Deserts, mountaintops, tropical rain forests, and grasslands are all places where people live. Animals and plants live in these places, too.
How do people and environments affect each other?

Listening and Speaking
You will talk about your environment and things you can do to protect it. In the Listening and Speaking Workshop, you will give a how-to presentation.

Writing
You will practice expository writing. In the Writing Workshop, you will write a compare-and-contrast essay.

Quick Write
Write several sentences describing one thing you do to protect your environment. Share your work with a partner.

In this unit, you will learn these ELPS:

Learning Strategies: 1.A (1), 1.D, 1.E (1, 2, 3, 4), 1.F
Listening: 2.B, 2.F (2), 2.G (4, 5, 6, 7, 8, 9), 2.I (4)
Speaking: 3.B (1, 3), 3.C (1, 2, 4), 3.F (1), 3.G (1, 2)
Reading: 4.C (1, 2), 4.F (1, 2, 3, 5, 10), 4.G (1, 2, 3, 4), 4.K

For the full text of the ELPS, visit LongmanCornerstone.com

Video
Talk about the poster for this unit. Then watch and listen to the video and answer the questions at LongmanCornerstone.com.
What do you know about your environment?

Words to Know

Listen and repeat. Use these words to talk about the environment.

- conserve energy
- reduce pollution
- protect wildlife
- conserve water
- recycle
- protect insects

Practice

Work with a partner. Ask and answer questions about the environment.

- use fewer insecticides
- take the train or bus
- separate plastic, paper, and glass
- take shorter showers
- protect forests
- turn off lights

Example: A: What’s a good way to conserve energy?
B: One good way is to turn off lights.

Write

Read the question. Write your response in your notebook.

What are some things you do to protect the environment?
Make Connections

Copy the sentences below into your notebook. Complete the sentences with the following words.

1. Because ____ is an important part of the environment, we must conserve water in order to make sure we have enough of it.
2. Trees are an important part of our environment because they provide ____.
3. In order to have a ___, it’s important to recycle.
4. Because cars are major contributors to pollution, we should ride the bus, take the train, or walk as much as possible so that we can have ____.

What about you?

Talk with a partner. How you can help to protect the environment?
Air pollution is a big problem in Bangladesh. In large cities, like Dhaka, we are just beginning to measure pollution that comes from cars and factories. We hope modern cars and factories will mean cleaner air for everyone.

In Germany, we take recycling very seriously. Every city and town has bins where people can bring their used plastic and glass bottles, newspapers, cardboard, and aluminum cans. We hope this will mean a better future for everyone.
I live on St. Paul Island in Alaska. Our rocky beaches get lots of garbage from boats that pass by. We get together and pick up trash, bottles, and cans. In September, children and adults from around the world do the same thing. It’s called the International Coastal Cleanup.

What about you?

1. What are some environmental problems in your area?

Biomes All Over the World describes the major biomes on Earth.

Words in Context

1. The Eden Project in Cornwall, England, has several man-made biomes. A **biome** is a group of plants and animals in a geographic area.

2. The **tundra** is found at the North and South Poles. Plants do not grow very tall, because the ground is often frozen or covered with snow.

3. The **equator** is an imaginary line that runs around the middle of our planet. It divides Earth in half.

4. A **desert** is usually dry and hot.

**Key Words**

- biome
- tundra
- equator
- desert
- tropical grasslands
- ocean
Most **tropical** rain forests are near the equator. They are usually hot and humid!

**Grasslands** are large areas covered with grasses. Savannas and prairies are two types of grasslands.

The **ocean** is the largest biome in the world. Oceans cover more than 70 percent of Earth’s surface.

---

**Practice**

Create a concept map for each new word.
- Write the key word in the center.
- Around it, write words that relate to it.
- Connect the words using lines.

**Make Connections**

Describe some of the plants and animals that live in your area.

**Speaking Skills**

If you can’t think of the right word, try using a synonym.
These words will help you talk about the reading.

**Academic Words**

<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>adapted</td>
<td>changed to fit a new situation</td>
</tr>
<tr>
<td>label</td>
<td>use a word or phrase to describe something</td>
</tr>
<tr>
<td>migrate</td>
<td>move from one place to another</td>
</tr>
</tbody>
</table>

**Words in Context**

Animals around the world have **adapted** to the places they live.

Map makers **label** each ocean on the map.

Many birds **migrate** south in winter to stay warm.

**Practice**

Write the sentence in your notebook. Choose an academic word to complete each sentence.

1. In spring, some animals ____ north to find food.
2. My mother will usually ____ all the food she puts into the freezer.
3. Polar bears have ____ to living in very cold weather.

**Apply**

Ask and answer with a partner.

1. Explain how to **label** a Venn diagram.
2. How have polar bears **adapted** to cold weather?
3. Why might animals **migrate** south in cold weather?
Final s sound: z, s, iz

Listen. Identify whether the final s is pronounced z, s, or iz. Then read each word aloud.

biomes    tops    pages

**Rule**

A final s is pronounced z after a vowel or a voiced consonant like b, d, g, l, m, n, r, or v. You can feel your throat vibrate when you say a vowel or voiced consonant. The final s is pronounced s after a voiceless consonant like f, k, p, or t. After words ending in ch, sh, j, s, x, or z sounds, the final s is pronounced iz.

**Practice**

Work with a partner. Read each word aloud. Tell whether the final s sounds like z, s, or iz.

1. classes       6. teaches
2. was          7. pages
3. mixes       8. goes
4. cats       9. walks
5. always
A **biome** is a community where certain kinds of plants and animals live. Earth has more than 30 different kinds of biomes. These photos show the most common ones.

Forests cover about one-third of the land on Earth’s surface. Forests are filled with trees and plants. **Temperate** forests have different **seasons**. In the winter, these forests can be cold. In the summer, they can be hot. Temperate forests get a lot of sunlight. The sun helps plants grow.

Many animals live in the forest. All need to be able to survive in different seasons. Small animals, such as squirrels and skunks, can be found in the temperate forest. Large animals, such as black bears, also make their homes there.

---

**community**  group that lives together in the same place

**temperate**  never very hot or very cold

**seasons**  changes in weather that happen annually
Another kind of forest is the **tropical** rain forest. Tropical rain forests are in areas near the **equator**. All rain forests get a lot of rain every year. The rain helps plants grow. In fact, rain forests have more kinds of plants than any other biome. The trees grow so well that very little sunlight can get through the **canopy** of leaves. This makes the ground in the rain forest wet and dark.

The darkness inside the rain forest makes it a perfect home for animals such as bats and small insects. Many **exotic** birds, reptiles, and mammals live in rain forests.

---

canopy cover
exotic unusual and exciting

**Before You Go On**

Why is it dark inside a rain forest?
The **arctic tundra** is the coldest biome on Earth. Trees do not grow in the tundra. Winds are very strong. Ice covers the ground, and water freezes. Animals such as polar bears must be able to live in the cold. Most animals that live in the tundra have extra fat to keep them warm. Many birds and other animals **migrate** to a warmer **climate** for the winter.

In the summer, the weather is warm enough in the tundra for things to grow. Plants and flowers appear. These plants and flowers can live in colder temperatures. Animals that eat plants and grass can find more food during the summer.
Mountains are on every continent on Earth. Most mountains have forests at the bottom of them. The higher you go up a mountain, the colder and windier it gets. The tops of very high mountains look like the tundra. Only small plants and flowers grow in these areas. The plants usually grow close to the ground, so the wind cannot knock them over. Animals that live on mountains, such as mountain goats and mountain lions, must be strong climbers.

Desert biomes have very little rain. Most plants cannot grow there. Deserts are either very hot or very cold. This makes it hard for anything to live there. Plants and animals that live in the desert have adapted to live with very little water.

continent  one of the main masses of land on Earth

The tops of many tall mountains are very cold and snowy.

Very few plants grow in the desert.

Before You Go On  What kind of climate does the tundra have?
There are few or no trees on grasslands. Average rainfall is somewhere between a temperate forest and a desert. The plants that live on grasslands do not get a lot of water year round. Grasses and wildflowers, though, get enough water to grow at least part of the year.

Prairies and savannas are two types of grasslands. Savannas are located near the equator. Animals such as zebras, elephants, and lions live on savannas. Prairies are in more temperate areas. Animals like bison, deer, and horses, live on prairies. Small animals and insects, such as rabbits, snakes, and grasshoppers, live there also.

People have turned most prairies into farms. The soil is good for planting crops. Farm animals can graze on the grass. But this means that there are not as many grasslands on Earth as there used to be.

crops plants grown by a farmer and used for food
graze feed on grass
The ocean biome is the largest biome on Earth. Oceans are huge bodies of water. They make up 70 percent of Earth’s surface. Many kinds of animals and plants live in oceans. Fish, crabs, and clams spend their lives under water. Larger animals, such as whales, sharks, and dolphins, also live in the ocean. Blue whales live in the ocean. They are the largest known mammals on Earth. Ocean water is very salty. Animals that live in the ocean must be able to drink salt water.

Earth has many different biomes with a variety of plants and animals. Look around you. Which biome is most like the place where you live?

**Visualize**

- What did you visualize when you read about temperate forests?
- What did you visualize when you read about the other biomes?
- How did visualizing as you read help you understand the selection?

**Think It Over**

1. **Recall** What is the largest biome?
2. **Comprehend** When do birds migrate back to the tundra?
3. **Analyze** How would you label your biome? What animals have adapted to living there?
**Desert**
This roadrunner lives in the desert. It had to run very fast to catch its dinner!

**Temperate Forest**
Squirrels are one of the many kinds of animals that live in temperate forests.

**Tundra**
The arctic fox lives in the tundra. Its fur coat changes color with the seasons.

**Mountain**
These llamas live in the Andes Mountains. Some llamas are wild, but people in the Andes also raise llamas for their fur and meat.
Prairie
Prairie dogs are very social animals. They live in underground burrows called towns.

Tropical Rain Forest
This poison arrow frog lives in the tropical rain forests of South America.

Ocean
Sharks live in the ocean. They are an important part of the marine food web.

Savanna
The rhinoceros is one of many animals that live on the savanna. People hunt rhinoceroses for their meat and horns.

Activity to Do
These pages use pictures and words to tell about animals and biomes.
- Pick any animal that interests you.
- Research that animal and its biome.
- Create two pages, using pictures and words, to describe that animal and its biome.
Visualize

Writers use words to help readers **visualize** what they are reading about. As you read, look for words that describe. These words will help you visualize what you are reading about.

**Practice**

Describe one of the biomes, plants, or animals from the selection to a partner. Use as many adjectives as possible.

- Have your partner guess what you are describing.
- After your partner guesses correctly, ask your partner to tell which details helped the most.
- Switch roles several times.
Use a Compare and Contrast Chart

When you compare, you tell how two or more things are similar. When you contrast, you tell how two or more things are different. You can use a T-Chart like this one to help you identify things that are alike and different.

**Practice**

Copy this chart. Compare and contrast the desert and grassland biomes. One example has been given.

<table>
<thead>
<tr>
<th>How grasslands and deserts are similar</th>
<th>How grasslands and deserts are different</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both deserts and grasslands get little rain.</td>
<td></td>
</tr>
</tbody>
</table>

**Apply**

Reread the selection and take notes on the different biomes. Then close your book and use your notes to retell the selection to a partner.

**Extension**

Utilize Make a brochure about your biome. Write a brief description of your biome and the plants and animals that have adapted to living in it. Add photos or drawings.
Comparatives and Superlatives

Use **comparative adjectives** to compare two things. Use **superlative adjectives** to compare three or more things.

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Comparative</th>
<th>Superlative (the most)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a fast car</td>
<td>a faster car than another</td>
<td>the fastest car of all</td>
</tr>
</tbody>
</table>

To form comparatives and superlatives of **one-syllable adjectives**, add -er or -est (or if ending in -e, add -r or -st). For adjectives ending in a vowel + consonant, double the consonant.

- tall → taller → tallest
- nice → nicer → nicest
- big → bigger → biggest

For adjectives with **two or more syllables**, add **more** or **most**. However, if a two-syllable adjective ends -y, change -y to -i and add -est.

- careful → more careful → most careful
- busy → busier → busiest

A few adjectives have **irregular** comparative and superlative forms.

<table>
<thead>
<tr>
<th>Good</th>
<th>Better</th>
<th>Best</th>
<th>Little</th>
<th>Less</th>
<th>Least</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td>Worse</td>
<td>Worst</td>
<td>Far</td>
<td>Farther</td>
<td>Farthest</td>
</tr>
</tbody>
</table>
Practice

Change each adjective to a comparative or superlative. Write the sentences.

Example: A bear is fatter than a horse. (fat)

1. The tundra is the _____ biome of all. (cold)

2. A mountain’s top is ____ than its bottom. (windy)

3. The ocean is the _____ biome on Earth. (large)

4. It is ____ on the savanna than on the prairie. (hot)

5. A tropical rainforest is ____ than a grassland. (dark)

6. A desert is ____ than a grassland. (dry)

7. The ____ mammal of all is the blue whale. (big)

8. Birds migrate to ____ climates in winter. (warm)

Apply

Work with a partner. Compare and contrast biomes and the plants and animals in them.

Example: A: I think the ocean is the most interesting biome.

B: Me, too. The ocean has the largest mammal, the blue whale.
Compare and Contrast

Expository writing explains or informs. There are different ways to organize ideas in expository writing. One way is to compare and contrast—to tell how two things are similar and how they are different.

**Writing Prompt**

Write a short essay in which you compare and contrast two biomes, such as a temperate forest and a tropical rain forest. Identify the subjects being compared. Then explain how they are alike and how they are different. Be sure to use comparatives and superlatives correctly.

1. **Prewrite**

Choose two biomes to write about. List their similarities and differences in a Venn Diagram.

A student named Gabriella listed her ideas like this:

- **Temperate Forest**
  - four seasons:
  - most trees lose leaves and grow new leaves

- **Tropical Rain Forest**
  - hot; trees grow all year; more kinds of plants and animals

2. **Draft**

Use your Venn diagram to write a draft. Use transitional words such as *similarly* and *also* to say how the biomes are alike, or *however* and *on the other hand* to say how they are different.
3 Revise
Read over your draft. Use the Writing Checklist to help you identify problems. Then revise your draft.

4 Edit
Check your work for errors in grammar, usage, mechanics, and spelling. Trade papers with a partner to get feedback. Use the Peer Review Checklist on Workbook page 404.

5 Publish
Prepare a clean copy of your final draft. Share your paragraph with the class.

Here is Gabriella’s essay:

A temperate rain forest and a tropical rain forest are alike in some ways. Both types of forests contain many trees and plants. Both also contain many different kinds of mammals and reptiles. However, there are key differences between the two forests. Temperate forests grow where there are four seasons. Most trees in temperate forests lose their leaves in autumn, when temperatures become cooler. They grow new leaves in the spring. A rain forest, on the other hand, is hot all year long. It also gets more rain than a temperate forest. This allows trees and bushes to grow all year. Also, the rain forest has a greater variety of plants and animals. More than half of all animals and plants on earth make their home in the rain forest.
**Key Words**

*Marine Food Web* describes the food web that exists in the world’s oceans.

**Words in Context**

1. Both fish and coral are **organisms**, or living things.
2. People, dogs, and whales are **mammals**. They give birth and feed their young with milk.
3. Bears are **consumers**. They eat food, but they don’t make their own like plants do.

**Key Words**

- organisms
- mammals
- consumers
- producer
- predator
- scavengers
- decomposers

These words will help you understand the reading.
4 A plant is a **producer**. It uses energy from the sun to make food.

5 An orca, or killer whale, is a **predator**. It hunts and eats other animals.

6 Crabs are **scavengers**. They search for and eat dead plants and animals.

7 Bacteria are **decomposers**. They break down dead plants, animals, and waste.

**Practice**

Make flashcards to help you memorize the words.
- Write a key word on the front.
- On the back, write the meaning.

**Make Connections**

What are some **organisms** that live in the ocean? Are they **producers**, **consumers**, or **decomposers**?

After discussing these questions, write your response in your notebook.
These words will help you talk about the reading.

**Academic Words**

**primary**
most important

**role**
position or job
someone or something has in a particular situation

**source**
where something comes from

---

**Words in Context**

Their *primary* concern is for the safety of their children.

A police officer’s *role* is to make sure people obey laws.

The newspaper is my parent’s main *source* of news.

---

**Practice**

Write the sentences in your notebook. Choose an academic word to complete each sentence.

1. The ____ of Pat’s pain was a broken bone.

2. Taking care of your health is your doctor’s ____ job.

3. The mayor has played a major ____ in improving our city.

---

**Apply**

Ask and answer with a partner.

1. What is the *primary* reason you go to school?

2. What *role* does your teacher play in your learning?

3. What is a *source* of fun for you during the school day?
Consonant Clusters

Listen. Pay attention to the beginning consonant sounds. Then read each word aloud.

<table>
<thead>
<tr>
<th>r-blends</th>
<th>l-blends</th>
<th>s-blends</th>
</tr>
</thead>
<tbody>
<tr>
<td>bring</td>
<td>black</td>
<td>skin</td>
</tr>
<tr>
<td>free</td>
<td>float</td>
<td>special</td>
</tr>
<tr>
<td>predator</td>
<td>please</td>
<td>swim</td>
</tr>
</tbody>
</table>

**Rule**

When r, l, or s come together with another consonant at the beginning of a word, the sounds of both letters usually blend together.

**Practice**

1. Read page 224. Make a list of any r-blends, l-blends, and s-blends that you find.

2. Use the words in the box above to answer these clues.
   a. This word begins with an r-blend. It’s an animal that hunts other animals.
   b. This word begins with an l-blend. It means “rest in or on top of water.”
   c. This word begins with an s-blend. It’s what covers your body.
   d. This word begins with an s-blend. It’s something to do in hot weather.
What is the difference between a food chain and a food web? A food chain shows one way that energy travels between producers, consumers, and decomposers. A food web shows many food chains that are connected to one another.
The diagram shows a marine food web. The word *marine* means anything that has to do with the oceans or seas.

Food webs are very important to humans. Any change to one organism in a food web affects all the other organisms in the food web. Natural events, such as hurricanes and earthquakes, cause some major changes to food webs. Humans cause changes to marine food webs by overfishing or *pollution*. It is important to learn about food webs so that you can help to keep them *balanced*.

**pollution**  something that makes the air, water, or soil dirty  
**balanced**  steady, secure
The marine food web starts with the sun. The sun gives energy for all life on Earth. Tiny plants called phytoplankton live in water. They use the sun’s energy to make food. Most phytoplankton cannot move around. They float in the water. Yet everything in the marine food web that lives \textit{depends on} them.

Zooplankton are very small animals. They move through the water and eat phytoplankton. This makes zooplankton the second connection in the marine food web. Small jellyfish, worms, and krill are examples of zooplankton.
Many small fish feed on plankton—both phytoplankton and zooplankton. These fish often swim in schools, or groups. This makes it harder for predators, such as sharks, to hunt them.

Some predators also eat plankton. Humpback whales feed on both small fish and plankton.
Large fish, such as sharks and tuna, eat smaller fish. Other animals that do not spend their entire lives in the water are also part of the marine food web. Penguins and elephant seals also eat fish.
Polar bears and orcas are at the top of the marine food web. This means they have no predators. They live on fish and other marine mammals.

Decomposers in the marine food web include bacteria and scavengers, such as lobsters. Decomposers eat the waste products of other organisms in the marine food web. They also eat dead animals and plants.

**Reading Strategy**

**Ask Questions**

- What did you learn in this reading?
- What did you have trouble understanding?
- What sections did you reread or ask for assistance with?

**Think It Over**

1. **Recall** Why do fish often swim in schools?
2. **Comprehend** What is the role of phytoplankton in the marine food web?
3. **Analyze** What are the three primary types of organisms in a food web?
Sequence

The order in which events take place in a process is called the sequence. After you read about a process, think about what happened first, second, third, and so on. Recognizing sequence can help you understand and remember the process better.

Practice

Number the organisms in order of their place in the food web, beginning with the primary producer, phytoplankton.

_____ phytoplankton  _____ polar bear
_____ lobster  _____ zooplankton
_____ small fish  _____ large fish
Use a Sequence Chart

You can use a Sequence Chart to help you remember what happens first, next, and last in a process.

**Practice**

Copy this chart. Complete it to show a sequence of events in a marine food web. Add more boxes as needed.

- Phytoplankton make food with the sun’s energy.

**Apply**

Close your book and retell the selection to a partner.

**Extension**

**Utilize** Work with a group. Plan and create a poster showing a food chain or web in your biome. Use photos or drawings. Listen carefully to your classmates and work cooperatively. Present your poster.
Indefinite Pronouns

An **indefinite pronoun** is a word that takes the place of a noun in a sentence. It is not as specific as the pronouns *he, she, we, they, or it*. It can be used as a subject or object.

<table>
<thead>
<tr>
<th>Indefinite Subject Pronoun</th>
<th>Indefinite Object Pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Someone called you.</td>
<td>I forgot something</td>
</tr>
</tbody>
</table>

Look at the common indefinite pronouns below. Notice that they end in **-one, -body, or -thing**.

**Common Singular Indefinite Pronouns**

- anyone
- everyone
- someone
- no one

- anybody
- everybody
- somebody
- nobody

- anything
- everything
- something
- nothing

All of the indefinite pronouns above are considered **singular**. *Everyone, everybody, and everything* refer to a single group. A simple present verb must agree.

**Singular**

Everyone at the party has a piece of cake.

A few indefinite pronouns are **plural**. They are listed in the chart below.

**Common Plural Indefinite Pronouns**

- (a) few
- both
- many
- several

**Plural**

Both of the students have their books.
Practice

Complete the sentences with the correct simple present form of the verb. Write the sentences.

Example: Does anyone want to see a crab? (do)

1. Both ____ predators. (be)

2. No one ____ the answer. (know)

3. Many in the ocean food web ____ consumers. (be)

4. Something ____ to provide food for fish. (have)

5. A few ____ north in the summer for food. (travel)

6. Everybody ____ interested in going to the aquarium. (be)

7. Anything that ____ is part of the marine food web. (live)

8. Everything in the food web ____ on phytoplankton. (depend)

Apply

Work with a partner. Make statements about what you learned in Marine Food Web. Use indefinite pronouns from the lists on the facing page. Then write your statements in your notebook.

Example: A: Everything is part of a food web.
        B: Many living things are consumers, and some are producers. Their role is to produce food.

Grammar Check ✔

Name some indefinite pronouns that are singular.
Name some that are plural.
Expository writing sometimes explains how something is made or how something happens. To do this, the writer presents a series of steps. The steps follow one another in a logical order.

**Writing Prompt**
Write a paragraph that explains a process in nature. It might be a food web, or the migration habits of an animal, or how a plant grows. Be sure to use indefinite pronouns correctly.

1. **Prewrite**
   Choose a process in nature to write about. Think about the steps in the process and how to present them in a logical order. List each step on a graphic organizer.

   A student named Champey listed her ideas like this:

   **STEP 1:** First, rain or wind pushes the seed into the earth.

   **STEP 2:** Then the seed takes in water.

   **STEP 3:** Next, the first root grows from the seed and pushes into the soil. Tiny hairs from the root begin to take in water.

   **STEP 4:** Finally, after the root is long enough, the plant pokes its head above ground.

   **STEP 5:** When the plant grows leaves, it can make its own food from the sun.

2. **Draft**
   Use your graphic organizer to write a draft. Keep in mind your purpose for writing—to explain a process in nature. Use sequence words such as *first, before, next, after, then* and *finally* to show the order in which things happen.
Reading 2

Champey Seng

Everyone knows that a seed has a tiny new plant inside of it. How does it grow? First, rain or wind pushes the seed into the earth. Then the seed takes in water. Next, the first root grows out from the seed. It pushes deep into the soil. Tiny hairs from the root begin to take in water from the ground. Finally, after the root has grown long enough, the plant pokes its head above ground. There is food inside the seed to keep the young plant growing. When the plant forms leaves, it is able to make its own food using light from the sun.

3 Revise

Read over your draft. Look for places where the writing needs improvement. Use the Writing Checklist to help you identify problems. Then revise your draft.

4 Edit

Check your work for errors in grammar, usage, mechanics, and spelling. Trade papers with a partner to get feedback. Use the Peer Review Checklist on Workbook page 404.

5 Publish

Prepare a clean copy of your final draft. Share your paragraph with the class.

Here is Champey’s paragraph:

---

Writing Checklist

Ideas

✔ I presented the steps in a logical order.

Word Choice

✔ I used sequence words.

Conventions

✔ I used indefinite pronouns correctly.

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Words in Context

1. Many animals, such as the African elephant, are **endangered**. That is, they may soon not exist in the wild.

2. When people **litter**, or throw garbage on the ground, I try to pick it up.

3. Smoke from factories is one cause of air **pollution**.

**Key Words**

- endangered
- litter
- pollution
- illegal
- conservation
- protect
It is illegal, or against the law, to go too fast when you are driving down the road.

Many people are concerned about the conservation of wildlife. They would like to create special places where animals will be safe.

It is natural for a mother to protect her newborn baby from harm.

**Practice**

Make flashcards to help you memorize the words.
- Write a word on the front.
- On the back, write a sentence, but leave a blank where the key word should be.

**Make Connections**

Many people care for and own animals as pets. Do you or someone you know have a pet? What type of an animal is it? What care does this animal need?
These words will help you talk about the reading.

**Academic Words**

**contribute**  
help make something happen

**cycle**  
a number of related events that happen again and again in the same order

**enabled**  
made it possible for something to happen

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**Words in Context**

A flat tire could **contribute** to a bike accident.

The life **cycle** of a plant begins when a seed starts to grow and ends when the plant dies.

Practicing every night has **enabled** me to play a difficult piece on the piano.

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**Practice**

Write the sentences in your notebook. Choose an academic word to complete each sentence.

1. Reading books at home ____ her to become a better reader.

2. Each year the weather ____ repeats as the seasons change from spring to summer, to fall, and then winter.

3. Many things, from cars to factories, ____ to air pollution.

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**Apply**

Ask and answer with a partner.

1. Can you describe the life **cycle** of a butterfly?

2. How does your teacher **contribute** to your understanding of the world?

3. How has using graphic organizers **enabled** you to become a better writer?
Commonly Confused Words

Words that sound the same, or almost the same, but have different spellings can cause problems for writers.

- It’s fascinating to watch sea turtles swim.
- A turtle is protected by its hard shell.

Practice

Work with a partner. Choose the correct word for each sentence.

1. The turtle laid (its, it’s) eggs in the sand.
2. Turtles are famous for (they’re, their) long lives.
3. Sea turtles are usually larger (than, then) land turtles.
4. With (your, you’re) help, sea turtles can be saved.
5. We saw the turtles swim (threw, through) the water.
6. Everyone was at the beach (except, accept) Carlos.
Sea turtles have been swimming in the ocean near Texas for millions of years, since long before dinosaurs. But now their lives are in danger, and if we don’t take action to help them, they will die out forever.

The Most Endangered Turtle

Five different species of sea turtles live off the coast of Texas in the warm waters of the Gulf of Mexico. The smallest are called Kemp’s ridley turtles. They are the most endangered turtle species in the world.
Many Kemp’s ridley turtles make nests along the beaches of Padre Island, a long, narrow island off the coast of Texas. The only other place that these turtles make nests in large numbers is in Mexico.

Each year, the females gather in the waters along the shore. Then all together, they crawl out of the water and dig nests in the sand. Each turtle lays about a hundred eggs and then returns to the ocean.

Before You Go On  What cycle does a sea turtle follow to lay its eggs?
What’s Killing the Turtles?

In 1947, forty thousand Kemp’s ridley turtles came ashore to lay eggs. By 1985, only about two hundred of these turtles came ashore. What happened to all the turtles?

Many years ago, people liked to eat turtles. Therefore, they killed them for meat and collected and ate their eggs. They also hung their shells on their walls. By the 1960s, the United States and Mexico realized that the Kemp’s ridley turtles were in terrible danger. These governments passed laws making taking turtle eggs illegal.

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collected  found and kept
realized  suddenly understood something
Many turtles still died. Many choked on the plastic bags littering the ocean. Many more were trapped in shrimp fishing nets and drowned.

In 1989, the U.S. government passed a law requiring shrimp fishermen to use a special net with openings at the bottom and the top that allowed larger animals like turtles and sharks to swim free. This law has helped a little. Gradually, more turtles are coming to Padre Island to nest each year. However, there are still major threats to the safety of Kemp’s ridley turtles. Many fishermen refuse to use the special nets because they think they catch fewer shrimp with the nets. And police suspect some fishermen have been killing turtles on purpose to protest the law. In addition, pollution and the amount of litter in the ocean appears to be increasing.

**suspect** think that something is true

**protest** speak out or act out against a law to show disapproval

Before You Go On

What are some problems that contribute to the death of turtles?
Try not to disturb a nesting turtle or turtle eggs.

### How to Help

If you want to help the Kemp’s ridley turtles, there are many ways you can get involved and make a difference.

First of all, talk to your parents, your friends, and your teachers about the turtles. Ask them to help you support turtle conservation. The more people who know about the problem, the more will get involved, and the sooner the turtles can get the help they need.

Never litter and be sure to pick up any trash you see, especially along the shore. And kick the plastic bag habit! Help your parents remember to bring reusable bags to the grocery store instead of using plastic bags.

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**involved** take part in something  
**support** help by giving time or money
If you see a nesting turtle or a baby turtle, do not touch it. Protect the turtle from animals, vehicles, and people. If you are in Texas, call 1-866-TURTLE-5 for help.

Finally, write a letter to the president asking him to create a marine reserve around Padre Island, Texas. The marine reserve will be a place where turtles can swim free and fishing boats are not allowed. It will be the best way to make sure Texas sea turtles will be around for millions more years to come.

vehicles  machines such as cars, buses, etc., that carry people or things
reserve  an area of land where wild animals are safe

Texas Sea Turtle Conservation Websites
www.seaturtles.org

Think It Over

1. Recall  How did the law that was passed in the 1960s help contribute to saving sea turtles?

2. Comprehend  What are some things you can do to help sea turtles survive?

3. Analyze  How might a marine reserve enable sea turtle numbers to grow?
Identify Fact and Opinion

By identifying facts and opinions as you read, you can make better judgements about the content of a text. Remember that:

• Facts are points that are true and can be proven.
• Opinions are points that someone makes based on what they believe.

Practice

Tell whether each statement below is a fact or an opinion.

1. Sea turtles have been swimming in the ocean near Texas for millions of years.
2. Five different species of sea turtles live off the coast of Texas.
3. Kemp’s ridley turtles are the most beautiful turtles in Texas.
4. More laws should be passed to support turtle conservation.
5. Marine reserves can help protect marine creatures.
6. Shrimp fishermen care only about the number of shrimp they catch.

These animals are also on the critically endangered animal list.
Use an Idea Web

An Idea Web can help you see how different ideas in a story are connected.

Practice

Copy this Idea Web. Complete it to show what you know about ways to help save the endangered Kemp’s ridley turtles.

- Share your work with a partner.
- Discuss each idea and the affect it has on the sea turtles.

Reread the selection and take notes. Then close your book and retell the selection to a partner.

Extension

Utilize Work cooperatively with a partner. Choose another endangered animal. Do research to find out why the animal is endangered and how you might help save it. Then share what you learned with the class.
Transitional Words

Transitional words, are connecting words that show relationships between sentences. Some connecting words show addition.

<table>
<thead>
<tr>
<th>Also</th>
<th>In addition</th>
<th>As well as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turtles have hard shells. In addition, they have sharp claws.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some connecting words show contrast.

<table>
<thead>
<tr>
<th>However</th>
<th>On the other hand</th>
<th>Instead</th>
</tr>
</thead>
<tbody>
<tr>
<td>These turtles don’t live on land. Instead, they live in the sea.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some are used to give an example.

<table>
<thead>
<tr>
<th>For example</th>
<th>For instance</th>
<th>Such as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turtles have long lives. For example, one lived 250 years.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some tell a result.

<table>
<thead>
<tr>
<th>Therefore</th>
<th>As a result</th>
<th>For this reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turtles are endangered. Therefore, they should be protected.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remember to use a comma after introductory transitional phrases at the beginning of a sentence.

I care about sea turtles. As a result, I work to protect them.
Practice

Choose the best transitional word for each sentence. Write the sentences.

Example: **Endangered** animals such as Kemp’s ridley turtles need our help! (instead, such as)

1. Plastic bags on the beach are ugly. ____ they can endanger a turtle’s nest. (in addition, as a result)

2. Conservation does help turtles. ____ some say more efforts are needed. (however, such as)

3. People **contribute** to the problem. ____ littering and pollution hurt sea life. (in contrast, for instance)

4. Laws to conserve energy are being passed. ____ new technologies **enable** us to save more power, too. (for example, in addition)

5. Many people contributed money. ____ the organization can continue to protect wildlife. (in contrast, therefore)

Apply

Work with a partner. Use transitional words to make statements about saving sea turtles. Then write them in your notebook.

Example: A: Sea turtles have been swimming in the ocean for millions of years. However, their lives are in danger these days.

B: Kemp’s ridley turtles are endangered. However, laws have been passed to protect turtles.

Grammar Check

Name some transition words that show addition, contrast, example, and result.
Organize Ideas by Cause and Effect

In expository text, writers often organize information by showing cause-and-effect relationships. A cause makes something happen. An effect is the result.

Writing Prompt

Write a paragraph about an animal that is endangered or needs protection. Show causes and effects. Use transitional words.

1 Prewrite

Choose an animal to write about. Think about why the animal needs protection. List cause-and-effect relationships in a graphic organizer.

A student named Jorgé wrote about the ocelot, a small, endangered wildcat that lives in Texas and Mexico. He listed his ideas like this:

- **CAUSE**
  - Ranchers clear land for cattle grazing and farming.
  - Roads and highways are built throughout South Texas.
  - Landowners are restoring grasslands.
  - The government is building underpasses.

- **EFFECT**
  - The ocelots have fewer places to make their homes.
  - Many ocelots are killed by cars and trucks.
  - Soon the ocelot may no longer be endangered.

2 Draft

Use your graphic organizer to write a draft. Use transitional words and phrases such as *therefore, for this reason,* and *as a result.*
3 Revise
Read over your draft. Use the Writing Checklist to help you identify problems. Then revise your draft.

4 Edit
Check your work for errors in grammar, usage, mechanics, and spelling. Trade papers with a partner to get feedback. Use the Peer Review Checklist on Workbook page 404.

5 Publish
Prepare a clean copy of your final draft. Share your paragraph with the class.

Here is Jorgé’s paragraph:

Jorgé Martinez

The ocelot is a small wildcat with golden fur and black spots. For this reason, it is sometimes called “America’s little leopard.” About 200 years ago there were many ocelots living in the grasslands of South Texas. Today, there are fewer than 100 left. South Texas is now covered with cattle ranches and farms. As a result, ocelots have fewer places to make their homes. Roads and highways are another problem for ocelots. More ocelots die from being hit by cars and trucks than from any other cause. However, there is hope for America’s “little leopard.” Many landowners are restoring grasslands to give ocelots a place to live. In addition, the government is building underpasses to help ocelots cross roads safely. Soon, the ocelot may no longer be endangered.
Link the Readings

Copy the chart into your notebook. Read the words in the top row. For each text selection, put an X under words related to that reading.

<table>
<thead>
<tr>
<th>Informational text</th>
<th>Literature</th>
<th>Protecting animals</th>
<th>How animals survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biomes All Over the World</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marine Food Web</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Save the Sea Turtles</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

1. How do the different biomes **contribute** to our lives?
2. What **role** do humans play in changing marine food webs?
3. How have people’s actions endangered Kemp’s ridley turtles? How can people help **enable** the turtles to survive?

How do people and environments affect each other?

Listening Skills

If someone is speaking too quickly, you can ask, ”Could you speak a little more slowly, please?”
# Projects

Your teacher will help you choose one of these projects.

<table>
<thead>
<tr>
<th>Written</th>
<th>Oral</th>
<th>Visual/Active</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List</strong></td>
<td><strong>Presentation</strong></td>
<td><strong>Poster</strong></td>
</tr>
<tr>
<td>Write a list that shows details about an interesting biome. Include the climate, along with animals and plants that live there.</td>
<td>Research an animal in your biome. Make a presentation that explains what the animal looks like, where it lives, what it eats, and its role in a food web.</td>
<td>Create a poster that shows the animals and plants in an interesting biome. Show how people can help the animals found there.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Magazine Article</strong></th>
<th><strong>Song</strong></th>
<th><strong>Illustration</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose a biome. Write a magazine article that explains how people affect animals in that biome. Describe some of the things people can do to help those animals.</td>
<td>Work as a group. Write and perform a song that tells how people can help animals live safely in a biome, such as an ocean or a forest.</td>
<td>You read about a marine food web. Learn about another kind of food web. Create an illustration that shows how the food web’s food chains are connected.</td>
</tr>
</tbody>
</table>

## Further Reading

**Rumpelstiltskin**
In this Penguin Young Reader® version of a classic fairytale, a queen must find out the name of a mysterious little man in time to save her family.

**Welcome to the Sea of Sand**, Jane Yolen
Arizona’s Sonoran Desert, the magnificent “sea of sand” home to a wide variety of animals, is described in an exciting way with colorful illustrations.
Give a How-to Presentation

You are going to write and give a how-to presentation about staying safe in a dangerous situation. You will listen as your classmates give their presentations.

1 Prepare

A. Choose a dangerous situation such as encountering a bear, shark, or rattlesnake, or being in a lightning storm, tornado, or hurricane, or getting lost in the wilderness.

B. Think about what you already know. Research answers to other questions you have. Then write your how-to presentation as step-by-step instructions. Find props to use in your presentation. Remember that your classmates will ask you questions after your presentation.

Staying Safe in a Lightning Storm

A lightning storm is very dangerous. More people die each year in lightning storms than in any other kind of weather. Here are the steps to take to keep you safe during a lightning storm.

If you are outside, try to find shelter in a building or a car. If you can’t, put your feet together. Then crouch down near the ground and place your hands over your ears.
2) Practice
Find a partner. Practice your presentation in front of your partner. Your partner will act out or mime your instructions to show he or she understands. Work with your partner to improve your presentation.

3) Present
As you speak, do the following:
- Speak clearly and loudly enough for everyone to hear.
- Slow down and use your props to make important points.
- Use gestures and facial expressions.

As you listen, do the following:
- Think about or visualize what you are hearing.
- Take notes on the presentation.
- Think of questions to ask the speaker after the presentation.

4) Evaluate
After you speak, answer these questions:
✔ Did you present each idea clearly?
✔ Did you use props to help make important points?

After you listen, answer these questions:
✔ Did you understand the main points and details of the presentation?
✔ What information did you find most interesting and useful?

Speaking Skills
How-to presentations are formal situations. Use formal sentence structures, grammar, and vocabulary. Don’t use slang.

Listening Skills
Be an active listener. Listen carefully to the spoken words. Look at the speaker’s gestures and visuals.
Write a Compare-and- Contrast Essay

Writing Prompt
Write an essay in which you compare and contrast two things based on facts and your own experience. You might compare two places you have visited, or two books you have read. Use signal words such as both, also, however, and unlike to point out similarities and differences. Include an introduction and conclusion.

1 Prewrite
Review your previous work in this unit. Now choose a topic. Think about two things you have experienced or researched that you would like to compare and contrast. List details about the experience in a Venn Diagram.

![Venn Diagram]

DENVER
- 500,000 people
- mountains, cold and snowy

SAME
- Large cities, beautiful scenery, cold in winter

DALLAS
- 2,000,000 people
- wide open spaces, hot and humid

2 Draft
Use your graphic organizer to help you write a draft. Keep in mind your purpose for writing—to compare and contrast two things. Be sure to use signal words.
Sofia Perez

Denver and Dallas

My family moved from Denver, Colorado to Dallas, Texas last year. Denver and Dallas are very different, but they are also similar in some ways.

Dallas and Denver are both large cities, but Dallas is much larger. Denver has a population of around 500,000, while Dallas has over two million people.

Both Dallas and Denver have interesting scenery. In Denver, you can see the Rocky Mountains, some of the tallest mountains in the world. Dallas is much flatter than Denver, and there are not any mountains. However, you can see wide-open spaces and a sky that stretches forever.

Dallas and Denver both get cold in winter, but it's much colder and snowier in Denver. Summers in Dallas are much hotter and more humid. You have to use air-conditioning a lot more.

Both Denver and Dallas are interesting cities. I enjoy the ways they are similar, and the ways they are different.
4 Edit
Check your work for errors. Trade papers with a partner. Use the Peer Review Checklist to give each other feedback. Edit your final draft in response to feedback from your partner and your teacher.

5 Publish
Make a clean copy of your final draft. Share your essay with the class.

Peer Review Checklist
✓ The essay is informative.
✓ Signal words are used to compare and contrast
✓ All the information is related to the topic.

SPELLING TIP
You can use a computer’s spell check to check your spelling, but the computer can’t tell if you mean weather or whether. You must still check your spelling carefully.
Listen to the sentences. Pay attention to the groups of words. Read aloud.

1. Earth has many different biomes with a variety of plants and animals.

2. A food chain shows one way that energy travels between producers, consumers, and decomposers.

3. If you want to help the Kemp’s ridley turtles, there are many ways you can get involved and make a difference.

A biome is a community where certain kinds of plants and animals live. Earth has more than 30 different kinds of biomes. The most common are tropical rain forests, tundra, mountains, grasslands, deserts, and oceans.

Mountains are on every continent on Earth. Most mountains have forests at the bottom of them. The higher you go up a mountain, the colder and windier it gets. The tops of very high mountains look like the tundra. Only small plants and flowers grow in these areas.

The ocean biome is the largest biome on Earth. Oceans are huge bodies of water. They make up 70 percent of Earth’s surface. Many kinds of animals and plants live in oceans. Fish, crabs, and clams spend their lives under water. Larger animals, such as whales, sharks, and dolphins, also live in the ocean. Blue whales live in the ocean. They are the largest known mammals on Earth.

With your partner, find the words that slowed you down.

- Practice saying each word and then say the sentence each word is in.
- Take turns reading the text again. Count the number of words you read.
Taking Tests

You will often take tests that help show what you know. Follow these tips to improve your test-taking skills.

Coaching Corner

Answering Questions That Have Pictures or Graphics

- Some test questions include pictures or graphics.
- You must read the text and look at the picture or graphic in order to answer one or more of the questions.
- Before reading the selection, look at the picture or graphic. Make sure you understand it.
- Next, preview the questions and answer choices.
- If there is text with the picture or graphic, read it next.
- After you read the selection, read the questions. Look at the graphic or picture again.
- Then choose the answer that comes closest to the answer in your head.

Practice

Read the following test sample. Study the tips in the box.
Read the selection and the chart. Then answer the questions.

1 When the female turtle is ready to lay her eggs, she comes out of the water and onto the beach. There, she digs a nest. The nest looks like a hole in the sand. She lays her eggs in the hole and covers them up with sand. Hiding the eggs makes it hard for predators to find the eggs and eat them.

2 The hatchlings, or baby turtles, are in great danger as soon as they hatch. Many animals and birds think the hatchlings are a tasty meal. The hatchlings run as fast as they can into the sea. With luck, they will grow up and have their own young.

1 Why do the baby turtles run into the sea after they hatch?
   A Many birds and animals like to eat them.
   B It is too hot for them to live on the beach.
   C The male sea turtle wants to eat the hatchlings.
   D The hatchlings are not in danger on the beach.

2 Look at the chart. Which of these belongs on the blank line?
   F Female sea turtle swims and lays her eggs in the water.
   G Female sea turtle digs a hole in the sand and lays eggs.
   H The hatchlings dig holes in the sand to hide themselves.
   J The hatchlings grow up to be sea turtles and have babies.

Tips
✔ This item has a graphic and some text. Make sure you look at both before you try to answer the questions.
✔ You can eliminate answer choices that don’t make sense. Then you can make a guess from the remaining answer choices.