



### Are amusement parks bad for the environment? Discuss. Then listen and read. Output Discuss. Then listen and read.

Your last visit to an **amusement** park was probably pretty enjoyable, wasn't it? Attractions such as rides, shows and games are really fun for visitors. While you're on a roller coaster or playing games in the arcade, you probably don't consider your environmental impact.

Think about it: amusement parks consume huge amounts of energy. Just going up the hill of one roller coaster ride uses enough energy to power a lamp for over 30 hours. Some high-speed rides use enough energy to power a small town. Amusement parks also use excessive amounts of water in rides, fountains and other park facilities. And then there is the issue of rubbish. Tonnes of litter are being produced in amusement parks by the millions of people who visit. Disneyland alone produces over 270,000 tonnes of litter each year, more than a mid-sized city!



Parks such as Ancol Dreamland in Jakarta, Indonesia, have recycling programmes for visitors.





Conservation is nothing new for the **industry**. Walt Disney thought about it back in 1955 while designing his first park, Disneyland California. Disney himself planned for the use of recycled water throughout his park. Even today, employees of Disney's parks are proactive in keeping them sustainable. At Disneyland Hong Kong, run-off rainwater is being collected into a lake and then re-used throughout the resort. And Disney parks are designed to be clean, with litter bins located every 30 steps inside the park. Each one leads to an underground system where rubbish is pushed through pipes at over 95 kph. (60 mph.) and ultimately compacted. Disney is also taking action to prevent waste. By using recyclable materials and composting, the parks have reduced litter by over 60 per cent.

Other parks are also becoming **sensitive** to their environmental impact. They are starting to **participate** in the green **movement** with positive **results**. Park vehicles and trains at the US-based Six Flags now run on used vegetable oil from the parks' kitchens. Copenhagen's Tivoli Gardens, one of the oldest amusement parks in the world, has a windmill that generates all its electricity.

These changes produce both environmental and economic benefits. As sustainable ideas and technology become more **accessible**, it's easier than ever for amusement parks to be green!

- **LEARN NEW WORDS** Listen and repeat. **△044**
- **Work in pairs.** Describe a recent trip to an amusement park or a public event. Did you see any litter there? Was there an effort to recycle? What else was being done to protect the environment?

Read and write the words from the list. Make any necessary changes.

accessible	consume	economic	enjoyable	excessive
industry	litter	participate	result	sensitive



It's good to know that the music has					
environmental champions like Jack Johnson. Jack is a singer and surfer who					
s very about nature. He was concerned about					
the negative impact his concert tours were having on the environment.					
So he decided to cut out waste and					
less energy. The					
of that decision is that Jack now fuels his tour bus	ses with biofuel, and				
performs at places that are	by public transport.				
He also invites non-profit-making organisations	to				
in educating fans about sustainability at his concert venues.					

5 LEARN NEW WORDS Listen to these words and match them to the definitions. Then listen and repeat. 045 046

benefit	non-profit	proactive	take action	
		1. a positiv	e effect	
		2. preparing for possible future problems		
		3. do some	thing about a pro	blem
		4. not focus	sed on making m	onev

### 6 YOU DECIDE Choose an activity.

- 1. Work independently. Research what another well-known person or organisation is doing for the environment. Share what you learnt with the class.
- 2. Work in pairs. Keep a journal of what you throw away in a day. Compare with your partner. How much waste did you produce? How can you reduce the amount of waste you produce?
- 3. Work in groups. Do you think musicians should be responsible for making their events more environmentally friendly? What can they say or do to make their fans more proactive in protecting the planet? Discuss. Then list three suggestions.

### SPEAKING STRATEGY 047

### **Defending your opinion**

I heard that racing cars use a lot of fuel.

I read that they use around 20,000 litres (5,300 gal.) in a race.

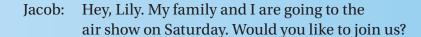
Most people would agree that there are greener forms of entertainment.

As far as I know, these industries are trying to go green.

All I'm saying is that electric cars and aeroplanes will change

the industry.

- Listen. How do the speakers defend their opinions? Write the phrases you hear. △048
- Read and complete the dialogue.



- Lily: Well, air shows are a little too noisy for me. \_\_\_\_\_they're really bad for the environment, too.
- - Lily: OK, but the planes at the show won't be electric. Those planes burn a lot of fuel and blow smoke into the environment. \_\_\_\_\_ they have a huge environmental impact.
- Jacob: Actually, \_\_\_\_\_\_ the coloured smoke is biodegradable and doesn't harm the environment.
  - Lily: Well, the fuel that's burnt certainly does. Sorry, Jacob. I hope you have fun, but I would rather not come. Let's get together on Sunday instead. You can tell me all about the show.
- **Work in pairs.** Take turns giving and defending your opinion using the information on the cards.
- 4 Work in groups. Discuss the information on the cards again.
  This time, express your own opinion.

Buying bottled water isn't bad for the environment. You just need to recycle the bottles.

Really? I've heard that only one in five bottles actually gets recycled.



Go to page 161.

### GRAMMAR (1) 049

### **Passives: Describing actions and processes**

What have musicians done to reduce their ecological footprint?

Jack Johnson's music is promoting sustainability.

Jack can teach his fans about conservation. They will pass on the ideas to their friends.

What **has been done** by musicians to reduce their ecological footprint?

Sustainability **is being promoted** through Jack Johnson's music.

Jack's fans **can be taught** about conservation. The ideas **will be passed on** to friends.



Read the information in the graphic. Underline the examples of the passive.

2 Listen. Complete the sentences. 1050

Work in groups. Talk about environmental improvements to your school or city. What has been done to protect the environment? What was done recently? What else can be done? What do you think will be done in the near future? Use the passive in your discussion.

200 BILLION LITRES (44 billion gal.) of bottled water are being consumed worldwide every year.

More than 40% of

More than 40% of all bottled water is being produced from TAP WATER.

Bottled water can be sold at nearly

10,000 TIMES the price of tap water.

Bottled water has **NOT** been found to be **SAFER** than tap water.

Almost 1/4 of bottled water has been CONTAMINATED.

Only 1 in 5 water bottles is being recycled.

More than **1** MILLION TONNES (2.2 BILLION LB.) of waste will be produced from the other four bottles.

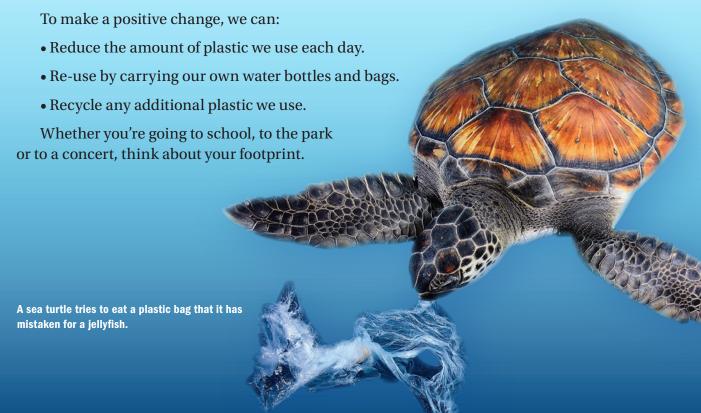
### LEARN NEW WORDS Read about the effects of plastic on the environment and what you can do about it. Then listen and repeat. 10 051 052

Recently, the worldwide **demand** for plastic has exploded. Plastic is all around us - our gadgets, dishes, furniture - almost everything is made of plastic these days! Plastic is convenient, but most of us never think about the damage caused by using too much plastic.

Jack says, 'Challenge yourself to reduce your plastic footprint.'

Why should we do this? And how can we?

Litter from plastic products dirties our cities. Much of the plastic ends up in landfill, where it can last up to 500 years! But worse is that our oceans are being polluted by plastics. There are around eight million tonnes of plastic waste in the world's oceans. Over 700 species of marine wildlife have been harmed by this pollution. Many animals mistake plastic for food. Over 100,000 marine animals die each year from eating plastic. Others might survive, but some of them end up on our plates. So, humans are also being harmed by plastic in the oceans.



- 5 Work in pairs. Think about Jack's message. Write five things that can be done to reduce the use of plastic in your daily life. Use the passive.
- **6 Work in groups.** Research how bottled water consumption and recycling have changed over the years. Present what you learnt to the class, using the passive.

Ten per cent more bottled water is being consumed each year.

- 1 BEFORE YOU READ Discuss in pairs.

  Based on what you have learnt so far in this unit and the photos on this page, what do you think the reading is about?
- 2 LEARN NEW WORDS Find these words in the reading. What do you think they mean? Use the other words in the sentence to help you. Then listen and repeat. 1053

cost development maintain venue

- 3 WHILE YOU READ Think about the author's purpose. △054
- 4 AFTER YOU READ Work in pairs to answer the questions.
  - 1. What is a benefit of hosting the Olympics?
  - 2. What are two negative results of hosting the Olympics?
  - 3. What was the total cost of the 2004 Summer Olympics?
  - 4. Give an example of how an Olympic site is being re-used.
  - 5. What should Olympic host cities do to avoid ending up with a 'ghost town'?

# GAME OVER

## After the torch goes out, what happens to Olympic sites?

How would you feel if your city were chosen to host the Olympic Games? The best athletes in the world would be right outside your door! The games bring excitement and attention to your region, as well as a lot of development. But the Olympics also have great economic and environmental costs. People have even been forced to leave their homes to make way for the Olympics. And once the last medal is awarded and the athletes have gone home, you may be left with a ghost town.

Greece is the birthplace of the Olympics. So the country was excited to welcome the 2004 Summer Olympics back to Athens.



After years of preparation, and nearly U.S. \$11 billion spent, the athletes arrived, and the games began. The 2004 Summer Olympics were a success. But shortly after they ended, the venues began to fall apart. Most of them sit empty today. The Olympic training pool is used by frogs, not athletes. Until recently, the Greek government was still paying to maintain these buildings, bringing the total cost of the 2004 Summer Olympics to over U.S. \$50 billion. Athens isn't alone. Many Olympic sites have become ghost towns. The abandoned site of the 1936 Summer Olympics is still standing in Berlin, nearly a century after it was built.

With good planning, Olympic venues can be successfully re-used. In many cities, former Olympic stadiums continue to host sporting events. Barcelona, host of the 1992 Summer Olympics, has been creative in re-using its venues. Barcelona's Port Olímpic, built for the Olympic sailing competition, is now a popular tourist destination, with a museum, hotels, shops and restaurants. Tourists visiting Beijing can now enjoy a water park experience at the Water Cube, where swimming records were broken during the 2008 Summer Olympics.

Hosting the Olympic Games is an honour. But the games only last 17 days! Olympic venues shouldn't simply be designed to be used for a couple of weeks. These facilities can improve a region only when they're designed for the long-term benefit of everyone. Architects who create quality facilities that serve a community for the years after the Olympics deserve a gold medal!

The Water Cube in Beijing, China





- **Work in pairs.** Think about the information in the reading. Why do you think the author wrote this text? What is the author's message?
- Discuss in groups.
  - 1. Would you like the Olympics to come to your country? Why or why not?
  - 2. Imagine your city or town has been chosen to host the Olympic Games. What needs to be built? How will your city change?
  - 3. What could the International Olympic Committee do to make sure that the venues designed for the Olympic Games don't turn into 'ghost towns'? Give two or three examples.

# **VIDEO**

- 1 BEFORE YOU WATCH Discuss in groups.

  Describe the size and the atmosphere of a concert or big sporting event that you've attended.
- **Discuss in groups.** You're going to watch a video called *The Footprint of Fans*. Based on what you have learnt so far in this unit, predict three ways fans leave an ecological footprint when they attend an event.
- 3 WHILE YOU WATCH Fill in a T-chart. List two problems and two solutions mentioned in the video. Watch scene 4.1.
- 4 AFTER YOU WATCH Complete the sentences below.
  - 1. Fans are responsible for up to

\_\_\_\_\_ of a concert's carbon footprint.

- 2. Some concert venues reward fans who carpool by giving them \_\_\_\_\_\_.
- 3. Some sporting events can fill a stadium with up
- 4. Sports fans can leave behind

\_\_\_\_\_ tonnes of waste.

5. Recycled plastic and other materials are now used to make \_\_\_\_\_.

Fans at the closing ceremony for the 2015 European Games held in Baku, Azerbaijan

5	Work in pairs. Tick the ways the video suggests that we can reduce our fan footprint.
	<ul> <li>□ only watch games on TV</li> <li>□ carpool to concerts</li> <li>□ buy recycled sporting equipment</li> <li>□ pay less money for tickets</li> <li>□ recycle water bottles</li> <li>□ go to fewer concerts and sporting events</li> </ul>
6	<b>Discuss in groups.</b> Answer the questions you see at the end of the video: What else are you a fan of? How does it impact the environment? How can you take action to become an eco-friendly fan?
7	YOU DECIDE Choose an activity.
	1. Work independently. Research a concert or sporting event. How could the organisers have made the event greener? Write a letter to the organisers presenting at least three ideas.
	2. Work in pairs. Survey your classmates to find out how many attend big events such as concerts or sporting events. Create five questions about transport, rubbish, energy use and recycling at these events. Summarise and report your findings.
	3. <b>Work in groups.</b> Make a short presentation to your local politicians suggesting how to reduce the carbon footprint of big events in your city.

### GRAMMAR \( \cdot 055

### Verbs followed by gerunds or infinitives

Most water parks want to use less water.

Park employees **encourage** visitors **to keep** water inside the pool.

We should **stop to look at** the root of the problem.

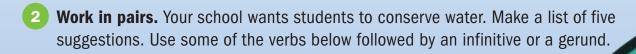
How can they **avoid wasting** water?

Maybe parks should just **stop using** so much water.

Parks must continue coming up with / to come up with ways to re-use water.

1	Work independently. Complete the sentences with the correct form of the verb in brackets
	Go to page 152.

- 1. This summer, I hope \_\_\_\_\_\_ (visit) my favourite water park.
- 2. Although I can't wait \_\_\_\_\_\_ (play) in the water each summer, I agree that parks should start \_\_\_\_\_\_ (conserve) more water.
- 3. Park designers should continue \_\_\_\_\_ (think) of new ways to use less water.
- 4. Park operators shouldn't stop \_\_\_\_\_ (clean) and \_\_\_\_\_ (re-use) the water in their attractions.
- 5. Some parks even choose \_\_\_\_\_\_ (collect) rainwater for use in their attractions.
- 6. Of course, if you want \_\_\_\_\_\_ (enjoy) water in a way that doesn't harm the environment, consider \_\_\_\_\_\_ (go) to the beach!



ask avoid choose continue start stop tell want

**Work in groups.** You are planning an event to raise awareness for the environment. Throw a coin and take turns moving (heads = 1 space; tails = 2 spaces). Say what you need to do.

START

We should think about finding a venue that's accessible by bus.



Go to page 163.

### WRITING

When writing a problem and solution essay, focus on including both information and reflection. Information can be provided about a problem, and reflection on the problem can lead to solutions. When writing about problems and solutions, the following phrases are useful:

Problem: due to it's true that the issue is

Solution: in order to one solution is will result in

1 Read the model. What is the problem? Underline the phrases that help you find it.

I love going to water parks for fun. However, many people think that water parks are bad for the environment. The issue is that the parks waste water. Due to a lack of drinking water in many parts of the world, people think water shouldn't be used just to have fun. It's true that thousands of litres of water are used every day at a single water park. And there are nearly 2,000 water parks around the world, so that's a lot of water!

Water park operators understand that they need to conserve water, especially in places with dry climates. One solution that has been developed is to recycle water. Using special filters, water parks are able to clean and re-use most of the water in their facilities. Some indoor water parks are able to recycle as much as 97 per cent of the water they use. Outdoor water parks lose water because of the sun. Building attractions in the shade will result in less water being lost. All water parks lose water when visitors splash it out of the pool. So, new designs are being created in order to keep water in the pools and prevent it from being wasted.

Water parks attract millions of people each year, so they aren't going away any time soon. If you think water is wasted at water parks, think about how much more water would be used if each visitor instead cooled off with a pool or a sprinkler at home! In that case, you could argue that water parks actually help conserve water.

- 2 Work in pairs. How many solutions did the writer give to the problem? What were they? Think of another solution to the problem.
- Write. Think about an activity that you enjoy that may be harmful to the environment. Write an essay to describe why it's a problem. Give at least three possible solutions to the problem.



# Reduce Your Footprint

'Your actions, your voice and your choices all have a huge impact.'

Jack Johnson
National Geographic Ambassador to the Arts, Musician



- 1. Watch scene 4.2.
- 2. Are you aware of how your actions affect the environment? What are some things you could do to further reduce your footprint?
- 3. What advice could you offer to friends and family for having fun without harming the environment?

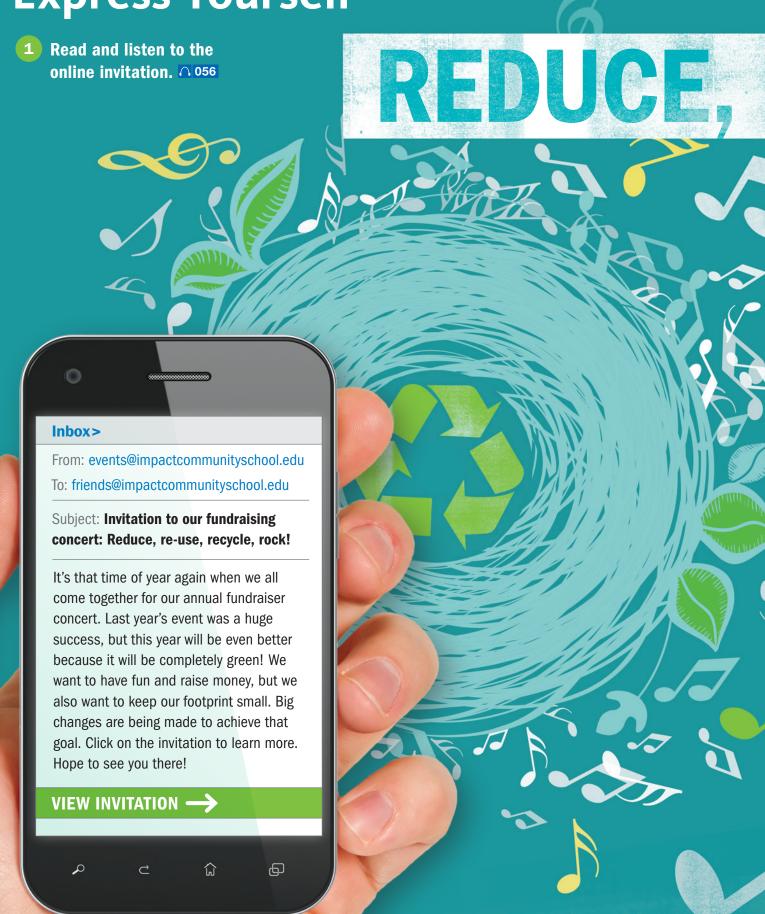
# Make an Impact

### YOU DECIDE Choose a project.

- **1** Make an ad promoting clean fun.
  - · Brainstorm ways to have fun that don't harm the environment.
  - Plan and write a script for an ad that promotes environmentally friendly fun.
  - · Film your ad and show it to the class.
- 2 Write a song about the environment.
  - · Brainstorm some environmental topics that matter to you.
  - · Write your lyrics and add music.



# **Express Yourself**



# ELECTER OF THE PROPERTY OF THE

WHEN: 22<sup>nd</sup> April at 3.00 P.M.

**WHERE: Impact Park** 

COST: €15.00 in advance, €20.00 at the event

(Remember, all of the money raised benefits Impact Community School!)

### We're reducing our festival footprint by:

- using biofuel tour buses for band transport
- · powering lights with solar energy
- offering only local organic food options
- · providing compostable plates and utensils

### You can reduce your festival footprint by:

- not printing this invitation
- · bringing your own refillable water bottle
- · walking, cycling or car sharing to the venue
- · forwarding this invitation to a friend

### 2 Discuss in groups.

- 1. Does the invitation make you want to attend the festival? Why or why not?
- 2. Name two other ways that the festival organisers could help guests reduce their footprint of fun.
- 3 Connect ideas. In Unit 3, you learnt about sustainable eating. In Unit 4, you learnt about having fun responsibly. What connection can you see between the two units?

### 4 YOU DECIDE Choose an activity.

- 1. Choose a topic:
  - sustainable fun
  - sustainable food
- 2. Choose a way to express yourself:
  - an online invitation
  - a slideshow
  - a poster
- 3. Present your work.