

What can we do?

- ▶ Discuss environmental problems
- ▶ Compare solutions to social problems

1 SNAPSHOT

WHAT A WASTE!



The United States generates **254 million** tons of waste a year. The average American produces almost **2 kilograms** of waste a day.



Fifteen hundred plastic bottles are consumed every second in the United States. It takes at least **500** years for a plastic bottle to decompose.



Americans throw away around **130 million** cell phones a year. Much of this e-waste ends up in landfills.



In the U.S., **30–40%** of the food supply is wasted. That could feed **millions** of hungry people.

How could we reduce the waste of each of these items?
What do you throw away? What do you tend to recycle?
What are two other environmental problems that concern you?

2 PERSPECTIVES Vote for a better city!

- ▶ **A** Listen to an announcement from an election campaign. What kinds of problems does Grace Medina want to fix?

VOTE FOR GRACE MEDINA FOR CITY COUNCIL

Grace Medina's ideas for Riverside!

Have you noticed these problems in our city?

- Our fresh water supply is being contaminated by toxic chemicals.
- The roads aren't being repaired due to a lack of funding.
- Our community center has been closed because of high maintenance costs.
- Our city streets are being damaged as a result of heavy traffic.
- Many public parks have been lost through overbuilding.
- Low-income families are being displaced from their homes due to high rental prices.

GRACE MEDINA – THE CHANGE WE NEED



- B** Which of these problems affect your city? Can you give specific examples?

3 GRAMMAR FOCUS

▶ Passive with prepositions

Present continuous passive

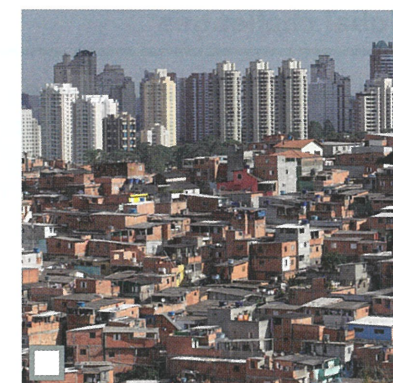
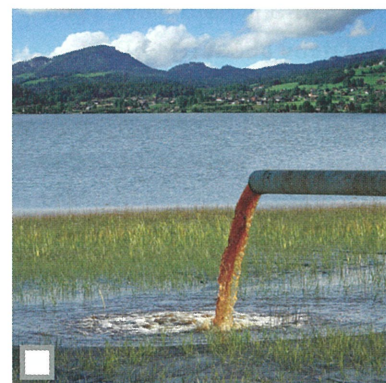
Our water supply **is being contaminated** by toxic chemicals.
Our city streets **are being damaged** as a result of heavy traffic.
The roads **aren't being repaired** due to a lack of funding.

Present perfect passive

Our community center **has been closed** because of high costs.
Many public parks **have been lost** through overbuilding.

GRAMMAR PLUS see page 138

- A PAIR WORK** Match the photos of environmental problems with the sentences below.



1. High emissions of carbon dioxide are causing climate changes. (by)
2. Rapid urbanization is depleting our natural resources. (through)
3. Water pollution has threatened the health of people all over the world. (due to)
4. Livestock farms have contaminated the soil and underground water. (because of)
5. The destruction of rain forests is accelerating the extinction of plants and wildlife. (as a result of)
6. Oil spills are harming birds, fish, and other marine life. (through)

- B** Rewrite the sentences in part A using the passive and the prepositions given. Then compare with a partner.

1. Climate changes are being caused by high emissions of carbon dioxide.

- C PAIR WORK** Cover the sentences in part A above. Take turns describing the environmental problems in the pictures in your own words.

4 PRONUNCIATION Reduction of auxiliary verbs

- ▶ **A** Listen and practice. Notice how the auxiliary verb forms **is**, **are**, **has**, and **have** are reduced in conversation.

Food **is** being wasted. Our community center **has** been closed.
Streets **are** being damaged. Parks **have** been lost.

- B PAIR WORK** Practice the sentences you wrote in Exercise 3, part B. Pay attention to the reduction of **is**, **are**, **has**, and **have**.

5 LISTENING Saving the environment

- ▶ **A** Listen to three people describe some serious environmental problems. Check (✓) the problem each person talks about.

	Problem		What can be done about it?
1. Morgan	<input type="checkbox"/> landfills	<input type="checkbox"/> poor farmland	
2. Dalton	<input type="checkbox"/> electricity	<input type="checkbox"/> e-waste	
3. Kendall	<input type="checkbox"/> air pollution	<input type="checkbox"/> water pollution	

- ▶ **B** Listen again. What can be done to solve each problem? Complete the chart.
C GROUP WORK Which problem above worries you the most? What is being done to fix it?

6 WORD POWER Global challenges

- A PAIR WORK** How concerned is your partner about these problems? Check (✓) his or her answers.

Problems	Very concerned	Fairly concerned	Not concerned
unemployment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
famine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
global warming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
government corruption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
infectious diseases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
political unrest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
poverty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
recession	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
violence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



- B GROUP WORK** Share your partner's answers with another pair. Which problems concern your group the most? What will happen if the problem isn't solved?

A: Many people have been affected by the high rates of unemployment.
B: We need to create more jobs and invest in education.
C: I agree. If we don't, young people won't have any opportunities in the future.

7 CONVERSATION What if it doesn't work?

- ▶ **A** Listen and practice.

Cindy: Did you hear about the dead fish that were found floating in the Bush River this morning?
Otis: Yeah, I read something about it. Do you know what happened?
Cindy: Well, there's a factory outside town that's pumping chemicals into the river.
Otis: How can they do that? Isn't that against the law?
Cindy: Yes, it is. But a lot of companies ignore those laws.
Otis: That's terrible! What can we do about it?
Cindy: Well, one way to change things is to talk to the company's management.
Otis: What if that doesn't work?
Cindy: Well, then another way to stop them is to get a news station to run a story on it.
Otis: Yes! Companies hate bad publicity. By the way, what's the name of this company?
Cindy: Believe it or not, it's called Green Mission Industries.
Otis: Really? My uncle is one of their top executives.

- B CLASS ACTIVITY** What else could Cindy and Otis do?

- ▶ **C** Listen to the rest of the conversation. What do Cindy and Otis decide to do?



8 GRAMMAR FOCUS

- ▶ **Infinitive clauses and phrases**

One way **to change** things is **to talk** to the company's management.
Another way **to stop** them is **to get** a news station to run a story.
The best ways **to fight** unemployment are **to create** more jobs and invest in education.

GRAMMAR PLUS see page 138

- A** Find one or more solutions for each problem. Then compare with a partner.

Problems

- The best way to fight poverty is _____
- One way to reduce government corruption is _____
- One way to reduce unemployment is _____
- The best way to stop global warming is _____
- One way to help the homeless is _____
- One way to improve air quality is _____

Solutions

- to provide more affordable housing.
- to create more jobs.
- to make politicians accountable for decisions.
- to have more vocational training programs.
- to increase the use of cleaner energy.
- to provide education to all children.
- to build more public shelters.
- to reduce deforestation.

- B GROUP WORK** Can you think of two more solutions for each problem in part A? Agree on the best solution for each.

9 DISCUSSION What should be done?

- A GROUP WORK** Describe the problems shown in the photos. Then make suggestions about how to solve these problems.



What can be done . . . ?

1. to reduce crime
2. to keep our water supplies safe
3. to improve children's health
4. to improve traffic and mobility

A: Our cities are being taken over by criminals.

B: Well, one way to fight crime is to have more police on the streets.

C: That's not enough. The best way to stop it is . . .

- B CLASS ACTIVITY** Share your solutions. Which ones are the most innovative? Which ones are most likely to solve the problems?

10 INTERCHANGE 7 Take action!

Brainstorm solutions to some local problems. Go to Interchange 7 on page 121.

11 WRITING A post on a community website

- A** Choose one of the problems from the unit or use one of your own ideas. Write a message to post on a community website.

NO MORE JUNK FOOD!

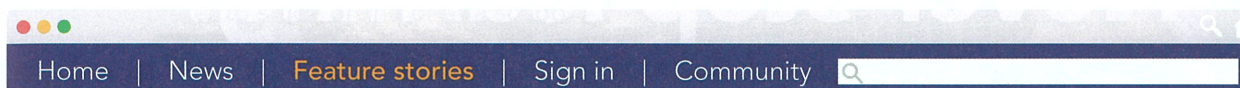
Our schools are serving poor quality food to our children. School cafeterias offer mostly fast food and soda to students. This has to change. One way to change this is . . .



- B PAIR WORK** Exchange messages with a partner. Write a response suggesting another solution to his or her problem.

12 READING

- A** Skim the article. What problem did the island face? What solution did the inhabitants come up with?



TURNING AN INVASION INTO AN ADVANTAGE

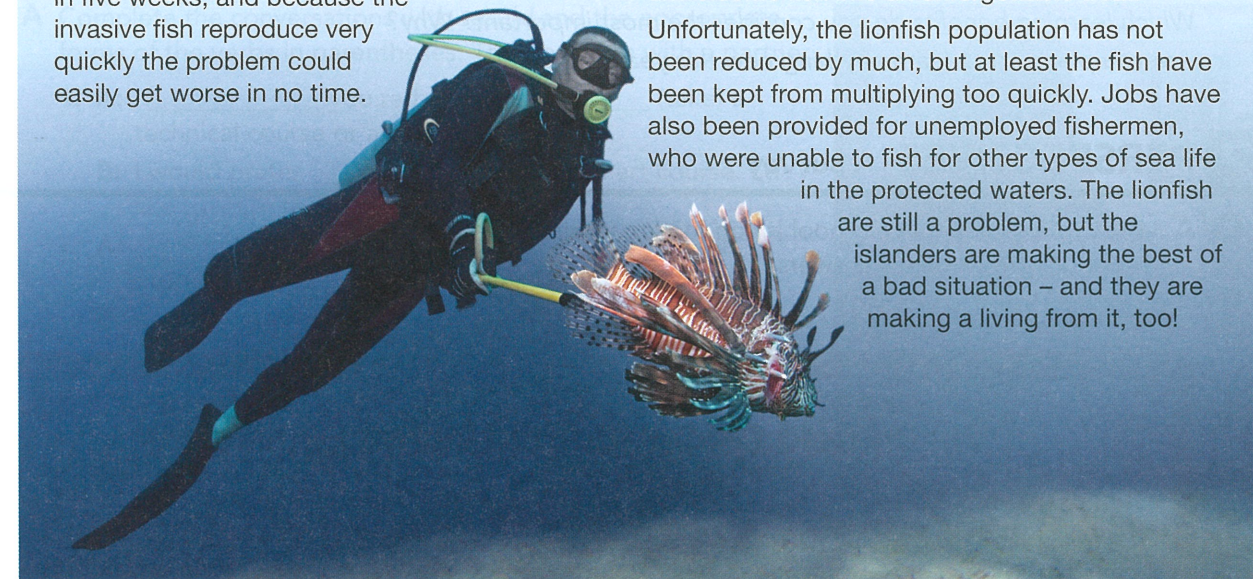
Lionfish are beautiful creatures. They are also one of the most invasive and destructive sea creatures on the planet, causing particularly serious problems in the Caribbean Sea. Their numbers have increased dramatically in a few years there, and they have already caused a great deal of damage to the ecosystem.

St. Lucia is a Caribbean island where action is being taken against the invasive species. The island is famous for its clear blue waters, and many tourists enjoy diving in order to explore the wonders of the extensive coral reefs.

Unfortunately, lionfish eat the native fish that keep the reefs clean and healthy, putting the reefs at risk. It is estimated that lionfish can eat up to 80% of the small fish in a coral reef in five weeks, and because the invasive fish reproduce very quickly the problem could easily get worse in no time.

Instead of trying to trap or poison the destructive fish, islanders are turning the lionfish invasion to their advantage. They realized that one way to reduce the population of lionfish was to hunt them for sport and business, and then use them for food. Although the fish have a very poisonous sting, they can be prepared so they are safe to eat. And Caribbean cooks were sure to find a way to turn these unwelcome fish into an unforgettable treat.

Unfortunately, the lionfish population has not been reduced by much, but at least the fish have been kept from multiplying too quickly. Jobs have also been provided for unemployed fishermen, who were unable to fish for other types of sea life in the protected waters. The lionfish are still a problem, but the islanders are making the best of a bad situation – and they are making a living from it, too!



- B** Read the article. Answer the questions.

1. Why are the lionfish a concern?
2. Why is it important to protect the area around St. Lucia?
3. What characteristic makes the lionfish hard to control?
4. What solutions have the islanders come up with?
5. What have the results of the islanders' efforts been?

- C GROUP WORK** What environmental threats exist where you live? Can you think of any creative or unusual ways to deal with them?