

TAKING ACTION

6



Earth, we believe, is the only planet with life on it. Humans, together with air, water, land, and other life, create our beautiful and constantly changing world.

ACADEMIC SKILLS

LISTENING *Listening for Emotion*
Using Symbols and Abbreviations

SPEAKING *Giving Sources of Information*
Be Going To (Gonna)

CRITICAL THINKING *Understanding Bias*

THINK AND DISCUSS

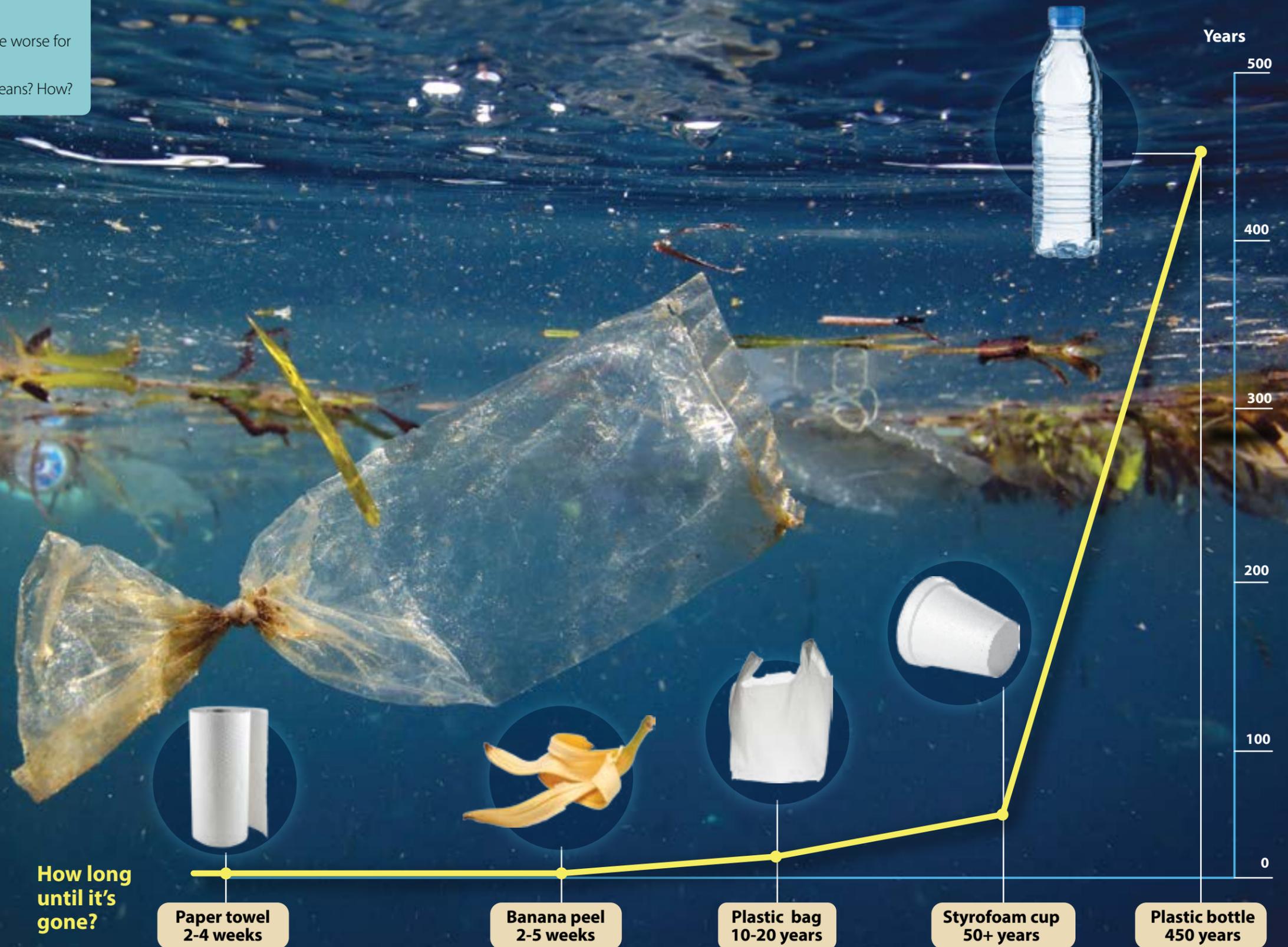
- 1 How does the Earth change over time?
- 2 What are some ways humans create changes to the Earth?
- 3 What kinds of things do people do to protect the Earth? Do they work? Explain.

EXPLORE THE THEME

Look at the photo and read the information. Then discuss the questions.

1. How is trash in our oceans a problem? Explain.
2. What does the information in the graph tell you? Which objects are worse for the environment? Explain.
3. Do you think people can help solve the problem of trash in our oceans? How?

THE TRUTH ABOUT TRASH



A Vocabulary

A 2.13 Listen and check (✓) the words and phrases you already know.

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> according to (<i>prep</i>) | <input type="checkbox"/> especially (<i>adv</i>) | <input type="checkbox"/> reduce (<i>v</i>) | <input type="checkbox"/> throw away (<i>v</i>) |
| <input type="checkbox"/> believe (<i>v</i>) | <input type="checkbox"/> habits (<i>n</i>) | <input type="checkbox"/> research (<i>n</i>) | <input type="checkbox"/> worst (<i>adj</i>) |

MEANING FROM
CONTEXT

B 2.14 Read and listen to the information. Notice each word or phrase in **blue** and think about its meaning.

Easy Ways You Can Use Less Plastic

According to many scientists, plastic trash is a big problem. Many say it is the **worst** problem in our world today. Follow these five easy tips to change your everyday **habits** with trash.

Tip 1

Stop buying water in plastic bottles. Many people **believe** bottled water is better than water from your kitchen sink, but **research** shows that bottled water is often not safer.



Tip 2

Don't use and then **throw away** plastic utensils. Take a fork, knife, spoon, and/or chopsticks with you.



Tip 3

Take a bag with you to the store. Say "no" to paper and plastic bags, **especially** plastic ones.



Tip 4

Buy your food in glass jars. Save the jars and reuse them.



Tip 5

Reduce the number of things you buy and throw away soon after.

C Write the correct word from exercise A next to its definition.

- _____ opposite of *best*
- _____ more than usual
- _____ information about something that a scientist carefully studied
- _____ things we do regularly or every day
- _____ in the words of
- _____ to think something is true
- _____ to make something smaller in number or size
- _____ to put something you no longer want in a trash can

VOCABULARY SKILL Prefixes: *re-* and *un-*

A prefix is one or more letters that come at the beginning of certain words. Some common prefixes are *re-* (*again* or *back*) and *un-* (*not*). Learning them will help you form new words or understand words you hear.

Word	Prefix	Part of Speech	Meaning
redo	re-	verb	to do again
reuse	re-	verb	to use again
undo	un-	verb	to change or release
unlike	un-	adjective	not like others, different
unusual	un-	adjective	not usual

D Read the statements. Add the prefix *re-* or *un-* to complete each statement.

- There are many ways you can ____use a plastic shopping bag.
- She hurt her leg. She's ____able to help clean the beach this weekend.
- Our oceans are ____safe for sea animals.
- I don't understand everything about the topic. I need to ____read the information.
- I'm ____satisfied with your work. You need to ____do it.
- My essay wasn't good. I need to ____write it before Monday.
- This idea is great. It's ____like any other!
- Did you ____cycle the bottles?

E Look back at the tips in exercise B. Which do you do? Which can you do in the future? Tell a partner or small group. Give examples where possible.

PERSONALIZING

- I take a bag with me to the store most of the time. I keep a couple in my car. I'm going to buy some forks and spoons that I can carry with me and reuse. I'd like to stop using so much plastic.

A Listening Student Podcast: Oceans of Plastic

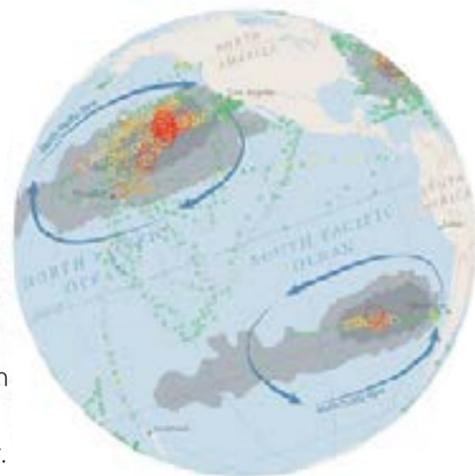
BEFORE LISTENING

PRIOR KNOWLEDGE

- A** Look at the map and photo. Read the title of the podcast. What do you already know about the topic? Tell a partner.

PREDICTING

- B** Choose the answer you think is correct to complete each main idea from the podcast.
1. Plastic in the Pacific Ocean (is / isn't) a major problem.
 2. People (are / aren't) responsible for the plastic in the ocean.
 3. The problem (is / isn't) getting better each year.
 4. Plastic in the ocean (hurts / doesn't hurt) sea animals.
 5. Plastic in the ocean (hurts / doesn't hurt) humans.



Huge amounts of plastic trash float in the world's oceans.

WHILE LISTENING

LISTENING FOR MAIN IDEAS

- C** 2.15 1.10 Listen to the podcast. Check your answers to exercise B. Were your predictions correct?

LISTENING FOR DETAILS

- D** 2.15 Listen to the podcast again. Choose **T** for *True* or **F** for *False*. Compare your answers with a partner. Then correct the false answers.

- | | | |
|---|----------|----------|
| 1. There is a garbage patch, or an "island" of trash, in the ^{Pacific} Atlantic Ocean. | T | F |
| 2. The speaker believes that plastic is the worst type of trash. | T | F |
| 3. Over 90 percent of the seabirds in the world have eaten plastic. | T | F |
| 4. Over 10,000 other sea animals die each year because of plastic trash. | T | F |
| 5. Many sea animals eat plastic in the water. | T | F |
| 6. The speaker believes cleaning the oceans is the only solution. | T | F |



Sea turtle eating a plastic bag that looks like a jellyfish

NOTE-TAKING SKILL Using Symbols and Abbreviations

We use symbols or abbreviate (shorten) words to write more quickly and note more points from a talk or lecture. Here are some common examples.

Symbol/abbreviation	Meaning	Example
=	<i>equals or is/are</i>	plastic = worst trash
< or >	<i>less/fewer or more than</i>	> \$40,000 but < \$50,000
%	<i>percent</i>	50% = a half (1/2)
mil./bil.	<i>million/billion</i>	65 mil./bil. years old

- E** 2.16 Listen to the *Did You Know* part of the podcast. Write a symbol or abbreviation from the box above to complete the student's notes correctly. NOTE TAKING

Facts about Plastic

- plastic in last 10 yrs 1900s
- 50 plastic used, use 1 time
- average American plastic trash 185 pounds a year
- Americans throw away 35 water bottles a year
- people in world use 1 plastic bags a minute

LISTENING SKILL Listening for Emotion

People's faces often change according to how they feel. A smile often means a person is happy. The way people speak can also change according to how they feel. For example, when speakers feel

- passionate/angry, they put more stress on words; they may pause after each word to be sure every word is clear.
- sad/unhappy, they may be quieter, and the stressed syllables may not be as strong.

- F** 2.17 How does each speaker feel? Listen and choose the correct emotion.

- | | | |
|--|---------------|--------|
| 1. The problem is getting worse every year. | a. passionate | b. sad |
| 2. The sea turtle at the animal hospital died. | a. passionate | b. sad |
| 3. The time to reduce plastic is now. | a. passionate | b. sad |
| 4. We must change our habits. | a. passionate | b. sad |
| 5. I just watched a video about seabirds. | a. passionate | b. sad |

AFTER LISTENING

- G** Work with a partner. Choose three statements from this lesson and say them with emotion. Your partner guesses which emotion you are expressing.

- A: There is an **island** of **trash** in the Pacific **O**cean!
 B: You are **angry**!

A Speaking

GRAMMAR FOR SPEAKING Future with *Be Going To*

We use the phrase *be (not) going to* + a base verb:

- to make predictions about the future.
*I think people **are going to get** sicker. **We're going to be** sorry.*
- to discuss planned future activities or intentions.
***I'm going to help** clean the beach. **I'm not going to buy** water in a bottle again.*

Affirmative	Negative
The test is going to be hard.	The test isn't going to be easy.
I'm going to study all weekend.	I'm not going to watch TV.
Questions	Answers
Are you going to stop using plastic?	Yes, I am . / No, I am not .
When is he going to arrive ?	He's going to arrive at about 5:00 p.m.

A Complete the predictions or plans with the affirmative or negative form of *be going to*. Use your own beliefs or predictions. Then write a prediction or plan of your own.

1. We _____ find a solution to the problem of plastic trash.
2. People _____ stop buying bottled water.
3. My country _____ create laws and programs to reduce trash.
4. In the future, people _____ live on other planets, such as Mars.
5. I _____ change my habits.
6. Your prediction/plan: _____

PRONUNCIATION *Be Going To (Gonna)*

2.18 We often reduce unstressed words or phrases when we speak. For *going to*, we say often *gonna*. You do not need to use reduced forms, but practicing and listening to them will help you communicate more effectively. Listen to the examples.

- A: Hey. **Are you going to speak** at the town meeting?
B: No, but **I'm going to** be there.

B Work with a partner. Share your answers from exercise A. Reduce *going to* to *gonna*.

- > *I predict that we're going to find a solution to the problem of plastic trash.*

C **2.19** Listen to Emily speak at a meeting of the *Clean and Green* project. Check (✓) each action when you hear the speaker say it.

1. _____ read the plans we discussed at last month's meeting
2. _____ not plant 100 trees this year
3. _____ plant 200 trees this year
4. _____ talk about a project in Nanjing, China
5. _____ have tall buildings with trees and plants on them
6. _____ discuss a project in Ljubljana, Slovenia
7. _____ pick up any old coffee, fruits, and vegetables
8. _____ teach a class about growing your own food
9. _____ have *Clean the River* events
10. _____ organize the *Clean the River* events

D **2.19** Listen again and write the number of the action in exercise C next to the person or group that is going to do it. Then tell your partner your answers. Use *gonna*.

CRITICAL THINKING:
CATEGORIZING

- > *Emily is going to read the plans discussed at last month's meeting.*

- | | |
|------------------------------|-------------------------|
| 1. Emily ^{1.} _____ | 4. Nanjing, China _____ |
| 2. The group _____ | 5. Vladimir _____ |
| 3. Tim _____ | 6. Kumiko _____ |



Vertical forest; view from below

SPEAKING SKILL Giving Sources of Information

When you are supporting your beliefs or ideas, you often need to include information from a variety of sources such as articles, books, Internet sites, diagrams, charts, or a survey. Here are common phrases we use when giving sources of information.

According to the diagram, it takes two to four weeks for a paper towel to break down.
 The podcast **stated that** people use 1 million plastic bags each minute.
 Our survey **found that** half of the students buy a bottled drink every day.
 Research **shows that** 50% of the plastic we use is for one-time use.

E Look back for this information in the lesson. Then with your partner, take turns giving the source and restating the information.

Example: It takes about 450 years for a plastic bottle to break down. (page 102–103)

> *The diagram shows that it takes about 450 years for a plastic bottle to break down.*

1. It takes over 50 years for a Styrofoam cup to break down. (page 102–103)
2. Americans throw away 35 billion water bottles each year. (page 107)
3. One way to reduce plastic is to take a bag with you to the store. (page 104)
4. Nanjing, China, has an interesting project to help clean the air. (page 109)

PERSONALIZING

F Work in a group of four. Complete column 1 with your own answers and complete columns 2–4 with your group members' answers. Put a check (✓) for yes or an X for no.

GREEN HABITS

Question	1	2	3	4
1. Do you usually take a bag with you to the store?				
2. Do you buy one or more bottles of water each week?				
3. Do you want to change some of your habits or the habits of people you know?				
4. Do you know about projects in your town that help the environment?				
5. Do you think each country needs to do more to help the environment?				

CRITICAL THINKING:
ANALYZING RESULTS

G In your group, analyze the information from your survey in exercise F. Then share the results with your class. Each group member takes a turn sharing a result or two.

> *According to our survey, three of us usually take a bag to the store.*

LESSON TASK Presenting a Project Plan

A Work in a small group. Complete these steps.

BRAINSTORMING

1. Research problems in your town or area. Make a list in your notebook. The problems can be about trash or another problem in your town.

Example: Littering (trash on streets, in rivers, lakes, public parks)

2. Choose one of the problems and discuss possible ways you can help as a group.

Example: Plan a Clean Our Streets day each month. Ask other students to help.

B Discuss and take notes in your notebook about each part of your presentation. Decide who will present which part.

ORGANIZING IDEAS

1. What is the problem? Give sources for any information about the problem.
2. What is your group going to do to help solve the problem? What are the steps?
3. When are you going to do it? How are you going to tell people about it? Who in your group is going to do what?

C Each group member should prepare one part of the presentation. Use the example as a guide. Give sources for any information and practice the reduced form of *going to*.

PRESENTING

Li: *According to an article last month in the Daily Post, there's a problem with trash in City Park. There are some volunteer organizations, but they all say they need more help, especially during spring and summer.*

Javier: *Our group is going to plan a day of action in May. We're going to clean City Park. According to the city website, they provide gloves and bags.*

Massa: *Li is going to create a poster to tell people about the day of action. We're hoping to get 40–50 students. Javier is going to visit City Hall and ask for some gloves and bags. I'm going to visit some local restaurants to see if they'll give us a free dinner. We plan to give students who collect the most trash a prize.*



Volunteers pick up plastic bottles in a park.

Choices

▲ (left) Chiricahua National Monument in Chiricahua Mountains, Arizona, USA

▲ (right) Crowded housing development in Phoenix, Arizona, USA



BEFORE VIEWING

A Look at the photos and read the captions. Discuss your answers to these questions with your class.

1. What is the first photo of? What is the second photo of?
2. What does the first photo say to you about Arizona? The second?
3. Which photo do you think is better? Explain.

B Match each word from the video with its definition. Use your dictionary to help you.

choice	generation	legacy	profound
extraordinary	image	memories	wonder

1. _____ (n) something we leave for future people to have or own
2. _____ (n) a picture or a view
3. _____ (n) people born around the same time
4. _____ (n) what one remembers about a past event or time
5. _____ (adj) very strong in feeling or emotion
6. _____ (adj) amazing; uncommon or unusual
7. _____ (v) to express interest in knowing something
8. _____ (n) the power or ability to choose

WHILE VIEWING

C ▶ 1.11 Watch Parts 1 and 2 of the video. In the *Images* column, take notes on the images you see. Then compare your notes with a partner.

Part	Images	Feelings about the United States
1	girl on rock pretty road	
2		

D How did you feel about the United States after seeing the images in Part 1? In Part 2? Discuss your ideas with your partner and write your ideas in the *Feelings* column above.

AFTER VIEWING

CRITICAL THINKING Understanding Bias

Bias is believing that some people or ideas are better or worse without thinking about the facts. Many sources (reports, news, diagrams, etc.) may have a bias. They may use photos or stories to create the story they want. It's important to be aware of bias and always look for a variety of sources when thinking about any issue.

E Work in a small group. Discuss these questions.

1. How did the photos in the video change your thoughts or feelings in Part 1 and Part 2?
2. How is the woman's voice or emotion different in Part 1 and Part 2? Did this change your thoughts or feelings?
3. Give one example of bias in the world.

A  2.20 Listen and check (✓) the words you already know. Then discuss their meaning with a partner. Check the dictionary for any you are not sure about.

- | | | | |
|--|-------------------------------------|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> behavior (n) | <input type="checkbox"/> garden (n) | <input type="checkbox"/> increase (v) | <input type="checkbox"/> prisons (n) |
| <input type="checkbox"/> criminals (n) | <input type="checkbox"/> guest (n) | <input type="checkbox"/> pretty (adv) | <input type="checkbox"/> purpose (n) |

MEANING FROM
CONTEXT

B  2.21 Look at the photo and read the caption. What do you think the title *Nature Behind Bars* means? Complete the information with the words in exercise A. Then listen and check your answers.

► A prisoner cares for an injured owl.



NATURE BEHIND BARS

Several universities around the country have projects in nearby _____. The aim is to help the prisoners learn about nature. The projects send _____¹ speakers, offer classes, or do some type of research. For example, some have started a _____² where prisoners can grow food and take notes on different plants and give their notes to scientists. Other projects involve animals. Research shows that working with nature can _____³ a person's level of happiness.

Further, the work gives prisoners a _____⁴. They do not usually have much to do in prison, and life can be _____⁵ boring. Working on the projects teaches them about gardening and animal _____⁶.

Very dangerous _____⁷ cannot usually do these activities. However, nature can still help. To test her ideas, one researcher put photos of nature (such as trees and plants) in their prison cells.* She wanted to see if it made them happier. The results show that even photos of nature can help people.

*cells: the small rooms in a prison where prisoners live

C Match each word from exercise A with its definition.

- | | |
|-------------------|--|
| 1. ____ behavior | a. a little less than "very" |
| 2. ____ criminals | b. to make bigger or to make more of |
| 3. ____ garden | c. the way someone acts |
| 4. ____ guest | d. a reason |
| 5. ____ increase | e. a visitor |
| 6. ____ pretty | f. people who do something wrong such as stealing |
| 7. ____ prisons | g. the places where criminals have to go |
| 8. ____ purpose | h. a place where you grow vegetables, flowers, or other plants |

D Complete the sentences. Choose the correct form of the word. (See page 85 and 105 for a review of suffixes and prefixes.)

- A (prisoner / prisoning) helped the researcher with the owl.
- Sometimes I (reuse / using) plastic bags from the store to carry my lunch to school. I (repurpose / unpurpose) them whenever I can.
- I love (gardener / gardening). I grew my first tomatoes this summer.
- My friend, Jana, is a (gardener / gardening). She grows flowers.

E Work with a partner. Discuss the questions.

- Do you think it is good to help criminals living in prisons? Why or why not?
- Do you think prisoners should have work or some other purpose? Explain.
- How can a garden be useful in a prison?

CRITICAL THINKING:
EVALUATING



B Listening A Conversation about Nalini Nadkarni

BEFORE LISTENING

PREVIEWING **A** Read the information about National Geographic Explorer Nalini Nadkarni. What types of projects do you think she does with musicians and prisoners?

MEET NALINI NADKARNI Nalini Nadkarni is an American ecologist who studies trees. She studies the importance of trees to all life. She also works in creative ways to teach all people about the importance of nature and conservation.* She's worked with musicians, fashion designers, prisoners, and others.



***conservation:** the protection of nature (animals, plants, and so on)

WHILE LISTENING

LISTENING FOR MAIN IDEAS **B**  2.22 Listen to the conversation. Check (✓) the two main ideas of the conversation.

- _____ Jamal and Claudi both study science.
- _____ Jamal and Claudi are both interested in going to a talk Friday evening.
- _____ Nalini Nadkarni works with trees in forests.
- _____ Nalini Nadkarni works to increase people's interest in nature.

LISTENING FOR DETAILS **C**  2.22 Listen again. Choose the correct answers.

1. Nalini Nadkarni studies _____.
a. trees b. prison fights c. rap musicians
2. Nadkarni did a project with a rap musician and _____.
a. a dancers b. prisoners c. city kids
3. Nadkarni is speaking tonight about her work _____.
a. with children b. in forests c. in prisons
4. Her research showed that seeing _____ decreased the number of fights.
a. photos of trees b. gardens c. research
5. Prisoners helped Nadkarni with her _____.
a. class b. research c. photos



Dr. Nadkarni teaches about trees at Stafford Creek Corrections Center.

AFTER LISTENING

D With a partner, discuss two students' statements about prisoners. Do they show bias? Give reasons. Which do you agree with more? Explain.

CRITICAL THINKING:
UNDERSTANDING
BIAS

Student 1: Prisoners don't have much to do all day, so the projects are good for them. People need something to do.

Student 2: I don't think prisoners should have these special projects. They are criminals.

E Look back at the information in Lesson A about reducing trash, plastic in the oceans, and the *Clean and Green* project. Then in a small group, discuss these questions.

CRITICAL THINKING:
SYNTHESIZING

1. How is the information in Lesson A similar to the ideas discussed in this lesson? How is it different?
2. Which information in Lessons A and B did you find most surprising? Explain.

B Speaking

GRAMMAR FOR SPEAKING Future with Will

We use *will* + a base verb:

- to make predictions.
*I think humans **will learn** to care for the environment.*
- to talk about unplanned actions.
A: *I don't want to go alone. Will you come with me?*
B: *Sure, **I'll go** with you.*

Contractions (*'ll* or *won't*) are common in speaking.

Affirmative	Negative
The lecture will be interesting.	The lecture won't last more than an hour.
The project will take years.	The project won't happen this year.
Questions	Answers
Will you help teach the kids?	Yes, I will . / No, I won't .
When will the problem end ?	It 'll end when we do something about it.

A Change the statements to predictions. Use *will* or *won't*. Write answers according to what you believe.

- English is the global language of business.
I predict English won't be the global language of business in the future.
- The prisoners care about nature.
I predict _____ when they get out of prison.
- Many prisons have similar projects.
I predict _____ in the future.
- Some prisoners work in gardens.
I predict _____ in the future.
- College students work with the prison project.
I predict _____ after they graduate.
- Your prediction _____

B Work with a partner. Take turns asking about your partner's predictions in exercise A and telling about your own predictions. Discuss predictions you don't agree on.

- A: *Will English be the global language of business in the future?*
B: *No, I predict that English won't be the global language of business in the future.*

EVERYDAY LANGUAGE Offering to Help

When we are working in a group, we often offer to do something or help someone. For example, someone may need help with a project, and others will offer to help.

A: *Who wants to research photos for our project?*

B: ***I'll do it.***

A: *Great, thanks.*

A: *Who **'ll bring** drinks?*

B: *Johan said he **'ll bring** water. **I'll get** some juice.*

A: *Perfect. Thanks, and remember—no plastic bottles!*

C Read the situations. With a partner, role play the situations. Include an offer to help.

A: *My car broke down. I can't get to class!*

B: *I'll take you.*

- A friend needs a ride to school.
- A group member needs someone to read his or her essay.
- Your professor asks for someone to help at the prison, either in the garden or with the small animals.

FINAL TASK Presenting a Project Using Images

You will find photos or other images to go with your group's project from lesson A on page 111. You will present the project individually to your group, but this time you will use photos, maps, a chart, or other images.

A Join your group from the Lesson Task on page 111 (or join any group if you were not in class). Discuss the ideas you presented and possible images that you can use. Take notes. BRAINSTORMING

B For homework, each group member looks for photos, charts, or other visual information. In class, present your ideas to your group.

PRESENTATION SKILL Using Photos for Emphasis and Effect

In some presentations, photos can help your listeners understand your ideas better. Here are some tips for using photos.

- Choose photos that are large and clear enough to see.
- Use photos that help explain new or different ideas when you can.
- Introduce photos with phrases such as: *As you can see in this photo...; Here you can see...; In this photo, ...; Take a look at...*

C As a group, choose the best photos and images from your group's research. Then plan your presentation using a chart like the one below.

Presentation	Image
According to an article last month in the Daily News, there is a problem with trash in City Park. As you can see in this photo of the park, it is a big problem. ...	
Our group is going to plan a day of action in May. We're going to clean City Park. In this photo, a local group is cleaning another park using city help. ...	
Li is going to create a poster to tell people about the day of action. Take a look at one of her great designs. ...	

PRESENTING

D Give your presentation again with photos and images. Add language as needed to introduce your photos.

REFLECTION

1. In your language or others you know, how do speakers express emotion? Is it similar to English or different? Explain.

2. What are some projects to help the environment in your country? Give an example.

3. Here are the vocabulary words from the unit. Check (✓) the ones you can use.

- | | | |
|---------------------------------------|-----------------------------------|--|
| <input type="checkbox"/> according to | <input type="checkbox"/> guest | <input type="checkbox"/> reduce |
| <input type="checkbox"/> behavior | <input type="checkbox"/> habit | <input type="checkbox"/> research <small>AWL</small> |
| <input type="checkbox"/> believe | <input type="checkbox"/> increase | <input type="checkbox"/> throw away |
| <input type="checkbox"/> criminal | <input type="checkbox"/> pretty | <input type="checkbox"/> worst |
| <input type="checkbox"/> especially | <input type="checkbox"/> prison | |
| <input type="checkbox"/> garden | <input type="checkbox"/> purpose | |

TAKING ACTION 6



Earth, we believe, is the only planet with life on it. Humans, together with air, water, land, and other life, create our beautiful and constantly changing world.

ACADEMIC SKILLS

- LISTENING **Listening for Emotion**
Using Symbols and Abbreviations
- SPEAKING **Giving Sources of Information**
Be Going To (Gonna)
- CRITICAL THINKING **Understanding Bias**

THINK AND DISCUSS

- How does the Earth change over time?
- What are some ways humans create changes to the Earth?
- What kinds of things do people do to protect the Earth? Do they work? Explain.