Uruguayan artist Jaime built this home in Florianopolis, Brazil, from recycled materials.

FEATURES

58 Recycling  
The real story behind recycling our trash

60 Managing the environment  
Some environmental stories from around the world

62 A boat made of bottles  
How one environmentalist is trying to raise awareness

66 Recycling Cairo  
A video about how recycled objects are used in Cairo, Egypt

1 Work in pairs. Look at the photo and the caption. What do you think of the home in the photo? Would you like to stay there? Which of these materials did Jaime use?

- cardboard  - glass  - leather  - metal  - paper  - plastic  - wood

2 Work in pairs. Listen to part of a documentary about Jaime and the house in the photo. Answer the questions.

1 What materials does the speaker mention?
2 What did Jaime do with them? Give an example.
3 What does Jaime want people to think about?

3 Work in pairs. Look at the highlighted expressions for talking about objects. Form similar sentences about the everyday objects in the box below.

- A dictionary is made of paper. You use it for looking up words.

- an envelope  - a cell phone  - a wallet  - a tin can

4 Think of another everyday object. Don’t tell your partner what it is, but describe what it’s made of and what you use it for. Your partner has to guess the object.
Vocabulary recycling

1 Work in pairs. What kind of trash do you throw away or recycle each week? What percentage of each type (a–e) is in your trash can?

2 Match these objects (1–8) to the type of trash (a–e) in Exercise 1. Some items match two categories.

<table>
<thead>
<tr>
<th>1 computer</th>
<th>2 bottle</th>
<th>3 jar</th>
<th>4 aluminum foil</th>
<th>5 TV</th>
<th>6 cereal box</th>
<th>7 magazine</th>
<th>8 bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>a electronics</td>
<td>d metal</td>
<td>b glass</td>
<td>e plastic</td>
<td>c paper and cardboard</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reading

3 Work in pairs. Look at the photos with the article. What do you think e-waste is? Why is the boy holding part of an old computer?

4 Read the article and check your ideas from Exercise 3.

5 Work in pairs. Read the article again and answer these questions.

   1 What did Peter Essick find in the markets of Ghana?
   2 Why do people melt parts of the broken computers?
   3 Why is recycling the metal dangerous?
   4 What types of electronic products are environmentally friendly?

Grammar quantifiers

6 Which of these nouns are countable (C)? Which are uncountable (U)? Write C or U.

   trash U  computer C  plastic bag C  box U  magazine C  paper U  metal U

QUANTIFIERS

We use quantifiers with countable and uncountable nouns to talk about quantity.

Do you ever throw away any electronic waste?
Perhaps you have some old technology that doesn’t work. Essick found a lot of e-waste in Ghana.

The sellers collect a few computers. They can’t sell many computers in the market. These parts don’t have much metal. There is a little gold inside. We shouldn’t send any e-waste to other countries.

For more information and practice, see page 164.

7 Look at the sentences in the grammar box. Then complete these sentences with the correct quantifiers in bold in the grammar box.

   1 We use _______ and _______ in affirmative statements with countable or uncountable nouns.
   2 We use _______ in questions and in negative statements with countable or uncountable nouns.
   3 We use _______ to talk about small quantities in affirmative statements with countable nouns.
   4 We use _______ in negative statements and in questions with countable nouns.
   5 We use _______ in negative statements and in questions with uncountable nouns.

8 Circle the correct quantifiers to complete the sentences.

   1 I throw away _______ paper do you throw away every week?
   2 I recycle _______ a few / a little things, like glass and plastic bottles.
   3 I don’t recycle _______ many / much glass.
   4 I recycle _______ a few / a little paper each week.
   5 Do you have _______ / any recycling bins?
   6 There are _______ / any old TVs for sale.
   7 You shouldn’t throw away _______ / any paper!
   8 How many _______ / much times can paper be recycled?
   9 Nowadays, a lot of _______ / a little cities and towns have special recycling centers.

Speaking myLife

9 Work in pairs. Discuss these sentences (1–4) about recycling. Are they true for you? If necessary, change the words in bold so the sentences are true for you.

   1 I throw away _______ paper every week.
   2 In my area, _______ / a few places have recycling bins.
   3 My school / _______ / place of work doesn’t have _______ recycling bins for paper.
   4 _______ / Some people in my country think recycling is important.

A: How _______ / much paper do you throw away every week?
B: I don’t throw away _______ paper. We recycle _______ in special green bins.

melt (v) to heat an object until it turns to liquid
5b Managing the environment

Vocabulary results and figures

1 Work in pairs. Discuss the questions.
   1 How often do you read news about the environment? Is it usually good news or bad news?
   2 Do you have any good news about the environment in your country?

2 Read a newspaper report about Portugal. Is it good news or bad news?

- Portugal powered the whole country using only solar, wind, and hydroelectric energy for about a hundred hours last week. Exactly a year ago, the country produced under a quarter of its electricity from renewable energy. So it’s a huge achievement for the country to live off renewable energy for over four days.

3 Look at the phrases in bold in the newspaper report above. Match these phrases with the exact information in a–e below.
   a 48% 
   b 107
   c from May 7 to May 11
   d 22%
   e 12 months

4 Work in pairs. Answer these questions about your life using ever, under, almost, and about.
   1 How much of your day do you spend looking at a screen (e.g., computer, TV)?
   2 How many hours a week do you spend shopping?
   3 How many people live in your town or city?
   4 How much money do you spend on buying clothes each month?
   5 How many months a year do you spend at school or at work?

Listening

5 Work in pairs. Listen to a news report about two environmental projects and answer the questions.
   1 What four deserts does the report mention?
   2 Where are the two environmental projects?
   3 What type of wall are the countries building?

6 Work in pairs. Listen again and answer the questions.
   1 What percentage of the Earth’s land is desert?
   2 When did the Three-North Shelter Forest Program begin?
   3 What is its purpose?
   4 How long will the wall be when it’s finished in 2050?
   5 How many countries are working together on the project in Africa?
   6 What are the goals of this project?

Grammar articles

a ARTICLES a/an, the, or no article
   1 In 1978, China started planting a wall of trees. Now the wall has about 66 billion trees.
   2 It’s the largest hot desert in the world.
   3 The Gobi Desert is getting bigger.
   4 Countries in Africa plan to build a wall.
   5 People know about the Great Wall of China.

b Pronunciation /ðə/, /ðiː/
   1 Listen to the difference in the pronunciation of the before a consonant sound and before a vowel sound.
   2 Listen and circle /ðə/ or /ðiː/. Then listen again and repeat.

7 Look at the grammar box. Complete these rules (a–c) with a/an, the, or no article (–).
   a We normally use _______ when we talk about something that isn’t specific or when it’s the first time we mention something. When we talk about something specific or talk about it again, we use _______.
   b We also use _______ when something is unique (there is only one), with superlatives, or with the names of some places (e.g., oceans, deserts, mountain ranges).
   c We use _______ when we talk about people or things in general, and with the names of most places (e.g., continents, countries, cities, lakes).

8 Read about another way to manage the environment. Circle the correct options. Circle “–” if no article is needed.

9 Around the world quiz
   1 There is _______ river that flows through parts of Brazil, Colombia, Peru, and Ecuador. What is its name?
   2 The White House is in _______ USA. Who lives there?
   3 There is _______ natural satellite that goes around _______ Earth every day. What is it?
   4 In 1998, Larry Page and Sergey Brin set up _______ global search engine. What is its name?
   5 _______ Arctic Ocean is _______ smallest ocean in the world. Which is _______ largest?

10 Work in pairs. Look at these questions from a general knowledge quiz. Complete the questions with a/an or the where necessary. Then try to answer the questions.

11 Check the quiz answers on page 155.

Writing and speaking

12 You are going to write five more quiz questions.
   Work in two pairs in a group of four.
   Pair A: Turn to page 153 and follow the instructions.
   Pair B: Turn to page 154 and follow the instructions.

13 Work in your group. Take turns asking and answering your five questions. Find out which pair has greater general knowledge.
5c A boat made of bottles

Reading

1 Work in pairs. These words and phrases are from the article on page 63. What do you think the article is about?

- plastic bottles
- special boat
- sail
- the Pacific Ocean
- San Francisco
- Sydney

2 Read the article and complete the fact file with numbers about the Plastiki.

**The Plastiki in facts & figures**

| Number of crew: | 1 |
| Number of plastic bottles: | 2 |
| Length: | 18 m |
| Width: | 6 m |
| Weight: about | 12,500 kg |
| Average speed: | 5 knots |
| Distance covered: | over 25,000 km |
| Number of days at sea: | 8 |

**Critical thinking reading closely**

3 Read the sentences (1–6). Circle the correct option for each sentence.

- T = The sentence is true. The information is in the text.
- F = The sentence is false. The information is in the text.
- NG = We don’t know if it’s true or false. The information is not given in the text.

1. The Plastiki is made of the same material as other boats.
   - T
   - F
   - NG

2. Humans recycle most of their plastic bottles.
   - T
   - F
   - NG

3. Plastic in the ocean is killing animals.
   - T
   - F
   - NG

4. The Plastiki is environmentally friendly.
   - T
   - F
   - NG

5. The size of the “Great Garbage Patch” is growing.
   - T
   - F
   - NG

6. The journey took longer than de Rothschild had planned.
   - T
   - F
   - NG

**Speaking**

6 Work in groups and discuss these questions.

1. Do you think environmental projects like the Plastiki can make people change their behavior? Why or why not?

2. In your country, does anyone try to change people’s behavior in these areas? How do they do this?
   - recycling more trash
   - stopping smoking
   - driving over the speed limit
   - eating too much food
   - anything else?

   **The government tries to stop people from smoking cigarettes by ...**

**Word focus**

3 Work in pairs. Find and underline five expressions in the article with the word take.

4 Work in pairs. Find and underline five expressions in the article with the word take. Then match the expressions with the uses (1–4).

- T = The sentence is true. The information is in the text.
- F = The sentence is false. The information is in the text.
- NG = We don’t know if it’s true or false. The information is not given in the text.

1. transportation: take a taxi,
   - T
   - F
   - NG

2. daily routines: take a walk,
   - T
   - F
   - NG

3. lengths of time: take a few days,
   - T
   - F
   - NG

4. idioms: take time,
   - T
   - F
   - NG

5. Complete the sentences with the correct form of take and the words in the box.

- take
- many days
- care
- a plane

1. The work was tiring, and the crew sometimes needed to __________ and relax.
2. The journey across the Great Garbage Patch was longer than expected—it __________.
3. Most people __________ from San Francisco to Sydney, so they don’t know about the pollution in the ocean.
4. __________ of the environment is a global responsibility.

**Speaking**

6 Work in groups and discuss these questions.

1. Do you think environmental projects like the Plastiki can make people change their behavior? Why or why not?

2. In your country, does anyone try to change people’s behavior in these areas? How do they do this?
   - recycling more trash
   - stopping smoking
   - driving over the speed limit
   - eating too much food
   - anything else?

   **The government tries to stop people from smoking cigarettes by ...**

**A boat with a difference**

The Plastiki looks similar to many other boats in Sydney Harbour. It’s eighteen meters long, six meters wide, and it weighs about twelve thousand kilograms. It carries a crew of six people and has an average speed of five knots. However, once you get near the Plastiki, you realize there’s a big difference: it’s made of twelve thousand five hundred reused plastic bottles.

**How did the Plastiki begin?**

David de Rothschild is an environmentalist who has crossed Antarctica and explored the Ecuadorean Amazon. One day, he was reading some information about all the plastic in the seas and oceans. He couldn’t believe what he was reading. For example, humans throw away four out of every five plastic bottles they use, and plastic trash causes about eighty percent of the pollution in the ocean. In addition, scientists think that around one million seabirds die every year from plastic pollution. De Rothschild decided he wanted to get involved in the fight against ocean pollution. To help more people understand the problem, he started building a boat made of plastic bottles.

**The journey**

De Rothschild sailed the Plastiki across the Pacific Ocean from San Francisco to Sydney. That’s more than fifteen thousand kilometers. On the way, he took the special boat through the “Great Garbage Patch.” This is a huge area in the Pacific with 3.5 billion kilograms of trash. You can see every kind of human trash here, but the worst problem is the plastic. It kills birds and ocean life.

**How well did the Plastiki survive the journey?**

The journey wasn’t always easy, and de Rothschild and his crew had to take care during storms. There were giant ocean waves, and winds of over one hundred kilometers per hour. The whole journey took one hundred and twenty-nine days. Originally, de Rothschild thought the boat could only travel once, but it lasted so well that he is planning to sail it again one day.

**Designing the Plastiki**

In addition to building the boat with recycled plastic, it was important to make the boat environmentally friendly and user-friendly. The boat uses renewable energy, such as wind power and solar energy. The crew can make meals with vegetables from the small garden at the back of the boat. They can take a break from work and get some exercise by using the special exercise bicycle. The energy from the bike provides power for the boat’s computers. And if anyone needs to take a shower, the boat’s shower uses saltwater from the ocean.

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knot (n) = a measurement of speed at sea (1 knot = 1.8 km/hr)
Reading
1 Work in pairs. Do you normally go to stores or do you prefer shopping online? Why?
2 Look at the website and email order. What did the customer order? What is the problem?

Telephone expressions
Good morning. How can I help you?
I’m calling about an order for a clock.
Can I put you on hold for a minute?
Is there anything else I can help you with?

Order number: 80531 A
Order date: March 20
Thank you for your order. Unfortunately, the model you ordered is currently not available. We expect more stock to arrive in seven days. We apologize for the delay. For more information, please call the customer service representative at 555-1754.

Item Number Description Quantity Price
HCV1N Hard-drive clock 1 $39

Real life calling about an order
3 The customer is calling customer service about her order. Listen to the conversation. Work in pairs and answer the questions.
   1 What information does the customer service representative first ask for and check?
   2 Why does the customer want the clock quickly?
   3 What does she decide to do?
   4 What will the customer service representative email her?

Pronunciation sounding friendly
a Listen to these sentences from a telephone conversation. Does the speaker sound friendly (F) or unfriendly (U)? Circle your answers.
   1 Good morning. How can I help you? F U
   2 Can I put you on hold? F U
   3 Is that A as in America? F U
   4 I’m calling about an order. F U
   5 Is there anything else I can help you with? F U
   6 Do you have the order number? F U

b Listen to the sentences again. This time, they are all friendly. Work in pairs. Listen and repeat with a similar friendly intonation.

Writing emails
1 Read the correspondence between a customer and a customer service representative. Put the emails (A–E) in order (1–5).

a
Dear Mr. Martinez:
I would like to inform you that the e-book reader you ordered is now in stock. I would be delighted to deliver this item immediately.
Please reply to confirm you would still like to purchase this item.
Charlotte Lazarro

b
Dear Sir or Madam:
I recently ordered an e-book reader online.
However, I received an email that said this was not currently available. Please refund my money back to my credit card.
Your sincerely,
Carlos Martinez

c
Thanks, but I bought the same product at a store yesterday. Therefore, please cancel the order and, as requested, send me my refund.
Carlos

d
As requested, here is the order number: 80531 A

e
Dear Mr. Martinez:
Thank you for your email. I apologize for the difficulties with your order. In order to provide you with the necessary assistance, could you please send me the order number?
Best regards,
Charlotte Lazarro
Customer Service Representative

Writing skill formal words
a The language in the emails in Exercise 1 is quite formal. Match the formal language in the emails to these less formal words (1–9).
1 got (received)
2 happy
3 asked for
4 give
5 give back (money)
6 help
7 say sorry
8 tell
9 want

b Work in pairs. Make these sentences more formal.
   1 I want my money back.
   2 I’m writing to tell you that I didn’t get the delivery.
   3 Do you want any help?
   4 Please give us your credit card details.
   5 Sorry, but I can’t give you your money back.

Imagine you ordered a printer online two weeks ago. You paid for delivery within 24 hours, but it hasn’t arrived. Write an email to the supplier and request a refund.

5 Work in pairs. Read your partner’s email. How formal is the language?
Recycling Cairo

While you watch

1 Watch the video. Were your predictions in Exercise 2 correct?

2 Watch the video again. Work in pairs and answer the questions.
   1 How does the narrator describe the streets of Cairo?
   2 How does he describe the rooftops of Cairo?
   3 What is Thomas Culhane helping Egyptians to do?
   4 What is Egypt’s great natural resource?
   5 What is the new solar hot water system made of?
   6 The new solar heaters provide hot water, so what do they reduce?

After you watch

5 Vocabulary in context

Watch the clips from the video. Choose the correct meaning of the words and phrases.

6 Write a short summary of the video (about 100 words). Use these phrases.

People in Cairo use the rooftops for ...
Thomas Culhane is helping some local people to ...
They make the solar water heaters out of ...
The new heaters provide ...
Culhane thinks the solar heaters demonstrate that ...

7 Work in pairs. You are going to be the narrator of the video. Watch a shorter version of the video with no sound. Your teacher will play this video twice. As it plays, take turns reading your summary from Exercise 6 to your partner.

8 In the video, Thomas Culhane says, “One man’s garbage is another’s goldmine.” What does he mean by this? Circle a, b, or c.
   a Everyone thinks the garbage is worth a lot of money.
   b Some people think the garbage is useless, but other people think it’s very useful.
   c You can sell the garbage for a lot of money.

9 Work in pairs. List some things people often use and throw away that other people could recycle or reuse.

Before you watch

1 Key vocabulary

Match these words and phrases with the pictures (1–6).

- water tank
- solar panel
- satellite dish
- rooftop
- goat
- garbage

2 Work in pairs. You are going to watch a video about using recycled objects in Cairo. What do you think is the connection between the words and phrases in Exercise 1?
UNIT 5 REVIEW AND MEMORY BOOSTER

Grammar

1 Circle the correct options to complete the article about recycling.

**Recycling around the World**

A new report looks at recycling in different countries and what they can learn from each other.

**Japan**

The Japanese have different types of recycling bins, so local people only throw away a little / a few household items. For example, they recycle about 100% of their drink cans, which is a lot higher than some countries in Europe.

**USA**

Overall, the USA doesn’t recycle as much as Japan, but it has introduced many / much new projects in recent years. This year, it recycled 48% of its paper, 40% of its plastic bottles, and 65% of its cans.

**Senegal**

Senegal recycles a few / a little of its waste industrially, but people generally don’t throw away any / much items that they can use for something else. For example, you can buy shoes made from old plastic bags, and drinking cups made from cans.

2 Work in pairs. Look at the photos. Answer these questions for each photo.

1 What project does the photo show?
2 What is the purpose of this project?

---

Vocabulary

3 Work in pairs. What materials are these objects made of?

- book
- bookshelf
- bottle
- can
- jar
- magazine
- cell phone
- radio

---

4 Work in pairs. Think of two more objects for each material in Exercise 3.

5 Look at the percentages in the article in Exercise 1. Match the percentages to these phrases (1–4).

- a full amount:
- just over a third:
- about two-thirds:
- almost half:

6 Write the percentage of time you spend doing these things each day. Then work in pairs. Explain how you spend your time to your partner.

- at work or at school
- sleeping
- texting friends
- watching TV
- eating

I spend over a third of my day at school.

---

Real life

7 Work in pairs. Practice making a telephone call about an order. Take the roles of someone who works for a company (A) and a customer (B). Use these ideas.

A: Hello. How can I help you?
B: calling / an order / a clock. It hasn’t arrived.
A: Do you / order number?
B: It / AG-100234L.
A: Sorry, can I repeat that?
B: Yes, it’s .
A: Let / check. Is / A / America?
B: That’s correct.
A: Sorry, this product / currently not in stock.
B: Would / change / order?
B: No. I’d like / refund.
A: That’s fine. Would / like confirmation / email?
B: Yes, please.
A: Is / anything else / can help you with?
B: No. Goodbye.

---

8 Practice the conversation again, but this time student B closes their book. Then change roles.