

5

The Environment

▲ Look at the photo. Discuss the questions.

- What kind of threat to the environment can you see in the photo?
- Do you think the situation can be improved? Why or why not?
- Whose responsibility is it to take care of the environment?

▲ Work with a partner. Discuss the questions.

- Think about an area you know well. What are some ways the environment there has gotten worse in the last decade? What are some ways the environment has improved in the last decade?
- Have you made any changes in your own life because of environmental issues? If so, describe them.



In this Unit

■ SYSTEMS

greenwashing
present and past perfect passive
collocations about the environment
sounds: /h/ and /r/
expressing purpose

● SKILLS

recognizing figurative and literal language
taking notes of key ideas
acknowledging the contributions of others
expressing doubt

▲ THEMES

the *no lawns* movement
upcycling
contributing to an online debate
types of pollution
networking tips

An opinion ARTICLE

▲ **A** Write a list of points in favor of and against having a lawn.

● **B** Read the article. What are the opinions presented?

- a The author presents opinions in favor of lawns.
- b The author presents opinions against lawns.
- c The author presents a mix of both opinions.

What's Greener than Grass?



From the second half of the 20th century, one of the most prominent symbols of the "American dream" was the lawn. Whether your house was large or small, it was supposed to have a nice green lawn in front of it, and countless Americans gave up their weekends in service of watering, weeding, and mowing their expanses of grass.

But there's a dark side to lawns beyond the time and money needed to care for them. Proponents of the "no lawns" movement are quick to point out that these green carpets are not only wasteful, but are actually harmful to the environment.

One issue is that many lawns have been created from non-native grass species—that is, plants that have been brought to North America from other lands. But non-native plants don't support native wildlife. They don't grow flowers that native pollinators need, they don't produce seeds that native birds eat, and they don't provide habitat. "A lawn is a green desert," says local anti-lawn garden activist Ellen Shaw. "It doesn't support any more life than a rock."

To fight weeds and insects, many homeowners turn to pesticides and fertilizers, unaware of or indifferent to the

toxic consequences. These chemicals are carried away from the lawn by the wind and groundwater, and the poisons enter the local environment. These kill not only insects but the birds and small animals that eat those insects, then the larger animals that eat the smaller ones, creating a chain of destruction.

The anti-lawn movement is making progress, however. States like California, Utah, and Colorado now offer homeowners thousands of dollars to replace their lawns with native wildflowers and bushes. Some state governments offer free gardening classes. And in some areas of Nevada, a state that struggles with drought, it's actually illegal to plant decorative grass, and existing non-native grass is being removed.

A healthy, diverse ecosystem that supports birds, bees, and butterflies while conserving water—that's greener than grass.

LOST FOR WORDS?

activist (n) a person who works to bring about change

fertilizer (n) a chemical used to help plants grow

lawn (n) an area of short grass in a yard

mow (v) to cut grass using a machine

pesticide (n) a chemical designed to kill insects

proponent (n) someone who is in favor of an idea or proposal

weed (v) to remove unwanted plants from a garden or yard

● **C** Reread the list you wrote in Exercise A. Which of your ideas were mentioned in the article?

IDENTIFYING FIGURATIVE AND LITERAL LANGUAGE

In an opinion article, writers use a mix of literal language to report neutral facts, and figurative language—which uses images and descriptions with vivid language—to engage the reader's imagination and emotions. For example:

The grass was green and soft. (literal meaning)

The grass danced in the breeze. (figurative meaning)

● **D** Write *L* if the sentence uses literal language and *F* if it uses figurative language.

- 1 There's a dark side to lawns.
- 2 These green carpets are not only wasteful, but are harmful.
- 3 Many lawns have been created from non-native grass species.
- 4 Non-native plants don't support native wildlife.
- 5 A lawn is a green desert.
- 6 These chemicals create a chain of destruction.
- 7 Some states offer thousands of dollars to replace lawns.
- 8 A healthy, diverse ecosystem is greener than grass.

▲ **E** Work with a partner. Describe what you see from your bedroom window using literal and figurative language.

GREENWASHING

A Match the words and the definitions.

- | | |
|------------------------------|--|
| 1 recyclable (adj) | a It refers to making false or misleading statements about how environmentally friendly a product or process is. |
| 2 renewable (adj) | b Foods that are grown without the help of chemical fertilizers and pesticides. |
| 3 greenwashing (n) | c A process that releases no more carbon dioxide (CO ₂) into the atmosphere than it removes. |
| 4 biodegradable (adj) | d Materials that naturally break down into harmless components over time. |
| 5 carbon-neutral (adj) | e Materials that can be collected, processed, and then made into new products. |
| 6 non-toxic (adj) | f Chemicals that are safe for people and animals to consume. |
| 7 eco-friendly (adj) | g Products that do not harm the environment. |
| 8 organic (adj) | h Energy sources such as wind and solar. |

PLAY WITH WORDS

The prefix *non-* means *not*. Which other words in Exercise A can be preceded by *non-*? What other prefixes that mean *not* do you know?

Game



B Complete the paragraph with words from Exercise A.

Don't bottle it!



Fresh, clean water is important for your health—but keep it planet-friendly! Choose ¹ fruits and vegetables at the store. Make sure your water is ², too, and doesn't contain harmful chemicals. Avoid buying bottles of water. For one thing, most water bottles are made of plastic, which isn't ³—that means it won't break down in the soil. Companies might advertise that their bottled water is ⁴ and safe for the environment because their bottles are ⁵, meaning the plastic can be used again. But that's not the same as a ⁶ resource like paper! And what about the environmental cost of delivering that water from the place where it was packaged to the store where you bought it? This kind of advertising is really just ⁷ To make your water consumption a more ⁸ habit, use a refillable steel bottle.

C Discuss the questions with a partner.

- How can people, businesses, and governments reduce their environmental impact?
- What makes a product environmentally friendly?
- What practices can help promote sustainability and reduce pollution?

I think people should buy more organic food and eco-friendly products.

I totally agree. But don't you think that sometimes these products are not available, or affordable?

Adaptive Practice



PASSIVE

▲ A Read the article. What do you think about initiatives like this?



Versova Beach

Versova Beach is widely regarded as the largest and one of the most successful beach cleanups in the world. It began with one man. Afroz Shah, a lawyer and environmentalist, lives near Versova Beach in Mumbai, India. By 2015, the beach had been covered in trash. It was so dirty that people couldn't enjoy walking or swimming there. Shah started simply: he just began picking up trash by himself. He was joined by his 84-year-old neighbor, and they picked up trash every Sunday. After a month, two men asked if they could help. In a few months, over 300 more people volunteered. Eventually, the campaign attracted over 200,000 participants.

By 2017, over 5 million kilograms of trash had been removed from the beach, and by 2020, an additional 35 million kilos of garbage had been collected.

Although the beach looks beautiful today, the fight is not over. More trash has been dropped on the beach, and dirty water from the river has not been stopped. But Shah and his team are still working, and the beach cleanup has been honored as one of the world's great success stories.

▲ B Who initiated the cleanup of Versova Beach in Mumbai, India?

- a the people living in the community
- b a lawyer named Afroz Shah
- c Mr. Shah's neighbor

■ C 📺 Watch the grammar video and read the explanation. Is a *by*-phrase always necessary?

PRESENT AND PAST PERFECT PASSIVE



We often use the passive when we don't mention who or what does the action, for example, when it's obvious, or not known or irrelevant. As a consequence, the focus is on the receiver, or the result of the action. We can leave out the agent, or refer to it using a *by*-phrase.

*Versova beach **had been covered** in trash for many years.
Thousands of people **have been inspired** by Mr. Shah's initiative.*

We use the present perfect passive for events that started in the past and continue in the present.

*More trash **has been dropped** on the beach.
Other sources of pollution **haven't been stopped**.
How much **has** your city **been affected** by air pollution?*

We use the past perfect passive for one past event that took place before another past event.

*By 2015, the beach **had been covered** in trash.
Cleaning plans **hadn't been put** in place before the project began.
Had the necessary equipment **been provided** for the volunteers?*



D Complete the sentences with the present or past perfect passive form of the verb in parentheses.

- 1 The beach (bury) under several feet of garbage when Shah began.
- 2 In earlier times, mangrove trees (plant) at the mouth of the rivers near the beach.
- 3 However, barriers (place) to keep the seawater from reaching the roots of the mangrove trees.
- 4 Because mangrove trees need salt water, they (damage) by these barriers.
- 5 Now that the barriers (remove), the mangrove trees are improving.
- 6 Water that (filter) by the roots of the mangrove trees flows into the ocean at Versova Beach.
- 7 Communities in other parts of the world (inspire) by the example of Versova Beach.
- 8 This once-dirty beach (transform) into a symbol of hope.

E Rewrite the sentences in the passive. Decide if there's any information you don't need to mention.

- 1 For years, people had damaged the land with poor farming techniques.
 For years, the land had been damaged by poor farming techniques.

- 2 In the last few decades, some people have restored the land to its former health.

- 3 People have replaced non-native plants with native plants.

- 4 The government has encouraged farmers to use more sustainable methods.

- 5 Before, people had described the area as an "ecological disaster zone."

- 6 Several research studies have shown the results of these efforts.

- 7 Many people have adopted the projects' principles throughout the country.

F Discuss with a partner. Have any environmental projects been done in your local community/country in the past five years? Have they been effective? Why or why not?

Adaptive Practice





PLAY WITH WORDS

Which of these words can also be used to make collocations with *environmental*?

issue, campaigner, energy, pollution, wildlife

What other related words and phrases do you know?



Game

Adaptive Practice



PRONUNCIATION

Collocations about the ENVIRONMENT

A Match the two parts of the environmental collocations.

- | | |
|-----------------------|---------------|
| 1 carbon | a destruction |
| 2 endangered | b development |
| 3 energy | c efficiency |
| 4 environmental | d footprint |
| 5 greenhouse | e gases |
| 6 habitat | f impact |
| 7 renewable | g species |
| 8 sustainable | h resources |

B Complete the sentences with collocations from Exercise A.

- We must protect because all animals and plants are important to maintain a healthy ecosystem.
- and fossil fuels are a primary cause of climate change.
- is dangerous because animals need somewhere to live!
- You can reduce your by walking or riding a bike.
- People need homes too, of course, but we should prioritize so that the environment is protected at the same time.
- New technology has much better than older models.
- Nowadays, architects are obliged to consider the of any building they plan.
- Bamboo and cotton are examples of

C Work with a group. Make a list of improvements for the environment around your school. Share them with the class.

Well, we don't have any endangered species around here.

No, but habitat destruction is a problem for birds and insects everywhere. Why don't we ...

Sounds:

/h/ AND /r/

A 5.1 How do you pronounce the words in each group? Say them. Then listen and check.

- 1 habitat – height – hub – host 2 resource – root – renewable – rush

B 5.2 Which words do you hear? Listen and choose the correct word in each pair.

- 1 head / red 2 hat / rat 3 hide / ride 4 hose / rose

C Work in pairs. Practice saying these sentences.

- Hank earned a high rank in the game.
- She wore a red hat on her head.
- The host served a delicious roast.

An academic LECTURE

- **A**  **5.3** Listen to a lecture about upcycling and take notes. Compare your notes with a partner. What do you think it's important to take notes about?

TAKING NOTES OF KEY IDEAS

Note-taking involves actively listening to information, identifying key ideas, and recording them concisely. It requires understanding the message, recognizing important details, and organizing the information efficiently.

Upcycling

Definition:

How is upcycling different from recycling?

Examples:

Advantages:

- ▲ **B** Work with a partner. What do you think about upcycling?

Contributing to an ONLINE DEBATE

ACKNOWLEDGING THE CONTRIBUTIONS OF OTHERS

When you contribute to an online discussion, it's important to show that you've read and understood other people's opinions. Use phrases to agree or disagree:

- Like X, I also believe that ...; I agree with X that ...; I'm on X's side.
- I can't agree with Y that ...; I believe Y is wrong about ...

- **A** Read the posts. Which idea do you agree with more?

How is our recycling program? Good enough, or should we do more?

Cara

These days almost everything can be recycled. So I'm tired of people telling me to worry about garbage. I don't want to carry my own bags everywhere! That's annoying. I'd rather get plastic bags from the store, and just recycle them.

Brian

I can't agree with Cara. Recycling is great, but it still uses energy. And nothing is fully recyclable. The best thing is to use fewer products in the first place! Sometimes I think recycling programs actually make people waste more.

- **B** Write your own post on the topic of community recycling. Mention both of the previous posts and add your own ideas.

LOST FOR WORDS?

crate (n) a large box made of wood or plastic, used for carrying or storing things

landfill (n) a place where trash and garbage are dumped or buried

support (v) to provide enough money to pay for things like food, clothes, etc.

toss (v) to throw away, to get rid of something

WRITING



Expressing PURPOSE

- ▲ **A** Read the conversation between two friends. What do you think about their ideas?



Alexis: You know what's even worse than plastics? Microplastics!

Jamie: What do you mean? What are microplastics?

Alexis: Super tiny pieces of plastic. Some are so small that you can't even see them! They wind up in the soil and the water, and even our food.

Jamie: That sounds terrible! What can we do to prevent that?

Alexis: Well, companies need to change their packaging in order to reduce or eliminate their use of plastic.

Jamie: I always carry a cloth bag to the store so that I don't need to use a plastic bag to carry my things.

Alexis: That's great. And scientists are developing biodegradable materials for replacing plastic packaging.

Jamie: That's great. But is it really enough?

Alexis: I'm in favor of laws for bringing about this kind of change. We really need to reduce or eliminate microplastics so that we don't become sick.

Jamie: We also need education. People need to know what to do so as not to contribute to the problem.

- ▲ **B** How many things made of plastic can you see around you? Can you think of alternative materials they could be made of?
- **C** 📺 Watch the grammar video and read the explanation. Which expression requires a gerund?

EXPRESSING PURPOSE

There are a variety of expressions we can use to express purpose or explain why we do something.

to + base form

*We should use less plastic **to** reduce waste.*

in order (not) to + base form

*We should use less plastic **in order to** reduce waste.*

so as (not) to + base form

*We should use less plastic **so as not to** hurt the environment.*

for + gerund

*We shouldn't use plastic **for** making packages.*

*What are they doing it **for**?*

so (that) + clause

*We should reduce plastic **so that** microplastics don't get into our food and water.*



D Unscramble the words to make sentences.

- 1 they can / are implementing / sustainability / cities / plastic bans / promote / so that / .
.....
- 2 so as not to / eco-friendly packaging / companies / harm wildlife / are investing in / .
.....
- 3 commonly used / protect products / in packaging / plastic is / in order to / .
.....
- 4 containers / the plastics problem / you / should recycle / so as to / help solve / .
.....
- 5 to / raise awareness / recycled plastic / use / some artists / in their works / about waste / .
.....
- 6 plastic-free / what / initiatives / for / are / ?
.....

E Complete each sentence using *so as (not) to* or *so that*.

- 1 Many companies are switching to biodegradable materials reduce plastic waste.
- 2 Schools are organizing workshops students can learn about recycling.
- 3 Governments are implementing regulations ensure less plastic is used in packaging.
- 4 Some companies are switching to glass containers introduce harmful chemicals into their food.
- 5 Restaurants stopped using plastic straws they wouldn't waste resources.
- 6 We should limit our use of single-use plastics pollute the planet.

F Rewrite the sentences using the phrases in CAPITALS. Make any necessary changes.

- 1 People recycle paper to save trees. IN ORDER TO
.....
- 2 I made a poster for increasing people's awareness about environmental issues. SO AS TO
.....
- 3 Some volunteers are collecting money to plant new trees. SO THAT
.....
- 4 I always carry cloth bags so that I don't use plastic ones. IN ORDER NOT TO
.....
- 5 Most cities have recycling programs to reduce waste. FOR
.....
- 6 Dispose of plastic properly to avoid contaminating natural habitats. SO AS NOT TO
.....

G Work in pairs. Make a list of at least five things you could do to help the environment. Use expressions of purpose. Join another pair and share your lists.

Adaptive Practice





LOST FOR WORDS?



bush (n) a short, thick plant with a lot of branches

disturb (v) to change a situation in a way that causes problems

downward (adv) facing down

Discussing a CONCEPT

A What is light pollution and why might it be a concern?

B Watch and listen. Is Camila able to change Matt's mind?

Matt: Doesn't the city look beautiful at night?

Camila: Beautiful? I don't know. Honestly, sometimes I look out at a view like this and I just see pollution.

Matt: Pollution? What do you mean? It's night! You can't see any dirty air or trash. All you can see are the lights!

Camila: But that's what I mean. Light pollution.

Matt: Light pollution?

Camila: Yeah. Too much light, at a time when things are supposed to be dark. The sun is down, and the stars and moon aren't that bright. And then people turn on all these lights. It's terrible for birds.

Matt: Come again?

Camila: It's true! Light pollution is really bad for birds.

Matt: Where did you hear that? Think about it for a minute. Birds aren't even awake at night.

Camila: Exactly! But birds get confused by the bright lights, especially when they're reflected in the clouds, and think it's daytime. So they fly around instead of sleeping. They get exhausted, and can even die. It disturbs their migration patterns and even where they build their nests.

Matt: I've never heard that before. Can you provide a source for that information?

Camila: I can, if you're really interested. I did a research paper on this last term.

Matt: Well, that's depressing. But there isn't anything we can do about it. We need lights at night, to travel and to work.

Camila: I know, but we don't have to put up unnecessary lights. And people in houses and offices can close their curtains to keep the light inside. Streetlights can be changed so the light is focused downward.

Matt: You know, I think I'll talk to my parents. That might help a little. It's a place to start, anyway.

Camila: Did I hear you right? Your parents?

Matt: Yeah. They always put up a huge holiday display of lights. But there are other ways to decorate.

Camila: I know—why not decorate your trees and bushes with things that birds can eat?

Matt: Great idea! My parents love birds. If more birds came to our yard, that would be even better than lights.

C Watch and listen again. Which phrases do Matt and Camila use to express doubt? Write *M* for Matt and *C* for Camila.

EXPRESSING DOUBT

- 1 I don't know.
- 2 Can you provide a source for that?
- 3 Come again?
- 4 Where did you hear that?
- 5 I can, if you're really interested.
- 6 Did I hear you right?
- 7 I've never heard that before.
- 8 Where did you hear that?



D Match the examples to the different pollution categories.

- | | |
|---------------------------------------|--------------------|
| 1 bright LED advertisements | a visual pollution |
| 2 oil spills | b air pollution |
| 3 car fumes/vehicle emissions | c water pollution |
| 4 litter | d noise pollution |
| 5 construction activities | |
| 6 microplastics in oceans | |
| 7 loud music | |
| 8 smoke from wildfires | |
| 9 vandalism | |
| 10 power generation | |
| 11 sewage and stormwater runoff | |
| 12 road traffic | |

E Which type of pollution affects you the most? Choose one and complete the chart below.



NOISE POLLUTION



WATER POLLUTION



AIR POLLUTION



VISUAL POLLUTION

Type of pollution:

causes	effects	possible solutions

F Work with a partner who chose a different type of pollution. Take turns sharing information, expressing doubt, asking questions, and agreeing on possible solutions.

Did you know noise pollution is a real problem in our city?

Noise pollution? Are you sure? I think it's always so quiet around here!

Vocational Skills

▲ A Work in groups. Read the information about networking and discuss the questions.

Networking involves connecting with others to exchange information and build relationships. People network to seek or offer advice, collaborate on projects, and explore job opportunities. *Networking* can be done with people you know or with strangers, both in person and online. Your personal *network* consists of people you already know. You can also have professional connections or groups based on shared interests or hobbies.

- What are some networks you currently have?
- How often do you contact those people, and in what ways?
- Do you find it easy or difficult to network with strangers?
- Do you prefer networking in person or online?

EASY NETWORKING TIPS FOR THE NETWORKING HATERS



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● B Watch the video *Easy Networking Tips for the Network Haters*. Complete the four tips.

- 1 When you are in a networking event, look for
- 2 Instead of only meeting new people, reach out to
- 3 Turn networking into a game. For example,
- 4 One way to choose something to talk about is trying to find

● C Watch the video again. Discuss these questions with a partner.

- How do you usually start a conversation?
- Have you used any of the techniques before?
- Which technique do you think would work best for you?
- What other techniques do you know to make networking easier?

LOST FOR WORDS?



despise (v) to strongly dislike something or someone

dormant (adj) temporarily inactive

impactful (adj) strong, important, or effective

mutual interest (phr) something you have in common with another person, such as a shared hobby or something you like

revive (v) to make something active again

ties (n) people you have a connection to

virtual realm (n) an online space or community

Communication

● D Work in pairs. Read the instructions and make notes.

You are involved in a project to improve the environment in and around your city. Make notes about the people you would need to help you with the ideas below.

organize environmental education workshops

.....
.....
.....

plan community clean-up drives

.....
.....
.....

organize tree-planting events

.....
.....
.....

your own ideas

.....
.....
.....



● E Work with the whole class. Network to find help for your project and offer to help others. Follow these steps:

1

Your teacher will assign you one of the roles A–C. Read and follow the instructions on your card before you do the role-play.

2

Walk around the room. Try to find people who might have information or knowledge that is useful for your project.

3

Give yourself one point for every useful interaction you have—someone you spoke with who can help with your project.

A

You have useful information and knowledge related to:

- environmental education
- engaging workshop activities
- contacts for guest speakers and environmental experts

B

You have useful information and knowledge related to:

- locations for clean-up campaigns
- organizing volunteers and supplies
- contacts for local businesses and organizations

C

You have useful information and knowledge related to:

- best tree species for different areas
- tree planting and care
- contacts for local experts and environmental groups

USEFUL LANGUAGE

Networking

Do you know anyone who can ...?

I can ask my friends ...

We need to find someone who can help with ...

I know someone who's excellent at ...

We're looking for a collaborator with skills in ...

I can reach out to my contacts to find someone who can help with ...

● F Work with a partner. Discuss the following questions and share what you learned from your networking experience.

- How many useful connections did you make?
- What aspects of talking about your project felt easy or natural?
- What parts of the conversation did you find challenging or uncomfortable? Why?

▲ G What task would your class like to carry out most? How can networking be useful for you?

A Complete the sentences with words from the box.

endangered greenhouse habitat impact
organic renewable

- 1 We always buy fruits and vegetables.
- 2 Are wolves an species?
- 3 Solar energy is an example of a energy source.
- 4 Many animals are at risk of destruction.
- 5 Clean energy sources don't create gases.
- 6 What is the environmental of airplanes?

B Complete the sentences with *have*, *has*, or *had*.

- 1 A lot of forests been destroyed by fire in the past decade.
- 2 Several new laws been passed to reduce plastic waste.
- 3 Most of the oil been spilled by the time the cleanup started.
- 4 An initiative been implemented to encourage recycling.
- 5 By the time the wildfire was controlled, thousands of acres been destroyed.
- 6 A rare bird been seen for the first time in years.

C Rewrite the sentences with the expression in CAPITALS.

- 1 People conserve water. They want to save resources for future generations. TO
.....
- 2 Many cities have bike-sharing programs. This allows people to reduce their carbon footprint. SO THAT
.....
- 3 Recycled materials are used. The goal is to reduce waste in landfills. FOR
.....
- 4 Cities are building more green spaces. They want residents to have cleaner air. SO THAT
.....
- 5 Wildlife photographers use silent cameras. This prevents them from disturbing animals. SO AS NOT TO
.....
- 6 Volunteers clean beaches. They aim to protect marine life. IN ORDER TO
.....

≡ Wordlist ≡

biodegradable (adj)	carbon footprint
carbon-neutral (adj)	endangered species
eco-friendly (adj)	energy efficiency
greenwashing (n)	environmental impact
non-toxic (adj)	greenhouse gases
organic (adj)	habitat destruction
recyclable (adj)	renewable resources
renewable (adj)	sustainable development

PLAY WITH WORDS

Test your partner. Say part of a collocation. Can your partner remember the rest?

Work in groups. One student chooses an eco-friendly product, and the others ask questions about it.

Level-up challenge. Create a script for a video to promote environment friendly practices in your community.