

Unit 4

Problem Solvers

You will read about how people—and animals—work to solve problems, from out-of-control plants to people who solve problems with technology.

Reading 1

Photo Essay



**The Trouble
with Kudzu**

Reading 2

Fables



**The Fox and the Crow
The Fox and the Goat**

Reading 3

Social Studies



**Creative Problem
Solving**



How do we solve problems?

Listening and Speaking

You will talk about problems and solutions. In the Listening and Speaking Workshop, you will give a speech.

Writing

You will practice persuasive writing. In the Writing Workshop, you will write a review.

Quick Write

What are some problems in your town?
Write about one of them.

View and Respond



Talk about the poster for this unit. Then watch and listen to the video and answer the questions at [Pearson English Portal](#).

Build Unit Vocabulary

What do you know about problem solvers?

Words to Know



Listen and repeat. Use these words to talk about solving problems.



brainstorm



research



debate



investigate



design

Practice

Work with a partner. Look up these words in a dictionary. Then ask and answer questions using these words and the words above.

doctor

student

lawyer

scientist

Example: A: How can a scientist solve problems?

B: A scientist can do research to solve problems.

Write

Read the question. Write your response in your notebook.

What are some things you do to solve problems?

Make Connections

Complete the sentences with the following words and phrases.



politicians



a detective



an architect



inventors

1. _____ often debate concerns or problems in their communities.
2. _____ designs buildings. He or she often has to solve problems in creative ways.
3. _____ brainstorm new ideas together. They think of new things to invent and help each other solve problems that come up.
4. _____ has to investigate in order to solve crimes or mysteries.

What about you?

Talk about problems you have solved. How did you solve them?

Build Unit Background

Kids' Stories from around the World



Arnoud

I live in Canada. My school has a new program. It teaches students to solve problems without fighting. I learn special skills, such as how to listen to others. I also learn to say what I feel without getting angry.



Marta

My school is in Texas, U.S.A. Every year we have a science fair. This year, I studied what happens if you don't get enough vitamins. Then I showed people my research. This year I won an award.



South Korea



Suna

In South Korea people love to play Go. It is an old Chinese board game. You try to circle the other player's stones with your own. It's not easy, but it's fun!



Brian

I live in the Netherlands. Some of our parks have mazes made of hedges. There is only one correct path through the maze. I enter at one end and exit at the other. It's fun to get lost in a maze.

What about you?

1. Think of a problem you had. Did you solve it? How did solving the problem make you feel?
2. Do you know of a problem in your community that was solved? Share your story with the class.

Reading 1

Prepare to Read

What You Will Learn

Reading

- Vocabulary building:
Context, phonics
- Reading strategy:
Identify main idea and details
- Text type:
Informational text (photo essay)

Grammar

Comparative adjectives

Writing

Write a persuasive business letter

These words will help you understand the reading.

Key Words

vine
bean
celebration
gardener
roots

Key Words

The Trouble with Kudzu tells about a plant from Japan that was given as a gift.

Words in Context

1 The **vine** is climbing up a wall. It is a plant with long stems.



2 Green **beans** are good for you.

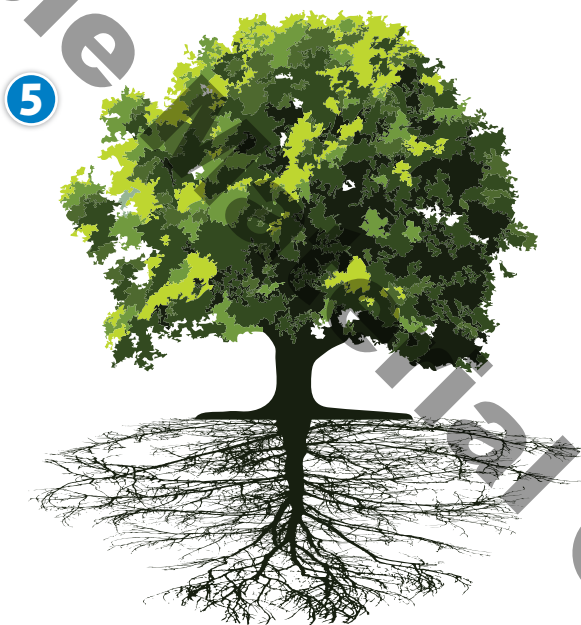


3 Parades are an important part of the **celebration** for the Chinese New Year.



4 The **gardener** plants vegetables and flowers in her backyard.

5 The **roots** are underground and support the tree. They also help the tree get water from underground.



Practice

Make flashcards to help you memorize the words.

- Write a key word on the front.
- On the back, make a drawing of each word.

Make Connections

What do you know about plants and trees? Have you ever planted a seed? Write your response in your notebook using some key words. Then discuss what you know with a partner.

Speaking Skills

When you don't know the right word to use, explain or describe the idea using words you know.



These words will help you talk about the reading.

Academic Words

affect

have an influence on

eliminate

remove or get rid of

outcome

final result



Academic Words

Words in Context

The new classroom rules **affect** all the students.

Having a good plan at the beginning of a project will **eliminate** problems later.

Everyone wanted to know the **outcome** of Ari's science experiment.

Practice

Choose an academic word to complete each sentence.

1. I have to _____ peanut butter from my diet because I am allergic to peanuts.
2. One way to achieve the best _____ on a test is to study very hard.
3. You can _____ how people treat you by being kind and polite.

Apply

Ask and answer with a partner.

1. What good and bad study habits **affect** your grades at school?
2. What can you do to **eliminate** low grades?
3. Think of a project or competition you joined. What was the **outcome**?



Phonics

Soft and Hard c

Listen to your teacher read each word in the box. Then read each word aloud. Notice the difference between soft c and hard c.

Soft c	Hard c
celebrate	cake
decide	discuss
fancy	country



When does c have the same sound as the s in **sun**?

When does c have the same sound as the k in **kite**?

Rule

The letter c usually has the soft sound when it is followed by e, i, or y. Otherwise, c usually has the hard sound.

Practice

Use a word from the chart to match each clue.

1. It's what you do when you choose something. (soft c)
2. It's another word for *nation*. (hard c)
3. It's a sweet food you eat on your birthday. (hard c)
4. It's what you do for a special time. (soft c)
5. It's another word for *talk*. (hard c)

Reading 1

Informational Text
Photo Essay

More About



How can an unwanted plant cause problems?



Listen to the Audio.

Listen for the main points and important details.

Reading Strategy

Identify Main Idea and Details

The main idea is the most important idea in the selection. The details give you information about the main idea. As you read ask yourself:

- What is the most important, or main, idea?
- What details help support the main idea?


Listen as your teacher models the reading strategy.

The Trouble with Kudzu

by Laura Sewell



Big, beautiful leaves and sweet-smelling purple flowers made kudzu popular.



This old truck is not going anywhere!

Do you know the story of Jack and the Beanstalk? Jack planted a magic **bean**. A **vine** grew from the bean. It grew and grew. Finally, the vine was so high and strong that Jack could climb up it and reach the clouds.

Well, kudzu doesn't come from a magic bean, but it is a member of the bean family. When people saw kudzu for the first time, they must have thought it was magic. Why? Because kudzu grows very fast—much faster than most other plants. In fact, it can grow up to 12 inches in only one day!

Before You Go On

After Jack planted the magic bean, what was the **outcome**?

Kudzu is a native plant of China and Japan. That means it grew naturally in those countries. Kudzu was brought to the United States from Japan in 1876 as a gift for a special **celebration**. The United States was celebrating its first 100 years as a **nation**.

Soon, every **gardener** and farmer wanted to plant kudzu seeds. Gardeners grew kudzu because it looked pretty and smelled good. Farmers grew it to feed their animals.

At first, kudzu was a big success! But it did not stop growing. It **blocked** sunlight that other plants needed. It killed trees and whole forests. Nothing was safe!

nation country

blocked stopped



Where have the trees gone? They are all covered with kudzu!



It takes only two or three years for kudzu to cover a house.

Now, people call kudzu a weed. It is a wild plant that grows where it is not wanted. People cut it down and dig up its **roots**. But **getting rid of** kudzu is not easy.

Over the years, people have learned to use every part of the kudzu plant. Cooks and artists use it to make jelly, paper, clothes, baskets, and chairs. This weed might be useful after all.



Artists use kudzu to make and sell items.

getting rid of removing completely

Reading Strategy

Identify Main Idea and Details

- What was the main idea?
- What were some details?
- How did thinking about the main idea help you understand the selection?



Think It Over

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1. **Recall** What are some ways that the kudzu plant is used today?
2. **Comprehend** How did kudzu **affect** the forests? Explain.
3. **Analyze** Why is it difficult to **eliminate** kudzu?

Learning Strategies

Main Idea and Details

Identifying the **main idea and details** can help you understand what you read. Ask yourself, "What was the reading about?" Your answer is the main idea of the selection.

Practice

Read these sentences.

- Kudzu killed trees and whole forests.
- Kudzu is a wild plant that grows where it is not wanted.
- Gardeners grew kudzu because it looked pretty.
- Artists make baskets with kudzu.
- Kudzu blocked sunlight that other plants and trees needed.

1. Which sentence tells the main idea?

2. Which sentences tell the details that support the main idea?



Use a Main Idea and Details Chart

This chart can help you figure out the main idea of the selection. You can show the details that support the main idea.

Practice



Fill in the main idea and details.

- Reread the selection. What is the main idea of *The Trouble with Kudzu*?
- Choose three of the most important details that support the main idea.

The main idea is:

Detail

Detail

Detail



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Apply

Using the photographs, retell the selection to a partner.



Extension

Research and find out how to plant a seed. Write the steps. Explain them to a partner. Ask your partner to follow the steps to show that he or she understands. Then switch roles and follow your partner's directions.

Grammar

Comparative Adjectives

Use the comparative form of an adjective to compare or talk about the difference between two nouns. A comparative adjective is usually followed by **than**.

The red car is **fast**.

A lion is **beautiful**.

The red car is **faster than** the blue car.

A cheetah is **more beautiful than** a lion.

There are several ways to form comparative adjectives:

One-syllable adjectives

Add *-er*

Ending in *-e*, add *-r*

Ending in vowel + consonant, double the consonant and add *-er*

dark → **darker**

wide → **wider**

fat → **fatter**

Two-syllable adjectives

Add *more*

Ending in *-le*, *-ow*, add *-(e)r*

Ending in *-y*, change *-y* to *-i* and add *-er*

careful → **more** careful

gentle → **gentler**

happy → **happier**

Three- or more syllable adjectives

Add *more*

likable → **more** likable

Irregular comparatives

good → **better** far → **farther** bad → **worse** fun → **more** fun

Practice A

Complete the sentences with the comparative form + *than*.

1. Kudzu grows faster than other plants. (fast)
2. It is _____ to eliminate kudzu
_____ other weeds. (difficult)
3. The year's celebration is _____ last
year's. (big)
4. My mom is _____ this week _____ last
week. (busy)
5. Today is _____ yesterday! (bad)

Practice B

Write sentences comparing these:

1. baseball and basketball (exciting)
Baseball is more exciting than basketball.
2. watching a sports game and playing a sports game (fun)
3. Restaurant A and Restaurant B (bad)

Grammar Check ✓

What are two ways to form a comparative?

Apply

Work with a partner. Choose a topic from the box. Think of two things for that topic to compare. Tell your partner which one is better or worse.

Example: A: Cats are more interesting than dogs.

B: Oh, really? I think dogs are more interesting.

animals

sports

foods

school subjects



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Writing

Write a Persuasive Business Letter

In a persuasive business letter a writer tries to persuade someone to think or act in a certain way. Always include facts to support your ideas. Be sure to include all the parts of a business letter.

Writing Prompt

Write a persuasive business letter to someone in your community. Try to persuade that person to help solve a community problem. Be sure to use comparatives correctly.

① Prewrite

Choose someone to write to about a community problem. Find the person's address. List your ideas in a graphic organizer.

A student named Tony listed his ideas like this:

Date
Address of recipient
Greeting
Body

- Ask Ms. Hughes to donate art supplies.
- Include facts to support my ideas.
- End letter by thanking Ms. Hughes.

Closing
Signature

② Draft

Use your graphic organizer to help you write a first draft.

- Keep in mind your purpose for writing—to persuade.
- Include only the most important information.

③ Revise

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

④ Edit

Check your work for errors. Use the Peer Review Checklist on page 402.

⑤ Publish

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

Here is Tony's business letter:

March 26, 2019

Ms. Kim Hughes

Hughes Arts Supply Store

Toronto, Ontario M1B 5K7

Dear Ms. Hughes,

We have a favor to ask you. The students at Webster School love their art classes. Art is fun! Also, art skills are more important today than ever before.

The problem is we need art supplies. Can you donate any supplies to our school? We would be very happy and thankful. Thank you for your help.

Sincerely,

Tony Liu

Writing Checklist

- ✓ **Ideas**
I included persuasive facts.
- ✓ **Organize**
I included all the parts of a business letter.
- ✓ **Conventions**
I used comparatives correctly.



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Reading 2

Prepare to Read

What You Will Learn

Reading

- Vocabulary building:
Context, word study
- Reading strategy:
Compare and contrast
- Text type:
Literature (fables)

Grammar

Superlatives

Writing

Write an advertisement

These words will help you understand the reading.

Key Words

flatter
praise
advice
guzzled
scampered

Key Words

These fables are about a tricky fox.

Words in Context

1 My sister tried to **flatter** my brother to get him to help her with her chores.



You're the best brother in the world!

2 My father gave me **praise** for the quality of my work. I received an A in math class.



3 Our **advice** to our little brother was this: do your homework every night.



4 After playing outside, the thirsty horse eagerly **guzzled** water from the river.

5 The squirrel ran past us and quickly **scampered** up into the tree as we walked by.



Practice

Add a page to your vocabulary notebook.

- Divide your page into three columns: the new words, their definitions, and drawings of the words when possible.
- Test yourself by covering one of the columns.

Make Connections

Have you ever been tricked? What happened? How might you have stopped it from happening? Explain.

These words will help you talk about the reading.

Academic Words

evaluate

judge how good something is

resourceful

good at finding ways to deal with problems effectively

scheme

tricky plan



Academic Words

Words in Context

The doctor will **evaluate** your health during the examination.

We have to be creative and **resourceful** to get a good grade on our project.

The thief had a clever **scheme** to steal money from the company.

Practice

Choose an academic word to complete each sentence.

1. The pirates thought of a good _____ to steal the treasure.
2. If the teachers _____ your work and like what they see, you will get good grades.
3. Carlos showed how _____ he was by getting his whole family to help him with his homework.

Apply

Ask and answer with a partner.

1. How do teachers **evaluate** your work?
2. Who do you know that's very **resourceful**?
3. Why does a villain's **scheme** make a story interesting?



Word Study

Thesaurus

A **dictionary** tells the meaning of a word. A **thesaurus** lists synonyms, or words with similar meanings, for a word.

Read this sentence.

The fox escaped from the trap because he was very **smart**.

If you wanted to know the meaning of the word **smart**, you would look up the word in a dictionary. If you wanted to find a synonym for **smart**, a thesaurus would help you choose the best word. **Clever** is a synonym for the word **smart** and would be a good fit in this sentence.

Practice

Work with a partner.

- Read the sentence and the thesaurus entry that follows.
- Circle the synonym that could go in that sentence.

"This is **bad** news," said the unlucky goat.

bad *adj.* 1. terrible. 2. wrong. 3. harmful. 4. sick.



Reading 2

Literature
Fables

More About



Why do some characters use tricks to solve their problems?



Listen to the Audio.

Listen for the main points and important details.

Reading Strategy

Compare and Contrast

When you compare you see how things are similar. When you contrast you see how things are different. As you read the two stories think about how they are alike and different.

- Who are the characters in each story?
- How does Fox act in each story?
- What is the lesson each story teaches?

Listen as your teacher models the reading strategy.

The Fox and the Crow

an Aesop's fable
retold by Lee Martin

One sunny, fall day, Mr. Fox went walking through the forest. “This would be a perfect afternoon,” he said to himself, “except for my empty tummy.” Echoing his thoughts, his stomach rumbled loudly.

Just then, Mr. Fox heard wings flapping overhead and he looked up to see a crow with a large piece of cheese in its beak. The crow landed in a tree nearby and Mr. Fox thought to himself, *That cheese looks very tasty. I must find a way to get it.* Being a clever fellow, he soon came up with an idea.

“Hello, Ms. Crow. Your feathers look especially **glossy** today and your eyes are as bright as glass beads.”

glossy shiny





As Ms. Crow **cocked** her head, Mr. Fox knew he had her attention. He continued, “Your voice must be even more beautiful than the lovely picture you make sitting in that tree. I am sure if I could hear you sing, I would call you the Queen of All Birds!”

Pleased with Mr. Fox’s **praise**, Ms. Crow took a deep breath and opened her beak to **caw**. Out fell the cheese, straight to the ground. Mr. Fox snapped it up.

“Yum! That is just what I needed, Ms. Crow. Let me offer you some **advice**: Do not trust someone whose words are meant only to **flatter**.”

cocked tilted

caw make a sharp, scratchy call, from a crow

Before You Go On

What was Mr. Fox’s **scheme** for getting Ms. Crow to drop her cheese?

The Fox and the Goat

an Aesop's fable retold by Lee Martin

Mr. Fox fell into a **well** one day and could not find a way to get out. But just as he was about to give up hope, Mr. Goat looked over the edge of the well.

“Oh, I am so thirsty, Fox,” he said. “Is the water good? And by the way, what are you doing in the well?”

Right away, Mr. Fox saw his chance to escape, so he said, “I am enjoying the water, of course! You should jump in and have a drink.”

Without thinking, Mr. Goat jumped right into the well and **guzzled** the water noisily. After he had finished drinking, he looked at the smooth, steep walls of the well. “How will we get out of here?” he asked.

well a deep hole that contains water and is often lined with stones



“Ahh,” said Mr. Fox, “that is the problem, but I think I have an idea. If you put your front hooves on the wall, I will run up your back and out of the well. Then I will return to help you.”

Mr. Goat did as Mr. Fox asked, and Mr. Fox **scampered** up his back and away as quickly as he could. He called back over his shoulder, “Goat, next time, you should look before you **leap**!”

leap jump



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Think It Over

Reading Strategy

Compare and Contrast

- Who are the characters in each story?
- How does Fox act in each story?
- **Evaluate** the lessons each story teaches. How are they similar? How are they different?

1. **Recall** Who did Mr. Fox fool in each story?
2. **Comprehend** How was Mr. Fox **resourceful** in solving his problems?
3. **Analyze** Why was Mr. Fox successful in tricking others?

Learning Strategies

Compare and Contrast

To understand what you read, compare and contrast ideas.

- When you **compare**, you tell how two or more things are alike.
- When you **contrast**, you tell how two or more things are different.

Practice

Compare and contrast the items listed. Tell two ways they are alike. Then tell two ways they are different.

1. a fishbowl and a swimming pool
2. a duck and a swan
3. a football and a basketball



Use a T-Chart

You can use a T-Chart to compare and contrast events, characters, or objects in a story or a non-fiction selection.

Practice



Compare and contrast the stories.

1. Write about how *The Fox and the Crow* and *The Fox and the Goat* are the same. Use the pictures and the words in the selections.
2. Then write about how they are different.
3. Compare your completed T-Chart with a partner's.

How Are They Alike?	How Are They Different?



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Apply

Reread the story and take notes. Then close your book and retell the story to a partner. Use the key words as you speak.

Extension

Think about amusement park rides. Compare and contrast two rides. You can write descriptions, draw them, or act them out. Show your class how they are alike and how they are different.

Grammar

Superlatives

Use the superlative form of adjectives to show that something or someone is at the top of a group. Use **the** before a superlative adjective. Study these rules for forming superlatives.

One-syllable adjectives

Add *-est*

Ending in *-e*, add *-st*

Ending in vowel + consonant,
double the consonant and add *-est*

smart → **the smartest**

nice → **the nicest**

fit → **the fittest**

Two-syllable adjectives

Add *most*

Ending in *-le*, *-ow*, add *-(e)st*

Ending in *-y*, change *-y* to *-i*, add *-est*

pleasant → **the most pleasant**

simple → **the simplest**

shiny → **the shiniest**

Three or more syllable adjectives

Add *most*

exciting → **the most exciting**

Irregular comparatives and superlatives

good → better → **the best**

bad → worse → **the worst**

The superlative adjective is often used with expressions that begin with *in* or *of* such as ***in the world***, ***of all***.

A crow is **the smartest** bird **of all**. It may be **the most resourceful** animal **in the world**.

Practice A

Work with a partner. Take turns giving the superlative form of these adjectives.

1. loud *the loudest*
2. intelligent
3. good
4. heavy
5. tall
6. kind

Practice B

Change each adjective to a superlative.

1. Ms. Crow's feathers were the shiniest (shiny) of all.
2. The desert is _____ (hot) place on Earth.
3. The monkeys scampered up _____ (tall) tree in the forest.
4. Her new scheme is _____ (dangerous) of all.
5. What was _____ (bad) trick Mr. Fox played?



Apply

Work with a partner. Read the sentences below and make statements. Use superlative adjectives.

Example: Juan is the tallest.

- Juan is taller than Rob. Rob is shorter than Paul.
- Stella is wise. Maria is wiser than Stella.
- The forest is a more peaceful place than the beach. It is a more peaceful place than the mountains.

Grammar Check ✓

When do we use superlative adjectives?



Writing

Write an Advertisement

Advertisements persuade people to buy products. Short sentences include important details and facts that will appeal to buyers. These details describe the most important features of the product.

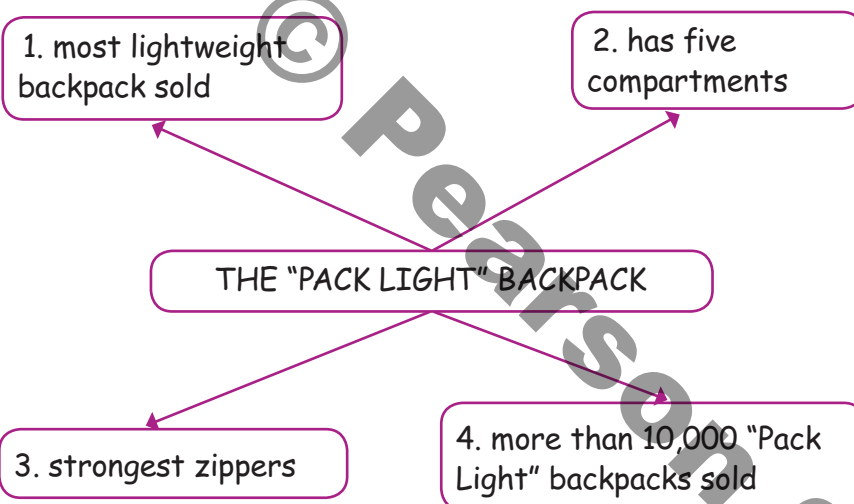
Writing Prompt

Write an advertisement about a real or imaginary product you can use in your home or school. Include important details and facts to persuade people to buy the products. Be sure to use superlatives correctly.

① Prewrite

Choose a product to write about. Think about the words you will use to describe the most important features of this product. List your ideas in a word web.

A student named Ana listed her ideas in this word web:



② Draft

Use your word web to help you write a first draft.

- Keep in mind your purpose for writing—to create an interesting ad.
- Include details that describe the features of the product.

3 Revise

Read over your draft. Look for places where the sentences are too long or the details are not interesting. Use the Writing Checklist to help you identify problems. Then revise your draft.

4 Edit

Check your work for errors. Trade papers with a partner to get feedback. Use the Peer Review Checklist on page 402. Edit your final draft in response to feedback from your partner and your teacher.

5 Publish

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

Here is Ana's ad for a backpack:

Ana Yang

The "Pack Light" is today's newest backpack!

- It's the most lightweight backpack sold!
- It has five different compartments!
- It's easy to pack and unpack!
- Its zippers are the strongest!
- More than 10,000 "Pack Lights" sold!

Carrying a "Pack Light" makes a difference. Be the coolest kid in class. Buy one today.

Writing Checklist



Ideas

I included interesting details to appeal to buyers.

I wrote short sentences to clearly explain my ideas.



Conventions

I used superlatives correctly.



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Reading 3

Prepare to Read

What You Will Learn

Reading

- Vocabulary building:
Context, phonics
- Reading strategy:
Identify cause and effect
- Text type:
Informational text (social studies)

Grammar

Adverbs of frequency and intensity

Writing

Write a persuasive brochure

These words will help you understand the reading.

Key Words

solve
communities
purpose
concerned
waste

Key Words

Creative Problem Solving is about solving problems in new and interesting ways.

Words in Context

1 Brainstorming is a good way to try and **solve** problems.



2 Many **communities** have lots of businesses and services, such as shopping centers and restaurants.



3 The **purpose** of the food drive was to fill the food pantry shelves and help feed hungry people.



4 My mother was **concerned** about my brother when he was sick and had a fever.

5 It's important not to **waste** food. Some people don't have enough to eat.



Practice

Make flashcards for the words.

- Write a key word on the front.
- On the back, write a sentence, but leave a blank where the key word should be.
- Use the cards to quiz yourself.

Make Connections

Can you think of a problem that you solved? What was the problem and how did you solve it? How did you think of the solution? Write your answers in your notebook.



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These words will help you talk about the reading.

Academic Words

creative

new and interesting

restore

repair something to make it seem new again

objective

goal



Academic Words

Words in Context

She always has very **creative** and different ideas.

The watchmakers fix and **restore** old, broken watches.

The cook's **objective** was to create a healthy and tasty meal.

Practice

Choose an academic word to complete each sentence.

1. Sue's _____ was to win the race.
2. The students found some _____ solutions to stopping food waste in the school cafeteria.
3. We couldn't _____ the old boat; it had too many holes in it.

Apply

Ask and answer with a partner.

1. Why is it a good idea to write your **objective** before starting a task?
2. Do you own something old that you want to **restore**?
3. Tell about the last time you did something **creative**. What was it?



Phonics

Digraph: ow

Sometimes the letters **ow** make one sound. Listen.
Sound out the words in the box.

Words with digraph ow	
grow	cow
own	down
yellow	tower

What two vowel sounds do the letters **ow** have? Say the words in the box aloud.

Rule

The letters **ow** can have the long **o** sound you hear in **grow** or the vowel sound you hear in **how**. Some words, such as **bow**, have two meanings and can be pronounced either way.

Practice

Read the sentences with a partner. Look for words with **ow**.

Before you can solve a problem, you have to know what it is.
How did you think of that solution?
Their objective is to grow new forests.
Now communities are trying to solve problems creatively.

1. Circle the words in which **ow** has the long **o** sound heard in **show**.
2. Underline the words in which **ow** has the **o** sound heard in **cow**.

Reading 3

Informational Text
Social Studies

More About



What problems can we solve by using technology?



Listen to the Audio.

Listen for the main points and important details.

Reading Strategy

Identify Cause and Effect

What makes an event happen is a cause. The result of a cause is an effect.

- Think about what caused the three problems in the text.
- Identify some effects of the problems.

Listen as your teacher models the reading strategy.

Creative Problem Solving

We all know that problems are a part of life. What's interesting is how we deal with problems. Today we'll look at three problems and three companies trying to solve them.

Deforestation, the removal of forests, is a problem all over the world. And deforestation has effects. Plant and animal species lose their habitats. The air becomes more polluted. If we don't **restore** the forests, there will be more **climate change**.

climate change the warming of the Earth's climate

People plant new trees to restore the forest.



One company working to counter deforestation is *Tree Planet*, a company in South Korea. They developed a **mobile** game about trees. Their **objective** is to plant trees in the real world. Players plant trees online and then *Tree Planet* plants trees in the ground. They have planted hundreds of thousands of trees in many different countries.

Another problem that requires creative problem solving is lack of access to electricity in some places. Electricity powers many things that help us. Think about refrigerators, washing machines, and lights. But some **communities** don't always have electricity. Life can be very difficult with no electricity.

Maya Pedal is a business in Guatemala. They **recycle** old bicycles into power machines. People **pedal** the bicycles to power everything from a water pump to a kitchen blender! *Maya Pedal* is nonprofit. Their **purpose** is not to make money. They are **concerned** with helping people.



mobile relating to mobile phones

recycle to use something again for a new purpose

pedal to push on bike pedals to make the wheels move

Maya Pedal recycles bicycles that people can use to power machines.

Before You Go On

How might people creatively **solve** the problem of food waste?

Zéro-Gâchis has stands in many supermarkets in France.



For-profit companies can help, too. Supermarkets can't sell some food after a **sell-by date**, or expiration date. They often throw away a lot of food. *Zéro-Gâchis* is a company in France. They help supermarkets to sell more food and waste less. The company communicates with **customers** online. Customers learn where they can go to buy cheaper food close to the sell-by date. It's a **win-win**! Customers pay lower prices and supermarkets sell more food. Supermarkets that work with *Zéro-Gâchis* have reduced food waste by 50%.

sell-by date the latest date a food product should be sold

customers people who buy something

win-win a situation where everyone is a winner

Customers can use the *Zéro-Gâchis* website to find cheaper food.



These three companies are good examples of creative problem solving. They saw a problem and thought of a way to help solve it creatively. Creative thinking can usually solve most problems!

Which of these companies do you think is the most creative? Why? Can you think of some other examples of creative problem solving in your community? Talk about it with your class.

People use wind turbines to harness wind power and make electricity. This is an example of creative problem solving.



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Reading Strategy

Identify Cause and Effect

As you read this selection, you looked for causes and effects.

- What examples of causes and effects did you identify?
- Did looking for causes and effects help you to understand the selection?

Think It Over

1. **Recall** What is one of the effects of deforestation?
2. **Comprehend** What are the **objectives** of nonprofit companies?
3. **Analyze** How are the solutions to the problems in the text **creative**?

Learning Strategies

Cause and Effect

Finding cause and effect relationships can help you to understand what you read.

- The **cause** is what makes something happen.
- The **effect** is the result of the cause.

To find an effect in a story, ask yourself: "What happened?"

To find the cause, ask yourself: "Why did this happen?"

Practice

Read the sentences below with a partner.

- Make a chart with two columns. Write "Cause" in one column. Write "Effect" in the other column.
- List each cause and each effect in the correct column.
 1. The water started to boil. Katie heated the tea kettle.
 2. Stan studies every day. Stan does well on quizzes.
 3. The baseball broke the window. Tom hit the baseball.
 4. Plants grew in the field. The farmer planted the seeds.



Use a Cause and Effect Chart

You can use a Cause and Effect Chart to help you understand cause and effect relationships in a story.

Practice



Complete this Cause and Effect Chart for *Creative Problem Solving*. Then compare your completed chart with a partner's.

Cause	Effect
Deforestation, the removal of forests, is a problem all over the world.	
	Life can be very difficult with no electricity.
Supermarkets can't sell some food after a sell-by, or expiration, date.	



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Apply

Take notes on the selection. Share them with a partner.

Extension

Are people in your community solving problems in **creative** ways? How? What is one problem that you would like to see solved? Tell your class about it.

Grammar

Adverbs of Frequency and Intensity

Adverbs of frequency answer the question *How often?*

How often do you see your grandparents?

I **always** see my grandparents on holidays.

Study the positions of frequency adverbs:

Positions of adverbs	Examples
After the be verb Before other verbs	She is never late. We always study after school.
Positions of usually In the middle of a sentence After be	We usually go to the beach. We are usually at home on weekends.
Positions of sometimes At the beginning of a sentence In the middle of a sentence At the end of a sentence	Sometimes I eat early. I sometimes eat early. I eat early sometimes .

In questions: Adverbs come directly after the subject

Is she **always** here? Do you **always** bring your lunch?

Adverbs of intensity come before the adjective they modify
or before another adverb.

I ran **very** fast. You are **too** funny! She is **really** smart.

Practice A

Reorder the words to make sentences. Write the sentences in your notebook. More than one answer is possible.

1. He / home / sometimes / comes / late He sometimes comes home late.
2. She / busy / on weekend / always / is
3. They / the movies / rarely / to / go
4. We / late / never / stay out
5. Does / him / visit / his grandmother / often / ?



Practice B

Ask and answer questions with your partner using adverbs of intensity. Use the questions below or create your own.

Example: A: How well do you speak English?

B: I speak English very well.

How well can you swim?

How easy is your English class?

How far is your house from school?

Grammar Check ✓

What do adverbs of frequency tell us? What do adverbs of intensity tell us?

Apply

Work with a partner. Make statements about your schedule and things you do. Use adverbs of frequency and intensity in your statements.

Example: A: I always eat breakfast at home.

Sometimes I bring my lunch to school.

B: I never eat breakfast. I'm not very hungry in the morning. I usually bring my lunch.



Writing

Write a Persuasive Brochure

A brochure is a small book about a topic. A persuasive brochure convinces someone to act or think in a certain way. Clear details present information that will persuade the reader.

Writing Prompt

Write a persuasive brochure to encourage people to attend an event in your community. Include all the necessary information about the event. Use clear, interesting details to present the information in a persuasive way. Be sure to use adverbs of frequency and intensity correctly.

① Prewrite

Choose an event to write about. Think about the information that will persuade readers to attend. List the information in a graphic organizer.

A student named Sam listed his ideas like this:

② Draft

Use your storyboard to help you write a first draft.

- Keep in mind your purpose for writing—to persuade.
- Show interesting details to appeal to your readers.

Page 1

- Community Clean Up Our Park day. Show you care!
- All plastic, metal, and glass will be recycled.
- Free barbeque after the work is completed.
- Games with prizes!

Page 2

- Date + Time: Friday, September 10 at 9 A.M.
- Place: Downtown Park - meet at the kids' playground.

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. Trade papers with a partner to get feedback. Use the Peer Review Checklist on page 402.

⑤ Publish

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

Here is Sam's brochure:

Please come to the Community Clean Up Our Park Day! Downtown Park is the most popular park in our town, but it needs a cleanup.

- We will separate the trash into recycling bins.
- There will be a delicious barbeque for all volunteers. And it's free!
- We will play some fun games and prizes will be awarded.

Please mark the date on your calendar.

- Friday, September 10 at 9 A.M.
- Downtown Park - we will meet at the kids' playground.

We are looking forward to seeing you there! Show some community spirit!

Writing Checklist

✓ Ideas

I included information about the event.

I used interesting details to persuade the reader.

✓ Conventions

I used adverbs of frequency and intensity correctly.



Apply and Extend

Link the Readings

Read the words in the top row.

Then follow these steps:

- For *The Trouble with Kudzu*, put an X under the words that remind you of the text.
- Repeat the same activity for *The Fox and the Crow* and *The Fox and the Goat* and *Creative Problem Solving*.



	Informational text	Literature	Solution helps one character	Solution helps many
<i>The Trouble with Kudzu</i>				
<i>The Fox and the Crow, The Fox and the Goat</i>				
<i>Creative Problem Solving</i>				

Discussion




1. The title of the story is *The Trouble with Kudzu*. Does kudzu still cause trouble? Why or why not?
2. How did Mr. Fox's actions **affect** the other characters in the stories? How does *Maya Pedal* **affect** people's lives?
3. How does **restoring** forests solve problems?

How do we solve problems?



Projects

Your teacher will help you choose one of these projects.

Written 	Oral 	Visual/Active 
<p>Skit</p> <p>Choose one of the selections. Write a skit about the problem and how it was solved. Make sure the problem and solution are clear.</p>	<p>Fable</p> <p>Many fables are about solving a problem. The way a character solves a problem leads to a lesson. Write a fable about someone who must solve a problem.</p>	<p>Flowchart of Steps</p> <p>Think of a problem you read about and how it was solved. Identify the problem. Tell what steps were taken to solve it. Then explain the solution.</p>
<p>News Article</p> <p>Write a newspaper article about a problem that you heard about. Tell how people solved it. Answer the 5 W questions in your article.</p>	<p>Interview</p> <p>Interview someone who has solved a problem. Find out what the problem was. Tell how the person solved it. Record your interview.</p>	<p>Comic Strip</p> <p>Create a comic strip about a problem and how it is solved. Use a problem you read about, or think of your own problem.</p>

Listening and Speaking Workshop

Give a Speech

You are going to write and give a speech. Then you will listen as your classmates give a speech.

1 Prepare

- A. Choose a problem that has been solved. It can be from your school, your community, or somewhere else in the world. Research it and give a speech based on your research.
- B. Think about what you want to tell your classmates. You will need to describe the problem, tell about the person who solved it, and explain how the person solved the problem. Find photos, posters, or other props to show during your speech.

Useful Language

 Listen and repeat.

I'm going to talk about . . .

We had a problem in our city for a long time. The problem was . . .

People were worried about . . .
Luckily, some of us had a great solution!

We had a problem at the most popular park in our town. So many people used the park and it was very dirty. The town didn't always keep it clean. We wanted to do something. We organized a cleanup day for the park. We asked people to volunteer. We offered a free barbeque and games with prizes. So many people came! The park was very clean and looked really beautiful. And everyone had so much fun! Now we're going to have a park cleanup day every month!

② Practice

Practice your speech with your props. Practice in front of your family or friends. If possible, record your speech. Then listen to yourself. How do you sound? Record yourself again and try to improve.

③ Present

As you speak, do the following:

- Face your audience and relax.
- Speak clearly and take your time.
- Show your props and other visuals.

As you listen, do the following:

- Listen for the general meaning, main point, and any details.
- Pay close attention. Your teacher will ask you questions about the speech.

④ Evaluate

After you speak, answer these questions:

- ✓ Did you describe the problem clearly?
- ✓ Did you explain who solved it and how?

After you listen, answer these questions:

- ✓ Did you know anything about the problem before the speech?
- ✓ Did the speaker use formal or informal language?
- ✓ Think about the general meaning of the speech. Can you think of a title for it? Tell your idea to the class.

Speaking Skills

Formal language is used in speeches. Remember to use correct grammar and complete sentences of different lengths and types.

Listening Skills

Listen carefully for ideas and information that aren't stated directly.



Writing Workshop

Write a Review

Writing Prompt

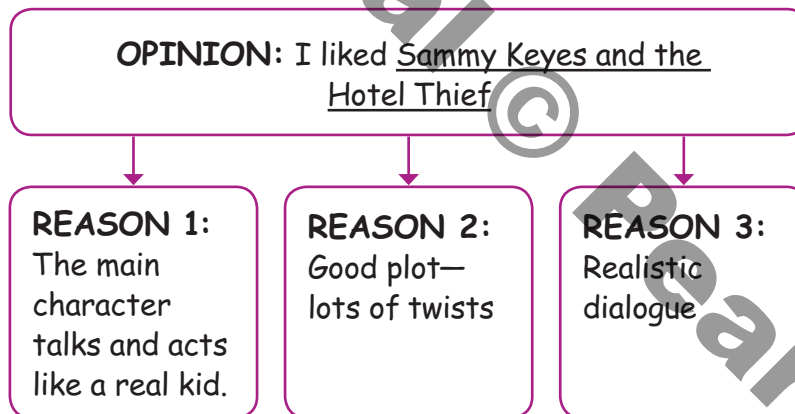
Write a review of a book, movie, or play. Clearly express your opinion of the work and include reasons that support your view.

1 Prewrite



Review your writing for this unit. Then think of a movie, play, or book that you liked or disliked. Why did you feel as you did? List your ideas in a graphic organizer.

A student named Rob listed his ideas in this chart:



2 Draft

Use your graphic organizer to write a draft.

- Keep your purpose in mind—to write a review.
- Support your opinion with reasons.

3 Revise

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

Here is how Rob revised his review:

Six Traits of Writing Checklist

- | | |
|---|--|
| ✓ Ideas
Did I clearly express my opinion? | ✓ Word Choice
Did I choose specific words? |
| ✓ Organization
Did I give reasons for my opinion? | ✓ Sentence Fluency
Did I use different kinds of sentences? |
| ✓ Voice
Does my writing sound like me? | ✓ Conventions
Did I begin and end sentences correctly? |

Rob Park

I enjoyed reading *Sammy Keyes and the Hotel Thief* by Wendelin Van Draanen. This mystery begins when 13-year-old Sammy sees a thief in one of the hotel rooms across the street from her grandmother's house. She watches until the thief sees her staring. Sammy realizes that she has to help the police ~~or they~~ ^{she and her grandmother} might be in danger. By the end of the book, Sammy cracks the case and catches ~~an ice cream vendor~~ ^{guessing involved} the thief. She also learns that taking risks is sometimes necessary.

Revised
to correct mechanics.

Revised
to clarify meaning.

Revised
to make writing smoother.

Sammy talks and acts like a real kid does. The plot was exciting, with enough twists to keep me ~~involved~~ ^{guessing}. The dialogue is sharp. As you read, you feel that Sammy, the narrator, is talking directly to you.

Revised
to make more vivid.

Sammy is a funny, smart person I liked knowing. I think you will, too.

4 Edit

Check your work for errors. Trade papers with a partner. Use the Peer Review Checklist to give each other feedback.

5 Publish

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



149–150

Peer Review Checklist

- ✓ The opinion is clearly stated.
- ✓ The opinion is supported by reasons.
- ✓ The writing is clear and interesting.

Spelling Tip

The *k* sound can be spelled with the letter *c*, *k*, or *ck*.

book cave track

Use a dictionary to check the spelling of words with the *k* sound.



Fluency

Listen to the sentences. Pay attention to the groups of words. Read aloud.

1. Kudzu doesn't come from a magic bean, but it is a member of the bean family.
2. One sunny, fall day, Mr. Fox went walking through the forest.
3. Players plant trees online and then *Tree Planet* plants trees in the ground.

Work in pairs. Take turns reading the passage below aloud for one minute. Count the number of words you read.

Kudzu is a native plant of China and Japan. That	10
means it grew naturally in those countries. Kudzu was	19
brought to the United States from Japan in 1876 as a	30
gift for a special celebration. The United States was	39
celebrating its first 100 years as a nation.	47
Soon, every gardener and farmer wanted to plant kudzu	56
seeds. Gardeners grew kudzu because it looked pretty and	65
smelled good. Farmers grew it to feed their animals.	74
At first, kudzu was a big success! But it did not stop	86
growing. It blocked sunlight that other plants needed. It	95
killed trees and whole forests. Nothing was safe!	103
Now, people call kudzu a weed. It is a wild plant	114
that grows where it is not wanted.	121

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

- Practice saying each word and then say the sentence each word is in.
- Then 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 Test Items for Revising and Editing

- Revising and Editing Tests often ask you to look for corrections and improvements that a writer should make.
- Before you read the written selection, preview the questions and answer choices.
- Read the whole selection carefully.
- After reading the selection, go back and carefully reread the sentences mentioned in the questions. Do you notice any mistakes in grammar or punctuation?
- Read each of the answer choices to yourself to see if one of them sounds better than the sentence in the selection. Choose the answer that does the most to improve the whole sentence.
- Remember that sometimes the sentence will not need any corrections.



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Practice

Read the following test sample. Study the tips in the box.

Answer the questions that follow.

(1) At tonight's town meeting, the City Council will announce its decision to make skateboarding on the sidewalk against the law. (2) Too many skateboarders have run into people and cars. (3) These accidents are making people *verry* angry. (4) But responsible skateboarders are angry, too. (5) Parents of skateboarders may be *angryier* than the kids. (6) They will have to pay fines if their kids are caught skateboarding on the sidewalk. (7) Mr. Ikeda has offered to give the town a plot of land to build a skateboard park. (8) It's a great offer, but we need money to build it. (9) Come to the town meeting and share your ideas!

- 1 What change should be made in sentence 3?
 - A Change *accidents* to *accident*
 - B Change *are* to *is*
 - C Change *These* to *Thi*
 - D Change *verry* to *very*
- 2 Which change, if any, is needed in sentence 5?
 - F Change *Parents* to *Parents'*
 - G Change *are* to *is*
 - H Change *angryier* to *angrier*
 - J Make no change
- 3 What change, if any, should be made in sentence 9?
 - A Change *share* to *say*
 - B Change *Come* to *Came*
 - C Delete *meeting*
 - D Make no change

Tips

- ✓ Think about what you have learned about adverbs of intensity.
- ✓ Review what you know about forming comparatives.