

WEEK 5 (4/27-5/1)

READING/ELA

PACKET

Monday	Review weekly overview, vocabulary words, and spelling words. Complete vocabulary and spelling word practice (pg. 1-6 of packet).
Tuesday	Read “Forests on Fire” and answer Make Connections questions, read strategy pages and answer the Your Turn questions.
Wednesday	Read “Global Warming” and answer the Text Evidence Questions.
Thursday	Complete the Your Turn practice pages.
Friday	Finish Your Turn practice pages and any unfinished work.

Dear Parent/Guardian,

During Week 5, your child will practice a variety of skills, including vocabulary, author's point of view, expository texts, text features, and context clues.

We also suggest that students have an experience with reading each day. Reading at home will make a HUGE difference in your child's school success! Make reading part of your everyday routine. Choose books that match your child's interests. Reading for 20 minutes a day will continue to grow your young reader's vocabulary and comprehension.

Links for additional resources to support students at home are listed below for letters and numbers review, sight word practice, colors, shapes, and more:

<https://classroommagazines.scholastic.com/support/learnathome.html>

<https://www.education.com/>

<http://www.sheppardsoftware.com/>

<https://www.funbrain.com/>

Essential Question: What changes in the environment affect living things?

Unit 5 Week 3

Story

Global Warming

Genre

Expository Text

Story

"When Volcanoes Erupt"

Genre

Expository Text

Story

"Forests on Fire"

Genre

Expository Text

Comprehension Strategy

ask and answer questions

Comprehension Skill

text structure: compare and contrast

Vocabulary Strategy

context clues

Writing Traits

ideas-develop a topic

Grammar

adjectives

Other Skills

fluency: rate

Genre

Expository Text

SPELLING/ PHONICS

prefixes

prewash
disable
discolor
mistaken
preheats
mistrust
incorrect
disconnect
preview
prejudge
misjudge
discomfort
dismount
misunderstand
disobey
dishonest
injustice
disapprove
inexpensive
indefinite

Vocabulary

atmosphere- the layer of gases that surrounds a planet such as Earth

decays- rots, decomposes

gradual- moving, changing, or happening slowly

impact- a strong effect or influence

noticeably- in an easily observed or noticeable manner

receding- moving back or away

stability- the state of being stable or secure

variations- the extents or amounts to which someone or something changes or varies



Vocabulary

Use the picture and the sentences to talk with a partner about each word.



atmosphere

Clouds form in our **atmosphere**, the layer of gases around Earth.

Why is the Earth's atmosphere important?



decays

When fruit **decays**, or rots, it is not very tasty and should not be eaten.

What does a banana look like as it decays?



gradual

The release of sand in an hourglass is **gradual**, so that it takes one hour.

What is a gradual event or change you have seen?



impact

A veterinarian has a big **impact** on the health of a pet.

Who has had an important impact on your life?



noticeably

José's hair was **noticeably** shorter after his haircut.

What is a synonym for noticeably?



receding

As I drove away, the mountain seemed to be **receding** in the distance.

If it was receding, was it getting close?



stability

While his sprained leg healed, Stephan used crutches for **stability** when walking.

If a thing has stability, is it shaky or steady?



variations

In the valley, there are many **variations** in the color green.

Where might you see variations in the color blue?



Your Turn

COLLABORATE



Pick three words. Write three questions for your partner to answer.



Go Digital! Use the online visual glossary

atmosphere

variations

receding

noticeably

stability

decays

gradual

impact

Finish each sentence using the vocabulary word provided.

1. (atmosphere) The weather balloon they launched _____

2. (decays) When food sits out for too long, _____

3. (gradual) The airplane began _____

4. (impact) People can have _____

5. (noticeably) The house was _____

6. (receding) I noticed _____

7. (stability) Three wheels give a tricycle _____

8. (variations) We were amazed to see _____

Word Study: **Prefixes**

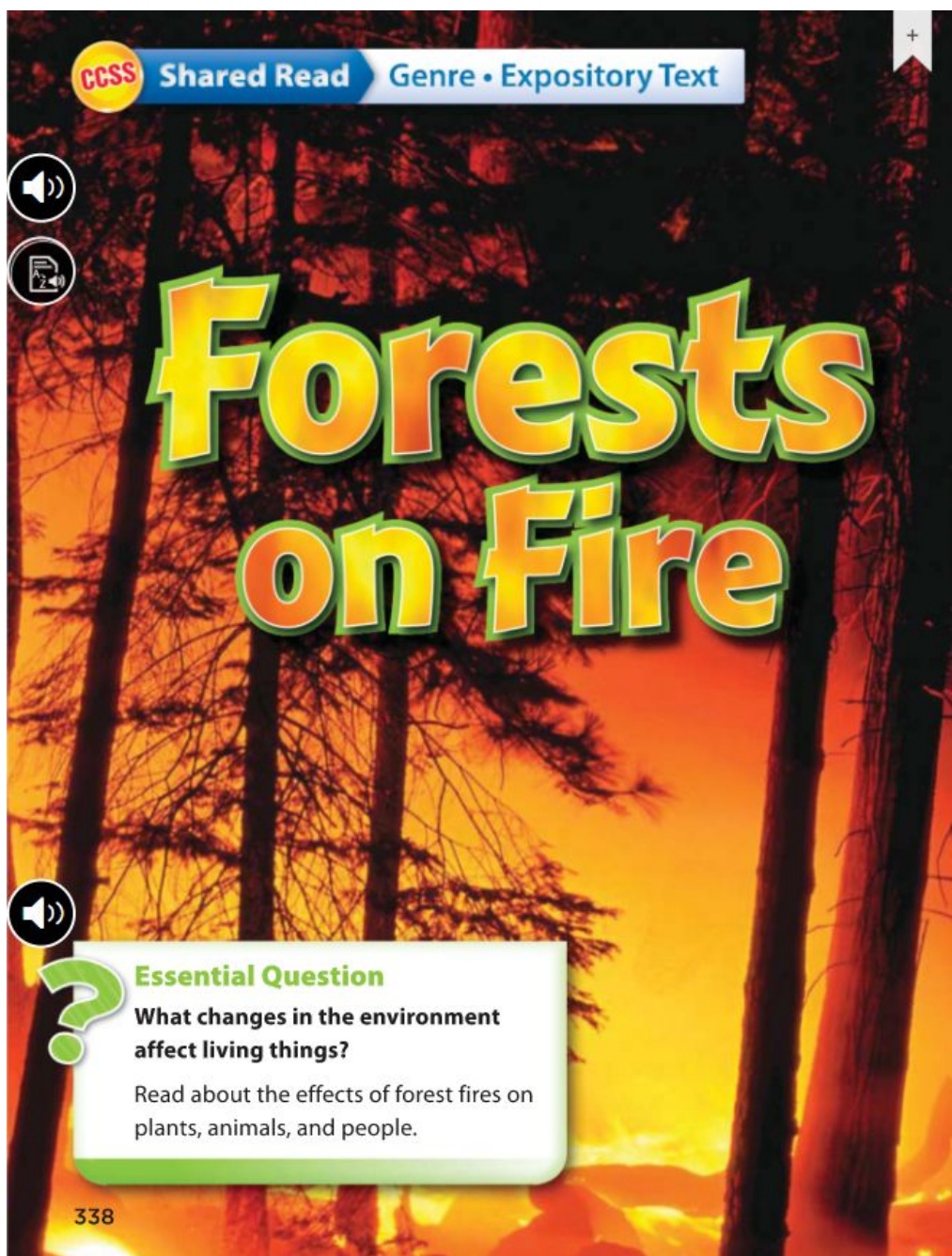
Name _____

dis- means "not," "absence of," or "opposite of"**in-** means "not" or "opposite of"**mis-** means "wrong" or "not"**pre-** means "before"

Add a prefix from the box to complete the word in each sentence below.
Use context clues to help you decide which prefix to use.

1. She will _____ wash the fabric to make sure it will not shrink.
2. Please remember to _____ connect from the Internet before you turn off the computer.
3. Their visitors will stay for an _____ definite amount of time.
4. He felt some _____ comfort when he hurt his leg.
5. If you do not speak clearly, they will _____ understand your directions.
6. She has little money, so she hopes to find an _____ expensive gift.
7. The teacher will _____ view the video before showing it to the class.
8. A friendship can be harmed if there is _____ trust between two people.
9. Always _____ heat the oven before you bake bread.
10. I _____ approve of the way they are behaving.

Day 2: Read the story (338-341) and complete the Make Connections questions, then practice the weekly strategies by reading pages 342-345 and answering the questions on each page. (There is a space to answer all questions after pg 345).



CCSS Shared Read Genre • Expository Text

Forests on Fire

Essential Question
What changes in the environment affect living things?

Read about the effects of forest fires on plants, animals, and people.

338



A few years ago, several red squirrels—an endangered species—had a temporary home at the Phoenix Zoo. Rescued from a ravaging wildfire that had already destroyed thousands of acres of land, the squirrels were waiting for the fire to be extinguished before being returned to the wild. Forest fires are part of nature, so it is important for us to understand not only how to fight fires, but also why they occur.

Destructive and Productive

Like rainstorms, wildfires are a force of nature. However, unlike rainstorms, wildfires are almost always destructive. They consume everything in their way, including plants, trees, and animals. Sometimes, they take human lives and homes as well.

Like a big storm, the destructive power of wildfires is terrifying. On the other hand, naturally occurring wildfires are

also productive forces. Whether their flames race through a forest, a prairie, or acres of brush, these fires produce necessary changes in their environment. Like rain, they can allow new life to flourish.

Benefits of Naturally Occurring Wildfires

A naturally occurring wildfire, sometimes called a forest fire, happens without any human cause. Three factors must be present for one to burn. These include fuel, such as dry grasses; oxygen, which is in our **atmosphere**; and a heat source to ignite the fuel. A lightning strike usually sparks a naturally occurring wildfire. The danger of fire is highest during a drought, when an area has experienced little rain.

Wildfires have happened throughout history, and they help to regenerate Earth and its species. When vegetation **decays**, wildfires clear it away so that new plant life can grow.





The black spruce tree needs a fire's heat to cause its cones to open and scatter seeds. Eventually, seedlings sprout, and a new forest will grow.



Fire also releases nutrients back into the soil, making it more fertile. And by eliminating leafy canopies of mature trees, fire allows nourishing sunlight to reach a forest floor.

Often, this new plant life will be better adapted to fire than what existed before. Some species will have fire-resistant roots, leaves, or bark. Other species will actually depend on fire to reproduce and thrive.

Stability and Diversity

Among its benefits, fire promotes **stability**. By eliminating invasive species that can take over an area, fire encourages the healthy growth of a region's own vegetation.

At the same time, fire promotes diversity. It ensures that plant life will exist at different stages of development. For example, a forest recently struck by fire will have new seedlings. Not far away, in a forest struck by fire twenty years earlier, there may be small trees. And nearby, there may be a forest of mature trees, untouched by fire for years.

These **variations** in plant life provide food and habitats for different kinds of insects, birds, and mammals. Woodpeckers eat insects in burned-out trees. Sparrows depend on seeds for food. Predators such as foxes are drawn by small prey. Forests at different stages attract a diversity of animals to a region.



The Human Factor

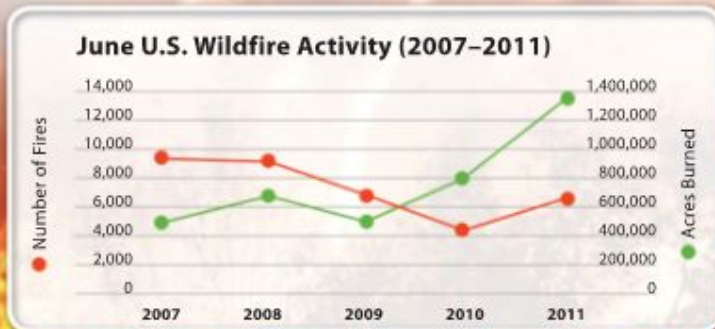
Although wildfires have benefits, they also are feared and misunderstood. As a result, our government tried to suppress them completely throughout the 20th century. This policy had a negative **impact** on the environment. The **gradual** buildup of decayed vegetation provided more fuel to feed fires. Consequently, wildfires became **noticeably** fiercer.

More recently, the government has used two different strategies to manage wildfires. One is to try to limit fires before they burn out of control. The other is to set small

“prescribed” fires to reduce the amount of fuel in the environment. Hopefully, the danger of catastrophic fires is now **receding**.

Unfortunately, human carelessness, such as a campfire left to smolder, also can start a fire. While a natural or prescribed wildfire can be beneficial, this is not true of fires that result from malice or mistakes. These happen at times and places that may cause irreparable damage to plant, animal, and human life. Fires cannot control themselves, so humans will always have to figure out how best to handle them.

Whether wildfires are small or large, firefighters are needed to help contain them.



Make Connections

Talk about how wildfires change the environment for plants. **ESSENTIAL QUESTION**

Why is it important for you to be careful around a fire of any kind, even in a home? **TEXT TO SELF**





Ask and Answer Questions

To be sure you understand what you read, ask questions about the text. If you have trouble answering the question, reread the section. At the end of an expository text, ask: *What is the main idea?* Then find details to support your answer.



Find Text Evidence

To check your understanding of the section "Destructive and Productive" on page 339, you might ask yourself, *What is the main idea?*

page 339

Like a big storm, the destructive power of wildfires is terrifying. On the other hand, naturally occurring wildfires are also productive forces. Whether their flames race through a forest, a prairie, or acres of brush, these fires produce necessary changes in their environment. Like rain, they can allow new life to flourish.

The main idea is that wildfires are both destructive and productive. Details such as how wildfires in a forest or prairie produce necessary changes help support the main idea.



Your Turn

COLLABORATE



Ask and answer a question about the information in the section "Benefits of Naturally Occurring Wildfires" on page 339. Use this strategy as you read.





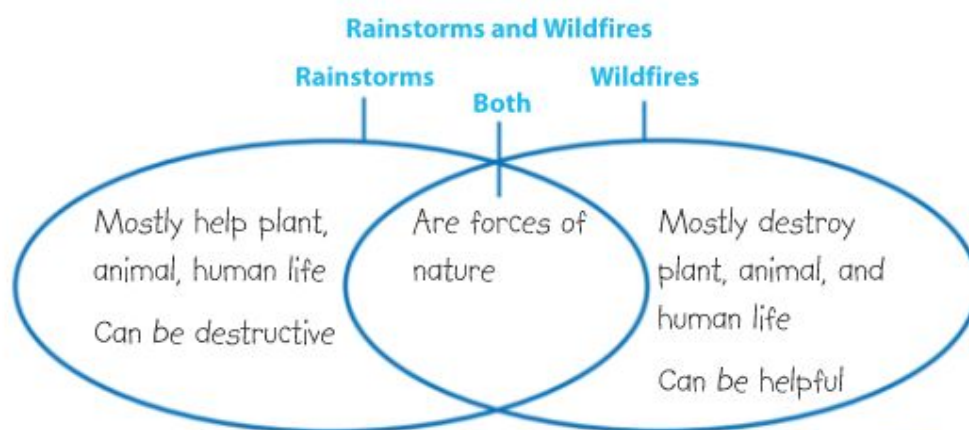
Compare and Contrast

Writers may organize a text to show how an idea is similar to or different from another idea. To figure out if a writer is using a compare-and-contrast structure, look for signal words and phrases such as *however*, *on the other hand*, and *just as*.



Find Text Evidence

The first section tells how wildfires are both like storms and unlike storms. This comparison helps me understand that both forces of nature have uses. Wildfires may be mostly destructive, but, like storms, they can be useful, too.



Your Turn

Reread "The Human Factor" on page 341. Compare and contrast the impact that humans have on fires as described in this section.

Go Digital! Use the interactive graphic organizer

COLLABORATE





Genre

Informational Text



Expository Text

The selection "Forests on Fire" is expository text.

Expository text:

- Gives information about a topic
- Develops the topic with facts, examples, and explanations
- May include graphs and photographs



Find Text Evidence

I can tell that "Forests on Fire" is expository text. The selection gives facts about the causes of wildfires and explains more about them. Photographs, captions, and a graph add information.

page 341

The Human Factor
Although wildfires have benefits, they also are feared and misunderstood. As a result, our government tried to suppress them completely throughout the 20th century. This policy had a negative **impact** on the environment. The **gradual** buildup of decayed vegetation provided more fuel to feed fires. Consequently, wildfires became **noticeably** fiercer.

More recently, the government has used two different strategies to manage wildfires. One is to try to limit fires before they burn out of control. The other is to let small

"prescribed" fires to reduce the amount of fuel in the environment. Hopefully, the danger of catastrophic fires is now **receding**.

Unfortunately, human carelessness, such as a campfire left to smolder, also can start a fire. While a natural or prescribed wildfire can be beneficial, this is not true of fires that result from **malice** mistakes. These happen at times and places that may cause irreparable damage to plant, animal, and human life. Fires cannot control themselves, so humans will always have to figure out how best to handle them.

Whether wildfires are small or large, firefighters are needed to help control them.

June U.S. Wildfire Activity (2007-2011)

Year	Number of Fires	Acres Burned
2007	~10,000	~1,000,000
2008	~12,000	~1,200,000
2009	~15,000	~1,500,000
2010	~18,000	~1,800,000
2011	~20,000	~2,000,000

Make Connections
Talk about how wildfires change the environment for plants. **ESSENTIAL QUESTION**
Why is it important for you to be careful around a fire of any kind, even in a home? **TEXT TO SELF**

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Photographs Photographs provide visual information. **Captions** also add information.

Graphs A graph is a diagram that shows numerical information, including changes over time. A title tells what the graph will show.



Your Turn

COLLABORATE



Discuss the graph on page 341.
What may have caused so many acres to burn in 2011?





Context Clues

Sometimes you can figure out the meaning of unfamiliar or multiple meaning words by looking for **clues in the paragraph**. You may see a synonym, an antonym, or a comparison that can help you define a word that puzzles you.



Find Text Evidence

When I read "Stability and Diversity" on page 340, the phrases new seedlings and small trees refer to trees in early life. Since mature trees have been untouched by fire for years, the word mature must mean "fully grown or developed."

For example, a forest recently struck by fire will have new seedlings. Not far away, in a forest struck by fire twenty years earlier, there may be small trees. And nearby, there may be a forest of mature trees, untouched by fire for years.



Your Turn

COLLABORATE



Use context clues to figure out the meaning of the following words in "Forests on Fire":

productive, page 339

regenerate, page 339

diversity, page 340



Make Connections Questions p.341 (Forests On Fire)

1. **Talk about how wildfires change the environment for plants** (hint: reread if you are unsure, the text talked about how fires can change the environment for plants in both good and bad ways).

2. **Why is it important for you to be careful around a fire of any kind, even at home?** (hint: think about what the text said about how fire can be destructive, and try to think about what you might have learned about fire safety before).

Your Turn Strategy practice pg. 342-345

Your Turn pg. 342 (Ask and Answer Questions Strategy):

Ask and answer a question about the information in the section “Benefits of Naturally Occurring Wildfires” on pg. 339. Use the “Ask and Answer Questions” Strategy as you read. (hint: Your question should help you understand what you read in the section. Good questions might start with “why” or you could ask “what was the main idea of the section?” You should be able to answer your question by rereading. Look at the example on pg. 342).

Question about the section: _____

Answer to my question: _____

Your Turn pg. 343 (Compare and Contrast Skill)

Reread “The Human Factor” on page 341. Compare and contrast the impact that humans have on fires as described in this section. (Hint: look at the example on page 343, and look back in the text on pg. 341. Look for ways people affect fires, then look at positive and negative ways they can affect fires).

Positive impacts of humans on fires	Both- The human impact	Negative impacts of humans on fires

Your Turn pg. 344 (Text Features of Expository Text)

Discuss the graph on page 341. What may have caused so many acres to burn in 2011?

(hint: Graphs are a helpful text feature that can help you understand the text and give you new information. Look on pg. 344 to learn more about them. You need to look at the graph and the story. Notice the number of fires dropping before 2011, what did the text say about suppressing fires and build-up?)

Your Turn pg. 345 (Context Clues Strategy)

Use context clues to figure out the meaning of the following words in “Forests on Fire” write the meaning and the clues you used to find it: (hint: pg. 345 has an example of how to use context clues. Make sure you are going back in the story and finding the words, look at the sentences around it to help figure out a meaning. Your meaning should be able to replace the word in the sentence and still make sense!)

Productive pg. 339:

Meaning: _____

Context Clues: _____

Regenerate pg. 339:(hint: Remember, the prefix re- means again!

Meaning: _____

Context Clues: _____

Diversity pg. 340:

Meaning: _____

Context Clues: _____

Day 3: Read the Story “Global Warming p.384-397” and then answer the Text Evidence Questions at the end.





Thousands of years ago, large parts of the land mass on Earth were covered by ice. Since then, Earth has been getting warmer. In recent decades, the rise in average temperature has been particularly rapid. “Global warming” is the term that has been used to describe these changes.

Weather and climate are different. Weather is what happens every day. Climate is the average weather over a period of years. For example, it’s possible that the weather on any day might be cool but the average weather, the climate, is getting warmer.

Why is the climate changing? Could Earth be getting warmer by itself? Are people doing things that make the climate warmer? What will be the **impact** of global warming? Can we do anything about it?



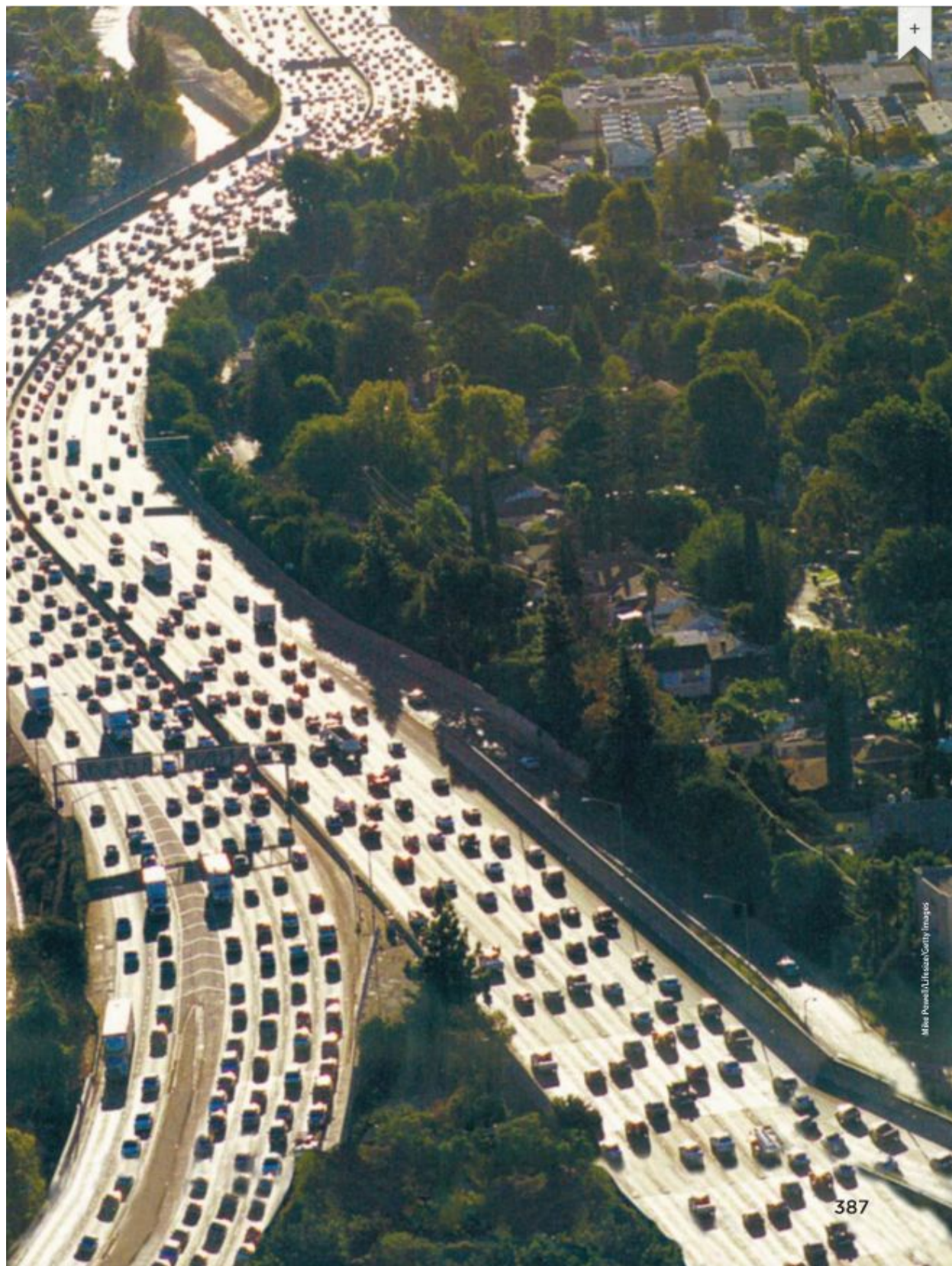
Global warming is happening because of the greenhouse effect. A greenhouse is a house made of glass. The glass lets in sunlight but keeps warm air from escaping. Earth is not a greenhouse, but certain gases in the **atmosphere** act like the glass in a greenhouse. Sunlight passes through Earth's atmosphere and warms the ground. Some of the heat bounces back into space, but much of it remains trapped near the ground by carbon dioxide, water vapor, and other greenhouse gases in the atmosphere.

The greenhouse effect helps make Earth warm enough for life to exist. But if greenhouse gases are released into the atmosphere in larger amounts much faster than before, then the warming will get much stronger and the climate will **noticeably** change.

In 2007, a report by 2,500 scientists from 130 countries concluded that humans are responsible for much of the current warming. No *one* person causes global warming. But there are billions of people on Earth. We cut down huge numbers of trees, drive hundreds of millions of cars and trucks, and burn vast amounts of coal and oil. All these activities contribute to a huge increase in greenhouse gases. Even if we decreased the amount of gases we now produce, it would not immediately stop the warming because greenhouse gases stay in the atmosphere for years.

The Earth's climate is very complex, and many factors play important roles in determining how the climate changes. Natural **variations** in Earth's orbit around the sun change the amount of sunlight we receive and thus the temperature. Earth has had much warmer and much colder climates in the distant past.







J. Baker/Science Source

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Most scientists agree that something different is happening now. While Earth's climate has always varied, it is now changing more rapidly than in any other time in recent centuries. Since we have been keeping weather records, nineteen of the twenty hottest years *ever* have happened since 1980.

For thousands of years, the balance of greenhouse gases in the atmosphere had not changed much. But now we burn huge amounts of coal, oil, and natural gas to generate energy. Every year, billions of tons of carbon dioxide pour out from the exhausts of cars, trains, trucks, airplanes, buses, and ships and from the chimneys of factories. There is 30 percent more carbon dioxide in the air than there was 150 years ago.

Trees, like other green plants, convert carbon dioxide into oxygen.

But trees and forests are cut down in huge numbers. When wood burns or **decays**, even more carbon dioxide is released. Carbon dioxide enters into the atmosphere much faster than the remaining forests and oceans can absorb it.

The release of other greenhouse gases adds to the speed at which the world's climate is changing. Methane is released by millions and millions of cattle and other farm animals. Nitrous oxide comes from chemicals used in soil fertilizers, as well as from automobiles.

**STOP AND CHECK**

Ask and Answer Questions According to the author, why has the atmosphere changed? Go back to the text to find the answer.



The Arctic is already showing the effects of global warming. Average temperatures in the northern regions of Alaska, Canada, and Russia have risen twice as fast as in the rest of the world. The Ward Hunt Ice Shelf, the largest single sheet of ice in the Arctic, started to crack in 2000. By 2002, it had split. Now it is breaking into smaller pieces.

The Arctic Ocean is the great body of sea ice that covers the North Pole. Satellite photographs show that the ice pack has been shrinking and thinning in depth since the early 1990s. Scientists say that for the first time in human history, ice may disappear from the Arctic Ocean every summer.

Bernhard Edmeyer/Science Source



Global warming has also changed the feeding patterns and behaviors of polar bears, walruses, seals, and whales. It may even impact their survival.

Polar bears live only in the Arctic. They are completely dependent on the sea ice for all their life needs. In the winter, females give birth to cubs. The mother polar bear eats little or no food during the winter.

As spring approaches, the bear family makes a run onto the sea ice to feed on seals, their main source of food. If the ice melts, their food supply will be cut off and this will impact their survival.

Glaciers and mountain snow covers are rapidly melting. Almost every glacier in Alaska is **receding**. A few decades ago, huge rivers of ice stretched over the land. Now hundreds of feet or sometimes miles of bare rock and soil are exposed. In 1963, the Mendenhall Glacier Visitor Center in Juneau opened, very close to the glacier. Today, it is a mile or more away from the frozen edge of the retreating glacier.

In the 1850s, there were 150 glaciers in Montana. By 1968, there were 37. In 2008, there were fewer than 24. Glaciers that have lasted for thousands of years may be gone in two decades.

The icy coverings on tall mountain peaks are also disappearing. Each year, there is less snow remaining on the mountains during the summer. The snow melts earlier by a week or more in the spring, and snow falls later by a week or more in the autumn.





Grinnell and Salamander Glaciers,
1957



© Gregory G. Dinsman, M.D. Science Source

Grinnell and Salamander Glaciers,
2004



As temperatures rise, the level of the oceans will rise. A recent study found that if average temperatures rise by 3° Celsius (5.4° Fahrenheit), Greenland's enormous ice sheet will begin to melt and sea levels all over the world may rise by a half foot to 3 feet or more.

This may happen over years or decades or may take longer than a century. A 3-foot rise in sea level would swamp the Gulf Coast and every East Coast city from Boston to Miami. Rising water would cover low-lying areas such as the Nile Delta and countries such as Bangladesh. Millions of people would be forced to move.

The Antarctic ice cap holds about 90 percent of the world's ice and about 70 percent of its freshwater. It does not look as if the entire ice cap will melt anytime soon, but if it does happen, sea levels would rise 20 or more feet. Now, *that* would cause major flooding in coastal areas.

Yin erbao - Imagnovision Images



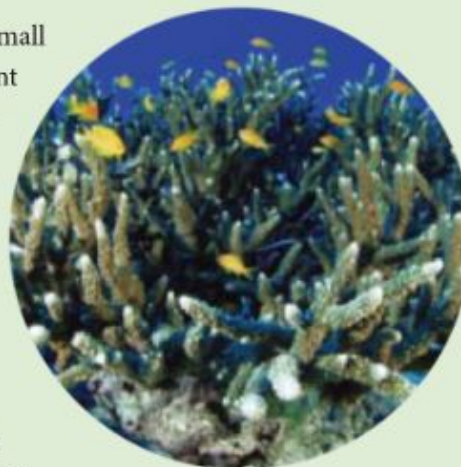


Atmospheric warming can cause a rise in ocean temperatures and place coral reefs in jeopardy. Coral reefs are huge branching structures made of the limestone skeletons of tiny animals called coral polyps. Coral reefs are found in warm, clear, shallow oceans. They are home to many kinds of fishes, jellyfish, anemones, crabs, turtles, sea snakes, clams, and octopuses and the algae that give the reefs their stunning colors.

Most coral reefs are highly sensitive. Even small changes in water temperature and in the amount of carbon dioxide in the water can kill algae in a reef. When the coral dies, it bleaches white. In 1998, a weather pattern called El Niño warmed the seas. In just one year, about one in every six of the world's reefs was lost. If coral reefs die, then much of the animal life they support will be wiped out as well.

Changing climate affects every ocean and every continent. Rising temperatures add heat energy and water vapor to the atmosphere. That can lead to heavier rainfalls and more powerful storms in some places, and long droughts in others. The changes will differ depending upon the location.

Many tropical areas may have greater rainfall. But in dry regions, even less rain may fall. Higher temperatures will cause the soil to dry up, and terrible droughts may ensue.



STOP AND CHECK

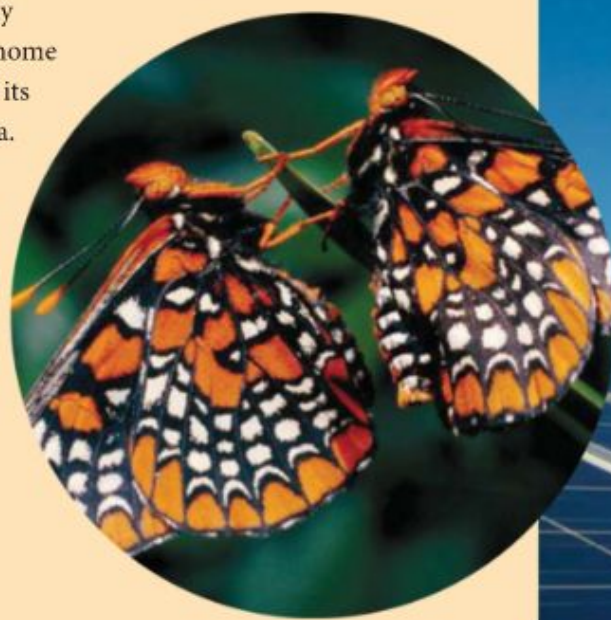
Ask and Answer Questions How might a warmer climate affect life in the oceans and on land? Look for details in the text to help you.



Wildfires may increase in forested areas as timberlands grow drier. The fires are likely to be bigger and more frequent and to burn longer. They would also release more carbon dioxide into the atmosphere and could lead to more warming.

Climate changes are not as easy to notice as changes in the weather. For example, a particular storm or a number of warm days during a winter is not really evidence of anything. We can all see day-to-day weather changes. But climate changes are noticeable as well. Plants and animals are already showing the effects of Earth's warming. Cold places, such as the North and South Poles and mountaintops, have been the first to feel the heat. Spring has come earlier, the ice has melted sooner, and there are fewer days where the temperatures are below freezing.

Many kinds of wildlife need the cold to survive. Some animals have adapted to the warmer weather by migrating to colder places. As the climate has warmed over the past century, the colorful checkerspot butterfly of the American West has moved northward or to higher elevations. The checkerspot butterfly has almost completely disappeared from its original home in Mexico and has adjusted to its new northern home in Canada. But not every animal can travel as easily. Scientists worry that crowding on mountaintops and colder places will cause some species to become extinct.





We can't do anything about some changes in our environment. Our planet may be going through a natural cycle of getting warmer. However, most scientists say that humans are at least partly responsible for climate change. That means it may be possible for people to slow down the change.

There is a debate about what we can do about our changing climate. Here's what people in some nations are trying to do:

- Improve fuel and energy economy so that people use less energy for vehicles, schools, offices, homes, and factories.
- Encourage the use of wind and solar power.
- Explore alternative ways of producing energies that do not directly release more greenhouse gases into the atmosphere.
- Protect and plant trees to increase forestlands.

Like J. Goodman/Photographer's Choice/Getty Images



Neil Massey/Getty Images/Getty



Nations and governments can do certain things to slow down dramatic climate changes. People can help, too. They can choose to use less energy to heat and cool their houses or use less fuel when getting around. Here are some things we might consider:

- Walking, biking, or using public transportation. One school bus can carry the same number of children as 30 or more cars.
- Using sturdy reusable bags for shopping and reusable cups and glasses is less wasteful than using disposable bags and cups.
- Taking short showers uses less energy than long showers.
- Planting a single tree can make enough oxygen for the lifetimes of two people. If one million trees are planted, the trees would eventually absorb more than one million tons of carbon dioxide.



Here's what some families are doing to slow down rapid climate change:

- Using fans instead of air conditioners. They may set a house air conditioner slightly higher in the summer, and slightly lower their heaters. They may lower a water heater's thermostat from "hot" (about 135° F.) to "warm" (about 120° F.).
- Using energy-saving fluorescent lightbulbs instead of incandescent lightbulbs. Fluorescent lightbulbs are more energy efficient and save on electricity costs.
- Turning off electric appliances and lights when they are not being used.
- Installing double-paned windows, extra insulation, good weather stripping, and solar panels to houses also saves energy.

Global warming isn't just about the Arctic Ocean melting and distant deserts becoming drier and hotter. Climate change impacts all of us. It can affect the world's food supply and the economic **stability** of countries.

The people and governments of the world are developing the tools and the scientific know-how to meet these challenges. As Earth's climate continues to change, we all want to find ways to safeguard our own and future generations.



STOP AND CHECK

Summarize How are some people trying to slow climate change? The strategy Summarize may help you.

Bloomington/Corbis

TEXT EVIDENCE QUESTIONS: "Global Warming"

- 1. GENRE:** How can you tell that this selection (Global Warming) is expository text? Give an example of a text feature and explain how it helps you understand the information. (hint: you learned about expository text and text features on day 2 pg. 344! Think about how you know this is expository instead of another type of text like a persuasive article or a fairytale).

How I know it is an expository text: _____

Text Feature and how it helps me understand information: _____

- 2. COMPARE AND CONTRAST:** How is Earth's climate today different from that of the past? Identify signal words the author uses to make the comparison. (Hint: They are just looking for a difference here! You learned about compare and contrast on day 2 of the packet pg. 343. You are looking for words that the author is using to tell you that there is a difference).

How Earth's Climate is different now than it was in the past: _____

Signal words that the author uses to make a comparison: _____

- 3. CONTEXT CLUES:** What is the meaning of the word *coastal* on page 392? Give examples of context clues in the paragraph that helped you figure out the meaning. (hint: you learned about context clues on day 2 of the packet pg. 345. Make sure to go back and read the paragraph the word was in!)

Meaning of *coastal*: _____

Clues in the paragraph that helped me find the meaning: _____

- 4. Write to compare how a rise in temperature affects the Arctic Ocean and coral reefs.** (hint: Think about how a rise in temperature affects each of these, and then tell me how the effects are similar. Rereading will really help you find evidence! Remember to use your own words). _____

Day 4-5 Complete Your Turn Practice pages and finish any incomplete work.

Read the passage. Use the ask and answer questions strategy to help you understand what you read.

Of Floods and Fish

10 The Mississippi River flows more than two thousand miles from
24 Minnesota to the Gulf of Mexico. Every few years, it floods. In April and
37 May, 2011, a combination of melting snow and falling rain along the upper
part of the river caused the lower part of the river to overrun its banks.

52 Floods cause widespread destruction. Floodwaters damage and
59 sometimes knock down buildings. They destroy farmland and animal
68 habitats. With nowhere to live, the animals often move into populated
79 areas. What about the fish? Because they live in water, shouldn't a flood
92 be good for them? As it turns out, floods can hurt fish populations just as
107 they harm many animals that live on the land.

116 The Dead Zone

119 The Mississippi floodwaters proved most detrimental to the fish and
129 other ocean life in the Gulf of Mexico. The Mississippi River is made
142 of fresh water. The Gulf is made of salt water. The extra river water
156 that flowed into the Gulf endangered the native saltwater fish. More
167 harmful, though, were the pollutants the river water carried with it. As the
180 swollen Mississippi washed over farmland, it picked up the fertilizer and
191 pesticides that farmers had used on the land and crops. These chemicals
203 are poisonous to ocean life. The river then dumped these poisons into
215 the Gulf. The extra river water and the farm runoff created a dead zone
229 along the coast. A dead zone is an area of water that does not have enough
245 oxygen to support life.

Threat of Invasion

The flooding of the Mississippi River posed a different threat to the fish that lived in it: the spread of an invasive species called Asian carp. Asian carp were brought to fish farms in the United States in the 1970s. A flood washed some of them from the farms into parts of the Mississippi River. In these places, the carp took over, threatening the native fish. When the Mississippi flooded again in 2011, scientists feared that the Asian carp would spread even farther.



Aaron Roath Photography

Supporting Life

Despite these problems, though, the freshwater fish that lived in the Mississippi River fared much better than those in the Gulf. For these Mississippi River fish, the extra river water provided advantages that helped them breed and survive.

As the river grew, so did the available habitat for the river's fish. River fish usually stay along the edges of a river, where the water is slower and shallower. The underwater plants and overhanging branches in these areas provide protection and food. When the Mississippi flooded, it increased the amount of shallow water on the river's edges. This gave the fish more water to swim in and more places to hide from predators. The spreading water also introduced more food. These factors improved the fish's chances of survival.

The expanded habitat provided more benefits than extra hiding places and food sources. It also created more areas for fish to spawn. The newly flooded areas allowed fish to lay eggs safely, away from predators and other dangers. This, in turn, meant more new fish hatched successfully.

If the flooding of the Mississippi teaches any lesson, it is that changes in the environment can affect living things in surprising ways. Despite its harmful effects, some animals benefitted from the change.

A. Reread the passage and answer the questions.

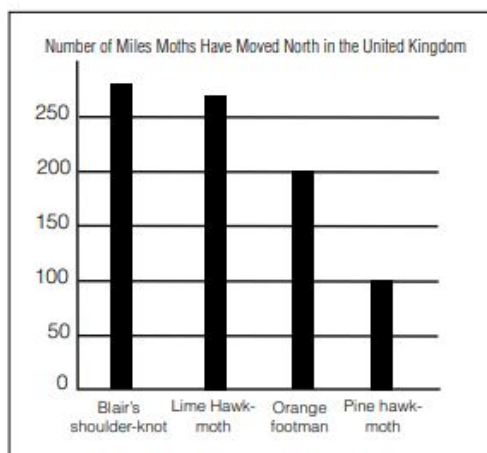
- 1. What comparison does the phrase *just as* indicate in the second paragraph?**

- 2. In what way are the main ideas of the sections called “The Dead Zone” and “Threat of Invasion” alike?**

- 3. Are the ideas in the section “Supporting Life” similar to or different from the ideas in the previous two sections? Explain.**

Moths and Changes in Weather

Scientists study moths to see how quickly they can adapt to climate change. Some moths adapt better than others. Some species of moths need cool weather and move north when the weather gets warmer. Moths already living in cool areas may not be able to find a cooler place to go. Warm weather affects the food caterpillars eat. Some caterpillars adapt to climate change and food supplies by hatching earlier or later than usual. It is hard to predict how climate change will affect moths over time.



Answer the questions about the text.

1. How do you know this is expository text?

2. Is the heading a strong heading for the text? Why or why not?

3. What text feature does this text include?

4. What do you learn from the text feature and its title?

Read each passage. Underline the context clues that help you figure out the meaning of each word in bold. Then write the word's meaning on the line.

1. Every few years, it floods. In April and May, 2011, a combination of melting snow and falling rain along the upper part of the river caused the lower part of the river to **overrun** its banks.

2. Floods cause widespread destruction. Floodwaters damage and sometimes knock down buildings. They destroy farmland and animal **habitats**. With nowhere to live, the animals often move into populated areas.

3. The Mississippi floodwaters proved most **detrimental** to the fish and other ocean life in the Gulf of Mexico. The Mississippi River is made of fresh water. The Gulf is made of salt water. The extra river water that flowed into the Gulf endangered the native saltwater fish. More harmful, though, were the pollutants the river water carried with it.

4. As the swollen Mississippi washed over farmland, it picked up the fertilizer and **pesticides** that farmers had used on the land and crops. These chemicals are poisonous to ocean life.

5. The flooding of the Mississippi River posed a different threat to the fish that lived in it: the spread of an **invasive** species called Asian carp. Asian carp were brought to fish farms in the United States in the 1970s. A flood washed some of the carp from the farms into parts of the Mississippi River. In these places, the carp took over, threatening the native fish.

6. The expanded habitat provided more benefits than extra hiding places and food sources. It also created more areas for fish to **spawn**. The newly flooded areas allowed the fish to lay their eggs safely, away from predators and other dangers.
