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### 42

### reate Awareness

### **Know Your Footprint**

Carbon dioxide, or CO2, is a gas in our atmosphere. Too much CO2 can cause severe changes in our planet's climate! Reduce carbon emissions today!



### **Use Less Fuel**

Most vehicles **use fossil fuels** and produce a lot of CO<sub>2</sub>. Take the bus or **carpool**—it's more efficient!



### **Conserve Water**

Take short showers and don't use more water than necessary.



### **Save Electricity**

Most **power plants** generate electricity using fossil fuels. Save electricity by turning off lights and appliances when you aren't using them.



### **Plant Trees**

Trees absorb carbon dioxide, protect the **soil** and keep temperatures cooler in the summer. Plant one today!



### **Use Clean Energy**

Solar panels and wind turbines don't pollute the environment.



### Recycle

Where does your garbage go? Every day, cities send tons of rubbish to landfills. But many materials shouldn't go there—they can be used again. Recycle paper, plastic, glass and metal.

### **Z** Complete the phrases. Then tick (✓) the actions that help the environment.

1	trees
2	electricity
3	the environment
4	your carbon footprint
5. conserve	
6. send rubbish to	
7. use clean	
8. use fossil	

### 1 Look at the pictures and circle the correct option.



conserve water / pollute the environment



use fossil fuels / plant trees



recycle / send rubbish to landfills



save electricity / use clean energy

### **G**uess What!

Our *carbon footprint* is the amount of carbon dioxide we produce.

### **3** Match the verbs with the definitions.

1. conserve to protect a natural resource

2. save to introduce garbage and chemicals to a place

3. recycle to put something in the ground to grow

4. pollute to use less of something

5. plant to transform objects into new things

### **△ ⋒**<sup>19</sup> Listen and number the suggestions.









Read a book.

Eat less meat.

Wear a sweater.

Buy a new car.

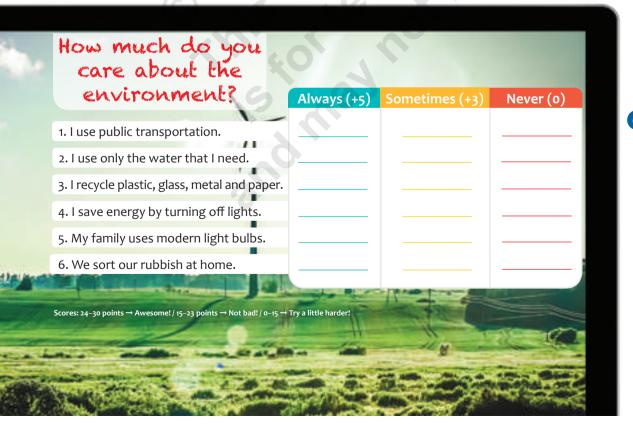


Think Fast! Read and tick (✓) about you.
Then calculate your score.

### **B**uess What!

Fossil fuels like oil and gas come from plants that were alive millions of years ago!





### Glossary.....

### carpool: to

arrange to travel together in the same car

### power plants:

factories that generate electricity

soil: earth; land

landfill: place where rubbish is buried

**glass:** a hard transparent material



Read the Ask Miss Eco column. Identify and discuss four environmental problems mentioned.



### Hi. My mum says I should pick up my dog's waste. I don't understand what harm it does. If I don't clean it, what will happen? (Danny 14)

Your mum's right, Danny. Dog poop not only smells, but it also contains parasites and can cause infections in humans and animals. It also pollutes water. If more people pick up after their dogs, the city will be much cleaner. As a dog owner, it's your responsibility!

### Someone told me that noise pollution can cause physical damage. What will happen if I listen to loud music? (Carol, 15)

If you listen to loud music, especially with headphones on, you will have permanent hearing problems by the age of 40. There is already a lot of noise around you—planes, cars, motorcycles, radios and heavy machinery—these all cause noise pollution.

### I heard the term 'light pollution.' Does this kind of pollution really exist? (Theo, 13)

That's an interesting question, Theo. Light pollution

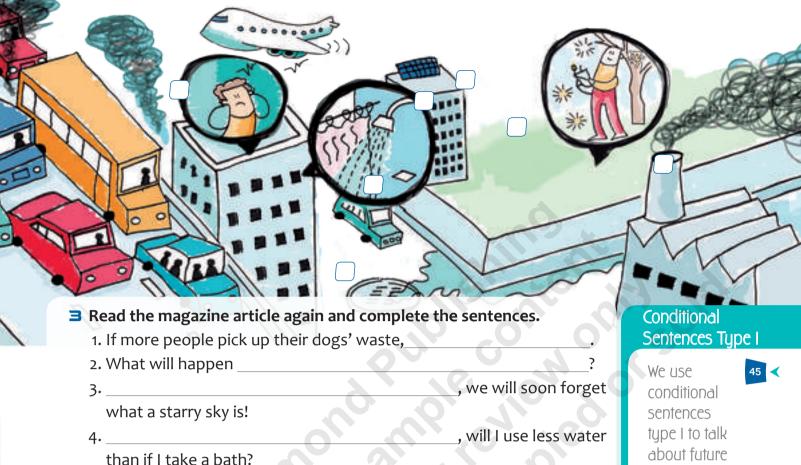
does exist. There are more and more lights everywhere. Artificial lights in towns and cities stop us from having a clear view of the sky. If we use lights everywhere, we will soon forget what a starry sky is!

### If I take a shower every day, will I use less water than if I take a bath? (Olivia, 14)

That is correct, Olivia. You use 26 litres of water for a quick shower and about 94 litres of water for a bath. You will always use less water if you take showers than if you take a bath. But don't stay in the shower for more than 10 minutes!

### What are the main causes of air pollution and what can I do? (Sean, 16)

Where do I start? Air pollution is caused mainly by emissions from factories and from burning fossil fuels like coal and gasoline. Cars produce a lot of bad gases, which causes air pollution. The next time your father or mother takes you to school, make sure you take a friend or two. If we share our cars, there will be fewer cars in the streets and less pollution in the air!



### $\triangleleft$ $\bigcap_{i=1}^{20}$ Listen to the interview and tick $(\checkmark)$ the topics that the people talk about.

washing the dishes

washing clothes

5. If we share our cars,

plastic waste recycling waste consuming energy

using electricity at home

F

F

F

### **S** W<sup>21</sup> Listen again and circle T (True) or F (False).

- 1. If we use compact fluorescent bulbs instead of regular lightbulbs, we will save 25% more energy.
- 2. Washing dishes by hand uses less water than a dishwasher.
- 3. Using cold water in a washing machine is not as good for washing clothes as using hot water.
- 4. The biggest user of energy at home is electrical equipment.
- 5. Every time we leave the fridge door open, we waste energy. Τ

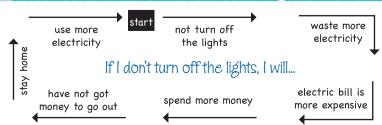
about future possibilities: *If+Simple* Present+Simple Future:

If we keep using cars, air pollution will act worse.

Simple Future+if+Simple Present:

There will be shortages if we continue to waste water.

### Think Fast! Read the conditions and consequences. Then connect the sentences using the first conditional.



### Duess What!

In the United States, it takes 25 large power stations to provide electricity for all the fridges in the country for one year.



### **Reading & Writing**

1 Look at the pictures and write the headings.

Being a Vegetarian Wearing Fur Coats Keeping Animals in Zoos

I'm not against wearing animal fur. We use **leather** for shoes, belts and jackets—so why shouldn't we use fur for coats and hats?

I don't agree with killing animals for their fur. It's wrong and it's **cruel**. There are many alternatives that are **stylish** and warm.

Zoos are good for the environment. They help to conserve animals that are in danger in the wild. And they're a great way for kids to learn about wild animals.

I'm against having zoos. Animals are **confined** in small areas so they can't move freely. Besides, they are fed by humans, so they can't hunt for food. They will never be able to live in the wild again.

There are many reasons to be a vegetarian. Firstly, meat isn't good for our bodies. Secondly, it isn't right to kill animals for food. And finally, it requires a lot of water and land to keep animals. Growing **crops** is much less **wasteful**.

There's nothing wrong with eating meat. Humans are omnivores, and meat does have a lot of protein. Plus, it tastes really good!

Read the statements. Write A (Agree) or D (Disagree).





- Read the statements on page 46 again. In pairs, discuss the arguments that sound more convincing.
- Complete the opinion expressions.

1. There are	
to be a vegetarian.	

- 2. There's with eating meat.
- 3. Zoos are the environment.
- having zoos. 4. I'm
- wearing animal fur. 5. I'm
- 6. I with killing animals for their fur.
- **S** Choose a topic from page 46. Write a sentence to state your opinion using an expression from Activity 4.
- Add two or three reasons to support your opinion.



Stop and Think! Discuss. How can you develop an informed opinion about something?

- **In your notebook, write** a short text giving your opinion on one of these
  - Animal hunting

topics:

- Battery disposal
- Consumerism

### Be Strategic!

Be more persuasive. State your opinion in a clear way and give reasons to support your opinion.

**leather:** a material made from animal skin

cruel: causing pain and suffering

stylish: in style; fashionable

confined: locked in an area

**crops:** plants that are used for food

wasteful: using resources in an inefficient way





### Read the sentences and number the photos.

- In Japan, many businesses have got Maneki neko cat figures for good luck!
- The people of Okinawa, in southern Japan, have got very distinct food. One dish is umi budo—a type of seaweed that tastes like caviar.
- 3. Sumo wrestling is a popular sport in Japan. Good sumo wrestlers should be very heavy. They **skip** breakfast and sleep after meals to help them gain weight!
- 4. In spring, white and pink cherry **blossoms** appear all over Japan. People have got picnics and parties in parks to enjoy them. There are even cherry-blossom flavoured snacks.

Tokye KAMIKATSU

### **Z** Read the article and discuss: is nuclear energy a good option? Why? / Why not? Naclear thergy in Japan

without producing carbon emissions. But now they're only more than 50 nuclear reactors, which can generate energy other countries to generate electricity. They have also got the size of the State of California. Japan hasn't got apan is home to 127 million people, and it is about a lot of fossil fuels, so it needs to buy them from using a few of these reactors. What's happened? In 2011, there was an earthquake near the coast of Japan. It was very powerful, measuring 9.0 on the Richter scale. The their homes. In addition to this, the power plant continues people very sick. Everyone who lived near the power plant earthquake caused a tsunami that damaged some nuclear was evacuated—nearly 450,000 people—and even after several years, more than 100,000 people can't return to reactors emit radiation, energy particles that can make reactors at the Fukushima power plant. The damaged



that it doesn't flow into the ocean. It leaks several tons of to leak radioactive water, which is regularly collected so contaminated water every day. Now a plan is in place to reduce the flow of water, but it will take about 30 to 40 years to clean up the site.

opportunity to use and develop new forms of clean energy. For this reason, people in Japan don't see nuclear energy last few nuclear power plants. Now they have got an as a safe option. What's more, they plan to close the

# ■ 12 Listen and answer. Why is the town of Kamikatsu a special place?

## $\blacktriangleleft$ $\mathbb{N}^{2^3}$ Listen again and circle T (True) or F (False).

- 1. Kamikatsu is a small town in northern Japan.
- 2. The population of Kamikatsu is about 2,000.
- 3. They haven't got a garbage truck.
- 4. They wash their rubbish.
- 5. There are 20 recycling categories.
- 6. They make new items using old clothes.



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caviar: fish eggs

seaweed: an ocean plant

skip: not to do something

**blossoms:** flowers

evacuated: moved to a safe place

radioactive: contaminated with radiation leak: to lose liquid from a container



1 Look and match the symbols to the slogans.



- $\geq$   $\Omega^{24}$  Listen to the scripts and tick ( $\checkmark$ ) the topics in Activity 1.
- $\blacksquare$  Number the missing fragments of each script. Then listen again and check.
  - 1. Be cool. Don't **litter**. 2. garbage trucks don't collect 3. in bottles, bags
    - 4. reduce, reuse and recycle 5. throw garbage out of their cars
    - 6. will have less trash 7. will ever visit our area 8. sort our garbage

### In general, people in our community care about the environment. We \_\_\_ and take paper, plastic, glass and metal to the special dumpster to recycle. The problem is that the dumpster is always full because the \_\_\_ recycling every day. I really think they should, so that people don't have to leave the garbage around the dumpster. It is also important to reduce the number of containers we use. If we reuse containers, we \_\_\_. So remember: \_\_! A growing problem in our neighborhood is littering. Some people \_\_\_ or leave it in the park, on the grass. In some places, the ground is covered \_\_\_ and wrappers. It's infuriating! If people continue littering like this, no one \_\_\_, we will harm the wildlife and pollute the environment.

We should work together, clean up the mess and live in a

healthy and beautiful place. It is time to say: \_\_\_\_!

### **G**uess What!

You don't need to be an important political figure to change your community. There are thousands—maybe millions—of teen activists in the world. They see a problem and look for a way to solve it.

### Glossary

litter: throw garbage in public places

trash: garbage

dumpster: a large container for

garbage

wrappers: covers for food items infuriating: making someone very angry





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### 1 Read and complete the sentences.

conserve emissions energy fossil landfills	planting pollute saves
1. Many cars and buses use fuel:	5.
2. Turn off the lights when you leave a room. It	electricity.
3. Reuse and recycle. Send less rubbish to	
4 water! It's a precious resource	2.
5. You can improve your neighbourhood by	trees.
6. Traditional power plants the	environment.
7. Use clean like solar and wind	energy.
8. Buying local products is a good way to reduce yo	our carbon dioxide
Look and label the actions.	
Look and label the actions.	
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<b>3</b>	f

### **3** Read and circle the correct option.

he climate is changing. The arctic is warming. Some cities have got air pollution that makes people sick. Is it too late to save the planet? I don't think so. If we (1) make / will make changes now, we (2) make / will make a difference. With new technologies, we can reduce our carbon footprint to zero. It's easy to think only countries and companies can change things, but small decisions are important, too. We (3) have / will have a lot less rubbish if we (4) **start / will start** reusing and recycling more. And if we

(6) make / will make more earth-friendly products. If everyone

toxic chemicals or a large carbon footprint—companies

(7) cares / will care about the environment, the situation (8) improve / will improve. Make a change today!

### is it too lake (5) **choose / will choose** earth-friendly products—without

### Unscramble the questions.

1. what / on / the	/ will / we	/throw/	happen /	if / trash /	ground / ?
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The city will look dirty.

2. happen / what / if / the / we / pollute / will / air /?

People will get sick.

3. pollute / what / happen / we / the / will / if / oceans /?

Fish and animals will die.

4. recycle / will / happen / what / we / if /?

We'll send less rubbish to landfills.

5. we / clean / happen / will / what / use / energy / if /?

We'll have clean air and water.

### **S** Complete these sentences using your own ideas.

1. If I go to school by bike,	3. If I win the lottery,
8 , , -	, , , , , , , , , , , , , , , , , , , ,

2.	won't h	nelp the	planet if	
			P	

### 1 Read and complete the sentences.

it will produce oxygen and clean the air you will keep them out of landfills you won't need any electricity or use any fossil fuels you can reduce your carbon footprint by 500% you will save up to 500 litres per month



### **Conserve Water**

If you turn off the water when you wash your hair,



### **Stop Sending Rubbish to Landfills**

Buy a cloth bag and use it when you shop. If you stop using plastic bags,

and prevent

them from polluting the environment.



### **Reduce Carbon Emissions**

If you eat vegetables instead of meat,



### **Save Electricity**

You don't need to buy solar panels to use clean energy. If you use natural sunlight instead of a lamp,



### Plant Something... Anything!

Planting trees helps the environment, but all plants do! If you keep a small plant in your house,

### **2** Look and classify the recyclable materials (1=plastic, 2=paper, 3=glass).





shampoo bottles



light bulbs



cardboard boxes



newspapers



soft drink bottles



jars



toilet paper rolls

