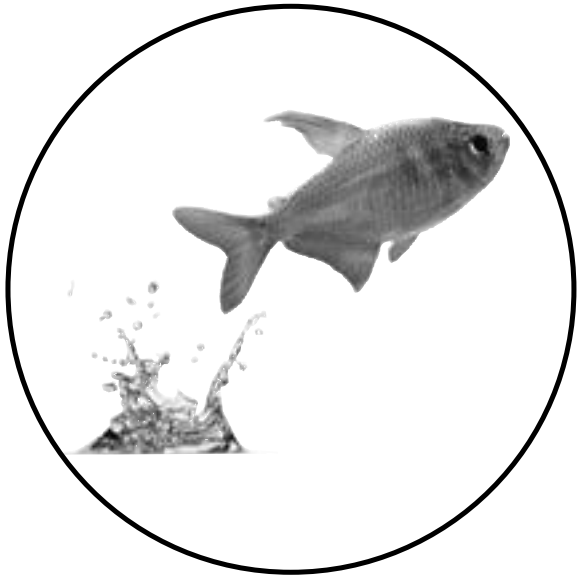

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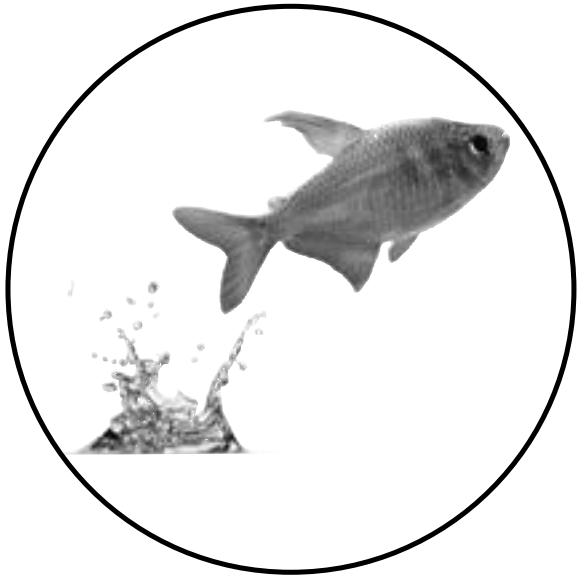

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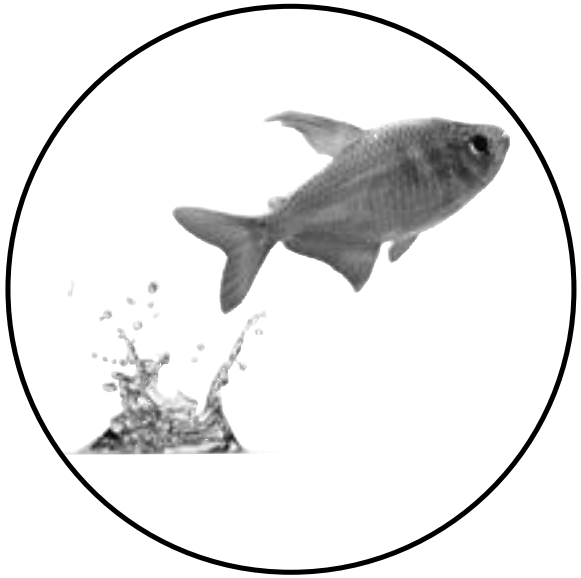

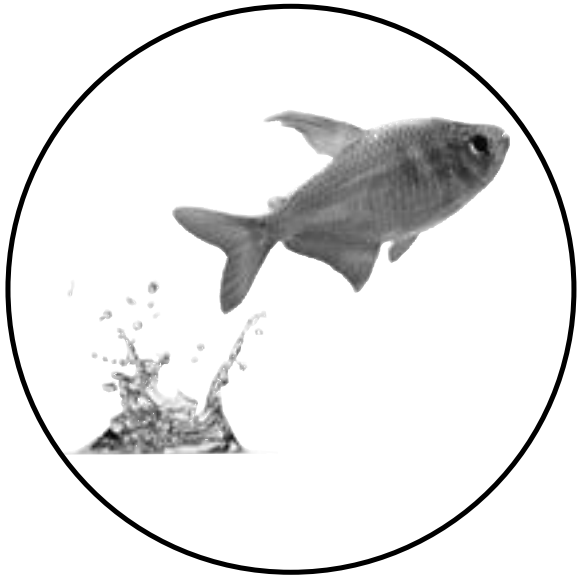

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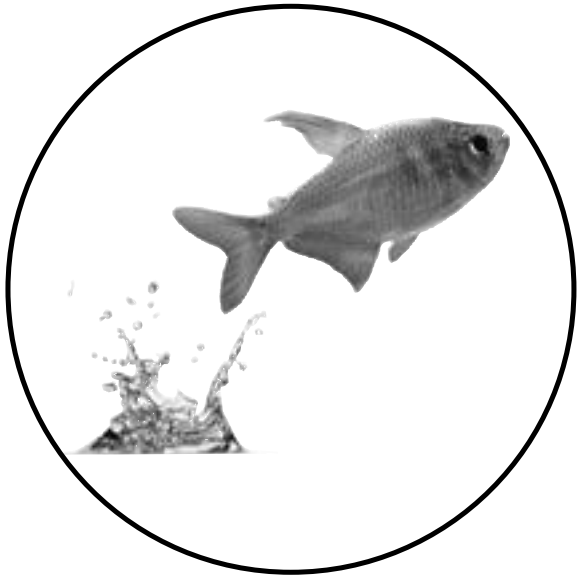

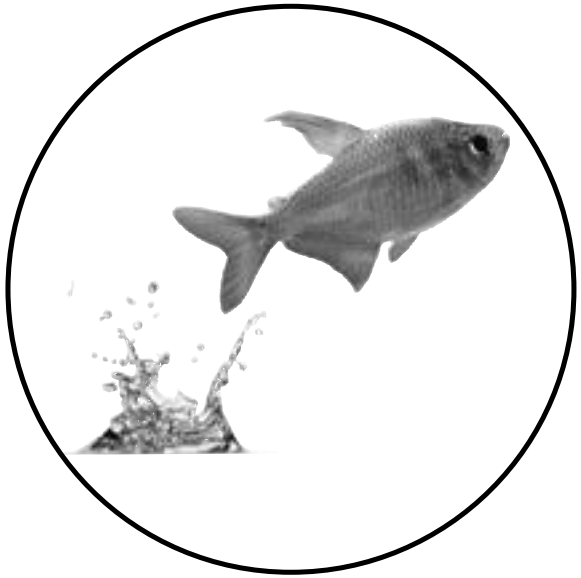

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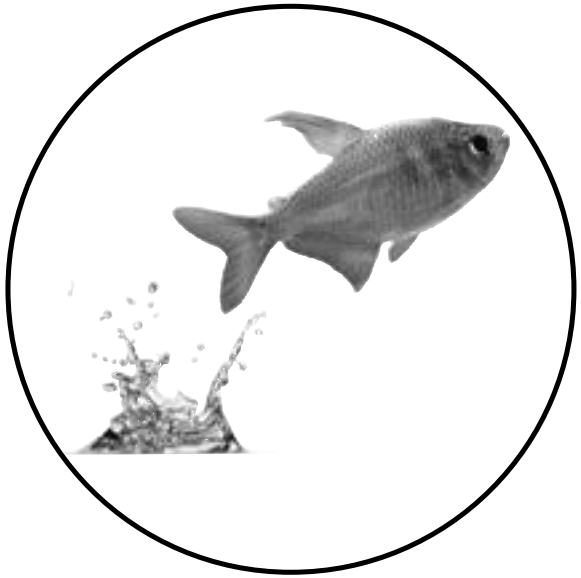

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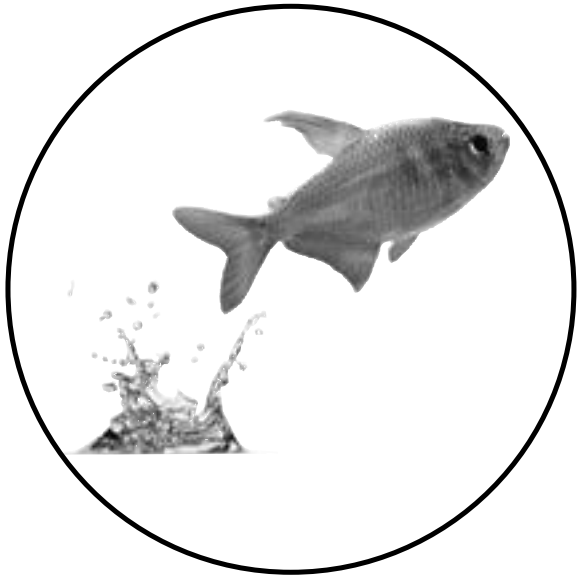

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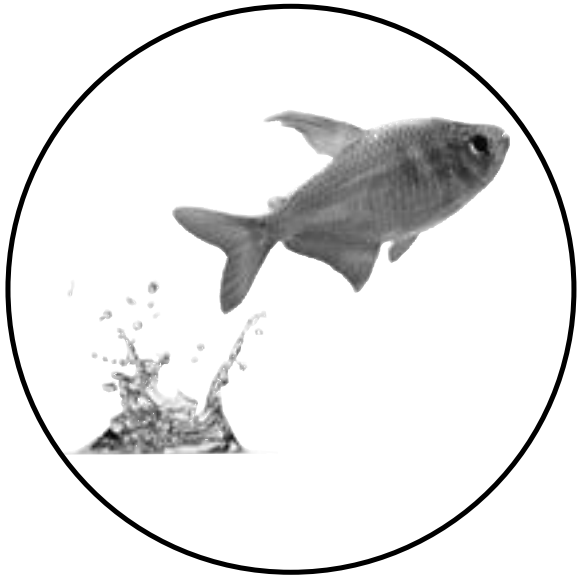

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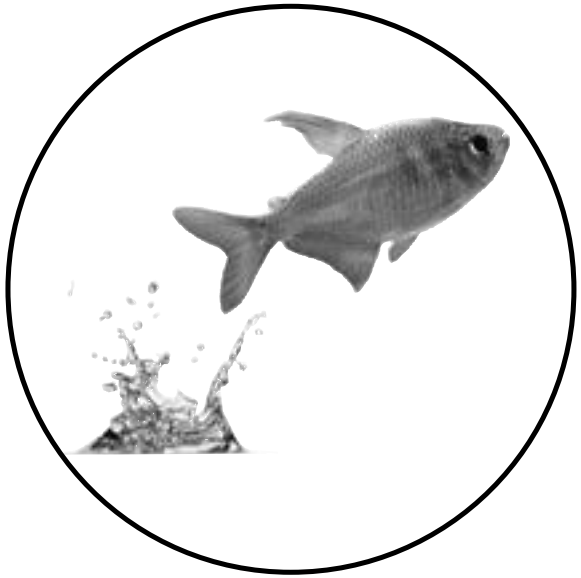

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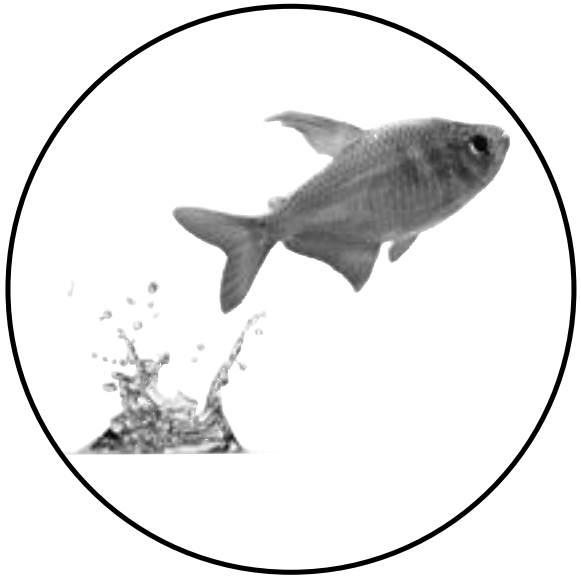

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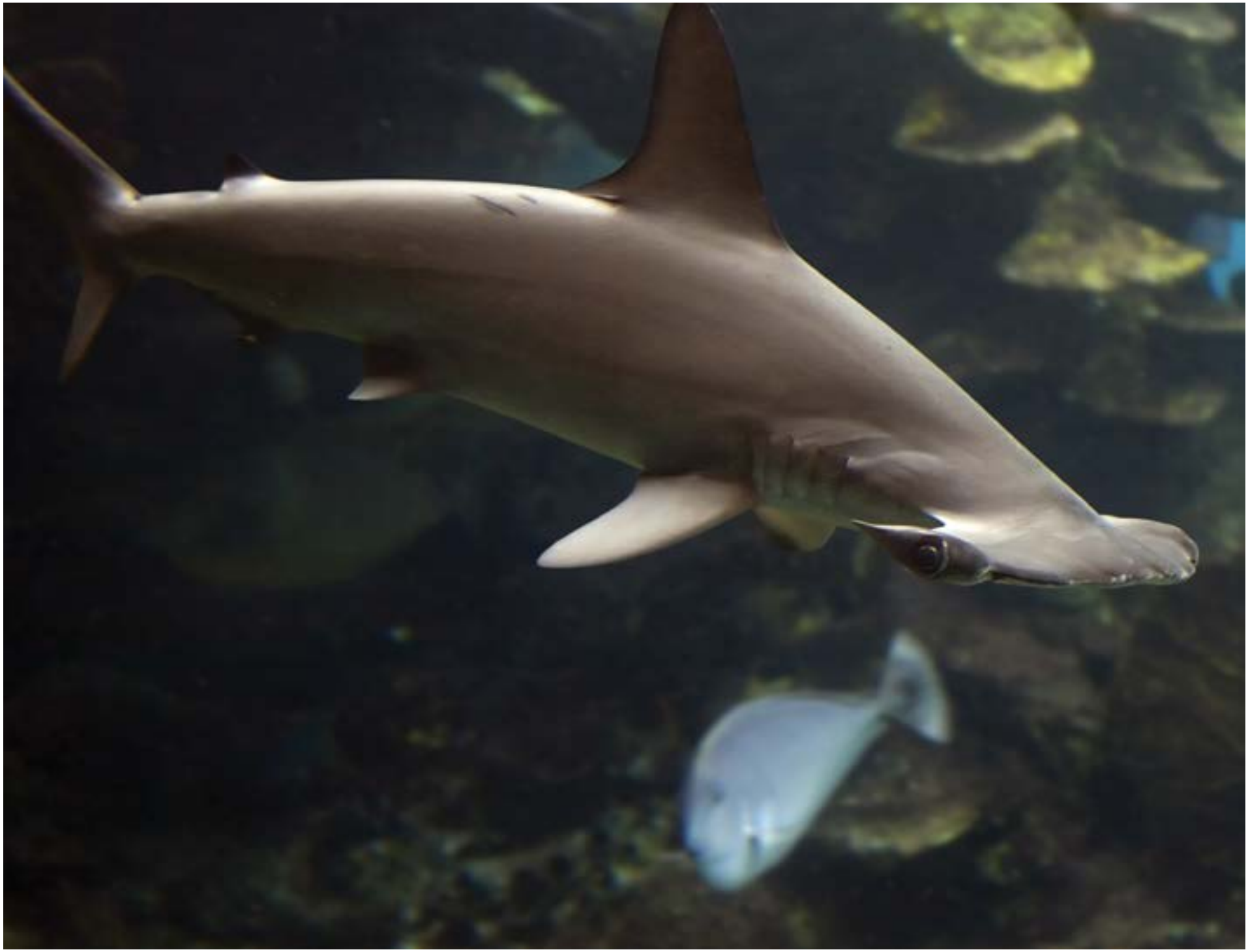

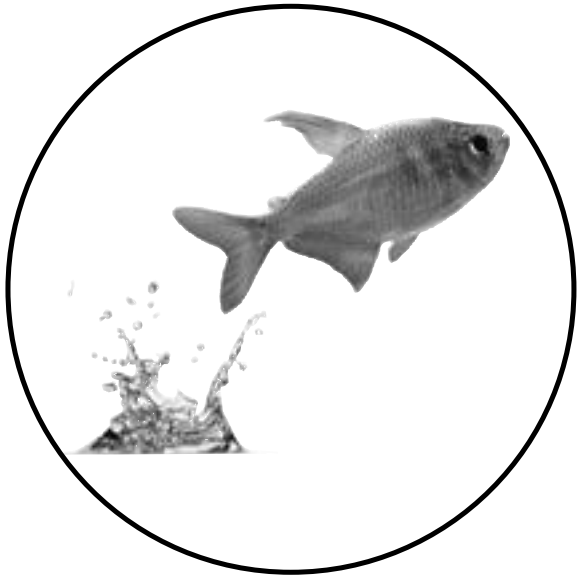

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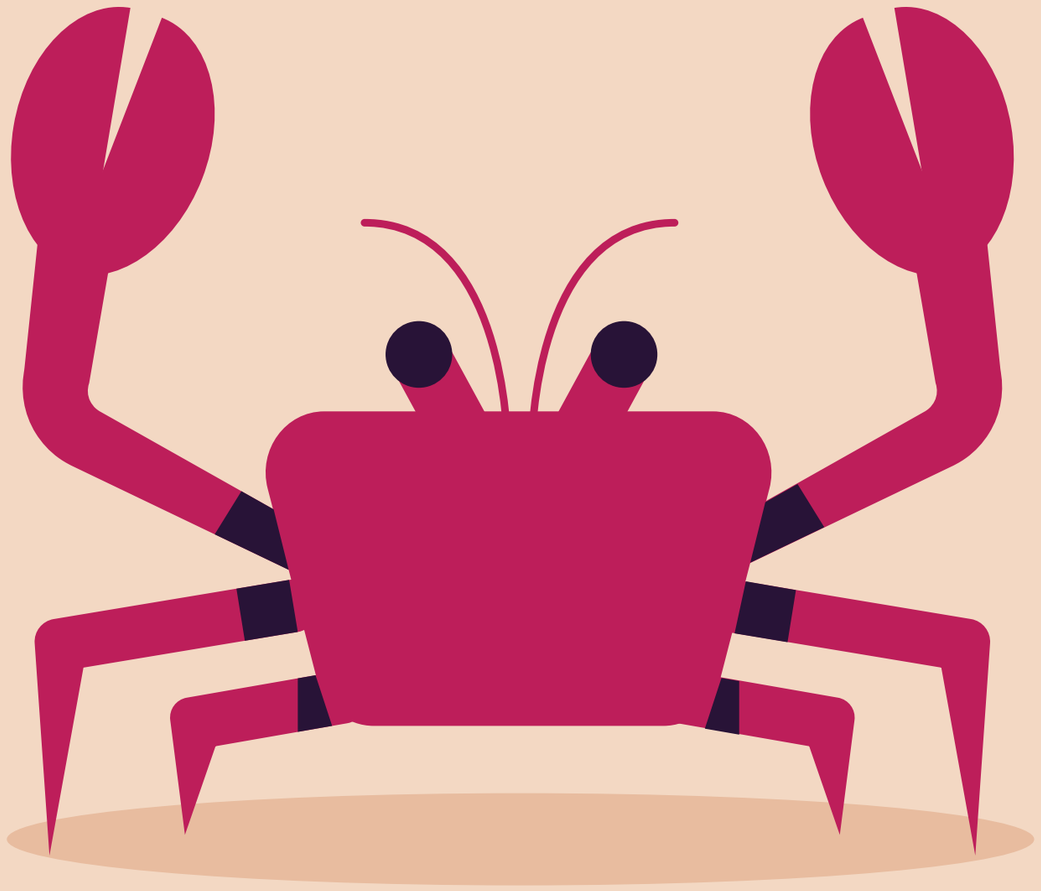

Grade 1

Knowledge 7 | Digital Components

Animals and Habitats: The World We Share

Grade 1 | Knowledge 7

Animals and Habitats:
The World We Share

Digital Components

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Food	Shelter

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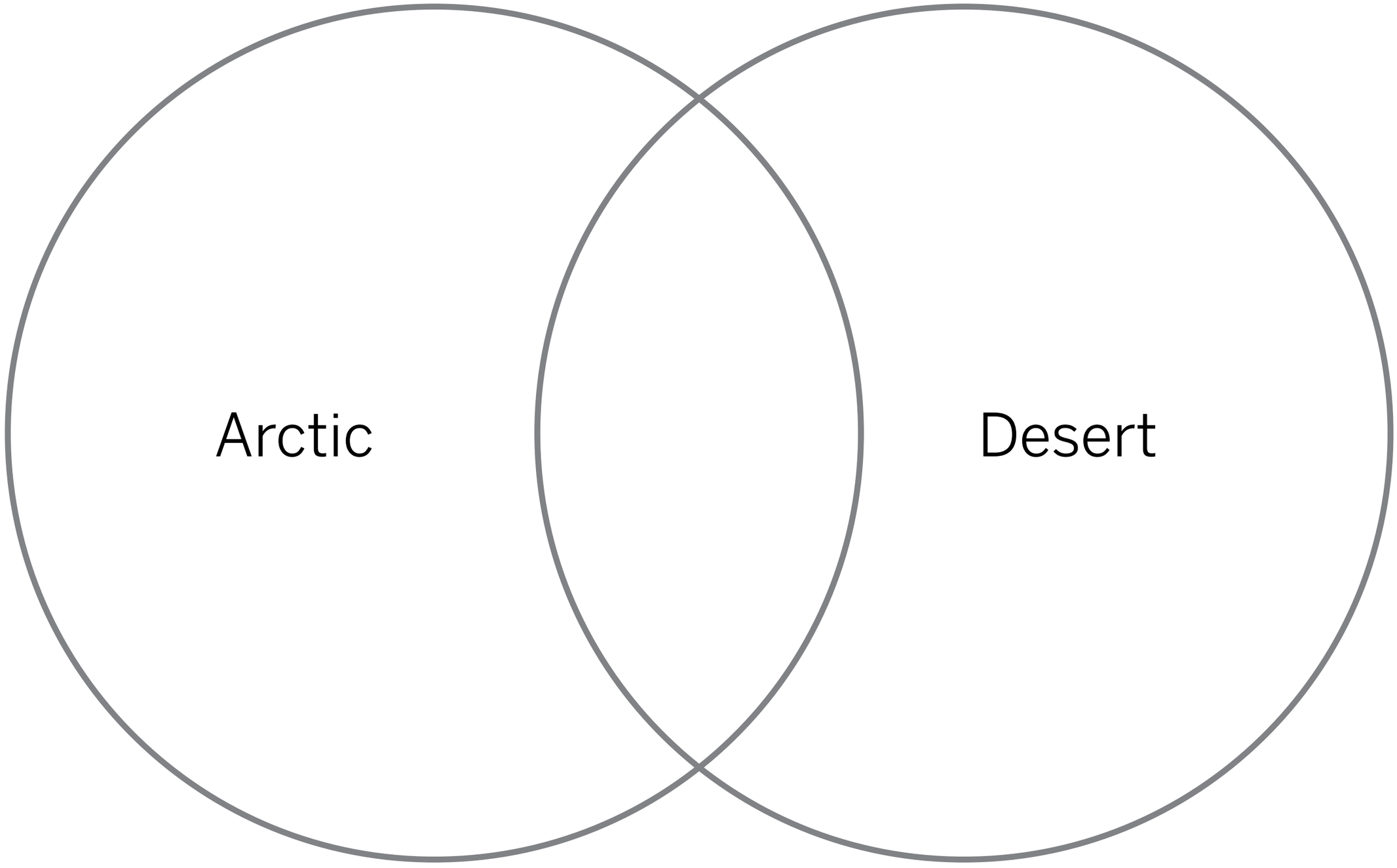
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And a special thanks to the Pilot Coordinators, Anita Henderson, Yasmin Lugo-Hernandez, and Susan Smith, whose suggestions and day-to-day support to teachers using these materials in their classrooms were critical.

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Expert Reviewer

Christine L. May

Writers

Ewa Beaujon

Amplify. TEXAS
ELEMENTARY LITERACY PROGRAM
LECTOESCRITURA EN ESPAÑOL

Amplify. TEXAS
ELEMENTARY LITERACY PROGRAM

Welcome!

Grade 1, Domain 7
Animals and Habitats: The World We Share

In this unit, students will explore how connected living things are to the environment they live in.

What's the story?

Students will learn about the concept of **habitats**, the different **plants** and **animals** that are a part of specific habitats, and what makes each habitat **unique**.

What will my student learn?

Students will learn about **habitats** and how plants and animals develop characteristics that help them **adapt** and **survive** in particular climates. Students will also learn about the **types of foods** animals eat and will be introduced to the notion of a **food chain**.

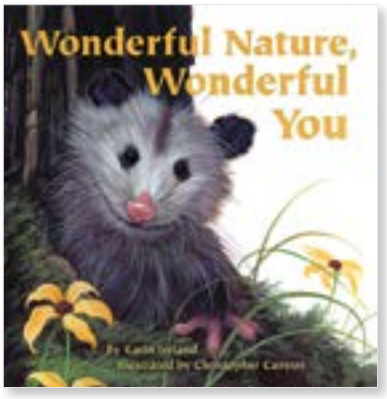
Students will **identify and describe** different habitats based on their **unique characteristics**. They will learn to **classify** animals according to the types of food they eat. Students will also explore **informational writing**. They will keep a habitat journal, creating a new entry for every habitat they learn about.

Conversation starters

Ask your student questions about the unit to promote discussion and continued learning:

1. What is a habitat?
   Follow up: Describe the habitat that surrounds where we live. Is it a good habitat for plants and animals? Why?
2. Tell me about the Arctic tundra.
   Follow up: What animals live there? What kinds of plants grow there? How have the animals that live there adapted to keep themselves warm?
3. What are some animals that you have been learning about?
   Follow up: What habitat do those animals live in? How have they adapted to their environment? Why is it important for living creatures to adapt to their environment?
4. Let's compare some of the habitats you have been learning about. (Choose from tundra, savanna, desert, forest, rainforest, etc.)
   Follow up: How are they similar to one another? How are they different? Which habitat would you want to live in? Why?

Grade 1: Domain 7
Wonderful Nature, Wonderful You



by Karin Ireland
Illustrated by
Christopher Canyon

I

●●● QT: 620L

Read-Alouds with this rating may demonstrate sophisticated syntax and nuanced content.

●●○ QL: **2**

These Read-Alouds may include some complexity in structure and purpose. The language may include some unconventional phrasing, idioms, or other specialized phrasing.

●●○ RT: **2**

This unit's tasks and activities may contain some complexity; students will benefit from the knowledge they have built throughout the program.

Summary: In this book, the author applies the survival qualities of plants and animals in nature to reinforce positive messages for children, such as doing your best or understanding that sometimes things don't turn out the way you would like. Social-emotional themes are integrated throughout this book, which showcases a variety of animals and their habitats.

Essential Question

How do plants and animals survive and thrive in their habitats?

Explain that a habitat is where an animal or a plant lives and that it provides food, water, and shelter. Review the story and have students identify places in the book where food, water, and shelter appear. Some examples include:

- nuts for squirrels to eat
- water from the air for moss
- a beach for the turtle to make a nest for her eggs
- fish, fruit, seeds, worms and snails as food for birds
- food from the water for otters
- grass for zebras
- a lake for food and water for hippos
- a home for beavers made of mud and branches

Vocabulary Routine

Tier 2 Vocabulary Words
fierce
instincts
float

Performance Task

Read aloud the paragraph about elephants under "More Wonder About Animals" in the back of the book. Have students write a paragraph about how an elephant uses its trunk to survive in its habitat.

Students should be able to

- list at least two ways elephants use their trunks to survive (e.g., trumpet information, grab food, breathe while underwater).

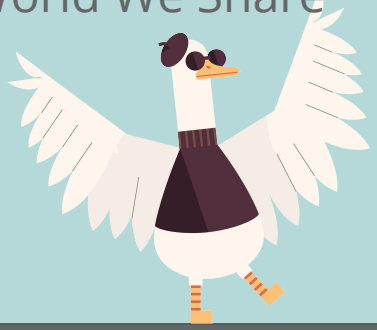
Writing Prompt

Have students write a sentence or sentences based on the following prompts. Encourage students to write in complete sentences.

- Write a short paragraph that describes your own habitat.
- How is your habitat the same as the habitat of one of the animals in the book?
- How is your habitat different from the habitat of one of the animals in the book?

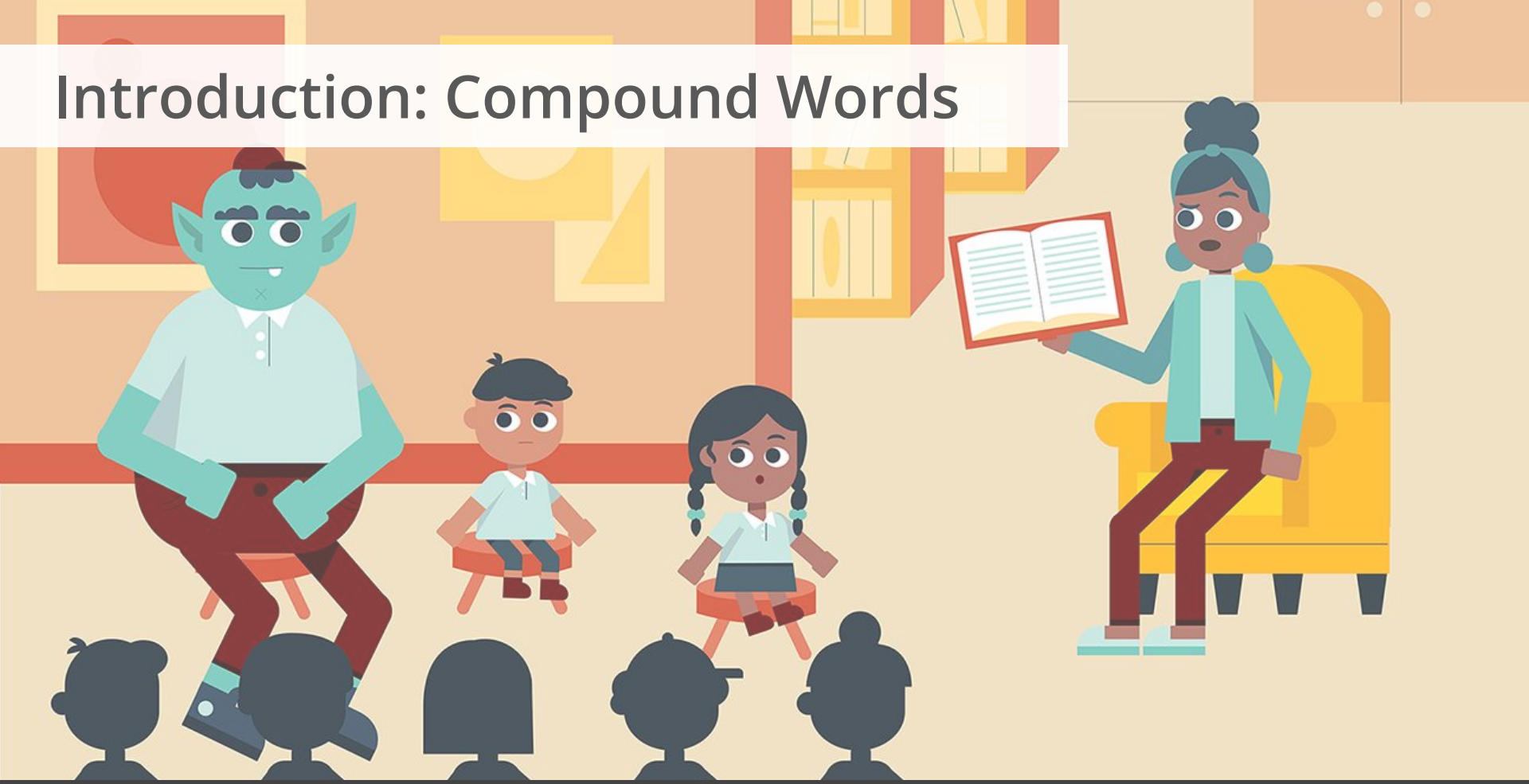
Vocabulary

Grade 1 Domain 7: Animals and Habitats: The World We Share



Compound Words

Introduction: Compound Words



Compound words are words that are made up of two separate words.

Since compound words are made up of two words that already exist, we can use those two words to predict the compound word's meaning.

In the *Animals and Habitats: The World We Share* domain, we learned about animals that live in **saltwater** and **freshwater** habitats.

These two words, **saltwater** and **freshwater**, are both compound words.

What makes them compound words?

Saltwater and **freshwater** are compound words because they are made up of two seperate words. Let’s break them down.

saltwater = salt + water

freshwater = fresh + water

Knowing the two words that make up a compound word means we can predict the meaning of the compound word.

saltwater = salt + water

Based on the meaning of *salt* and *water*, we can predict that **saltwater** is water with salt in it.

freshwater = fresh + water

Based on the meaning of *fresh* and *water*, we can predict that **freshwater** is water without salt in it.

Let’s Try It Together!

Look at the compound word below and try to predict its meaning:

alleyway

First, let's identify how many words make up **alleyway**.

How many words are there in the compound word **alleyway**?

Stand if you think there are two words in **alleyway**.

Stay seated if you think there are more than two.

There are two words that make up the compound word **alleyway**:

alley

way

Knowing that *alley* + *way* = **alleyway**, practice predicting the meaning of **alleyway**.

Discuss the meaning of **alleyway** with a partner.

An **alleyway** is a passage between or behind buildings.

Now Try One by Yourself!

Predict the meaning of the following compound words:

underwater

footprint

Write down both compound words and circle the two words that make up each compound word.

Now let’s determine each compound word’s meaning.

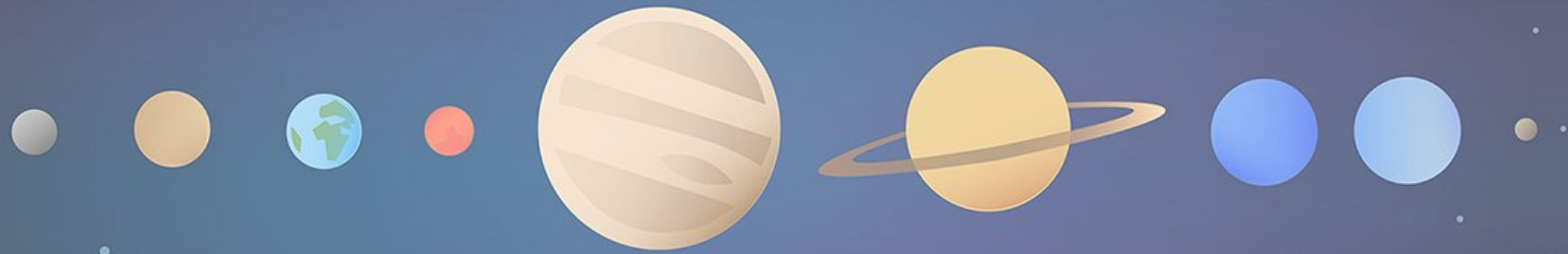
Stand up if you think **underwater** means *above the surface* of the water.

Stay seated if you think **underwater** means *below the surface* of the water.

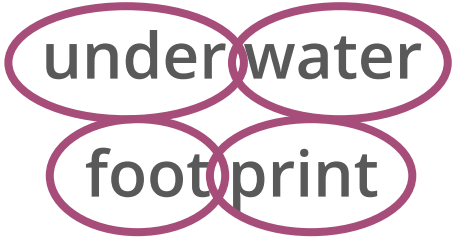
Stand up if you think **footprint** means a mark in the *shape of a hand* on a surface.

Stay seated if you think **footprint** means a mark in the *shape of a foot* on a surface.

Answer



Answer



Answer

Underwater means below the surface of the water.

Footprint means a mark in the *shape of a foot* on a surface.