



You can put a postage stamp on it, you can write an address on it, and you can send it through the U.S. mail. No, it's not an envelope or a package. It's the amazing coconut! The coconut is different from most other fruits because every part of it is useful. People drink the milk and eat the meat. They use coconut oil as a lotion, and they use the husks¹ for

¹ husks: the outside parts of some fruits, nuts, and seeds





containers. People in some island nations have even used the coconut in place of money. It is possible that humans have been using coconuts in many of these different ways for thousands of years. Even today, people are still finding new uses for the coconut.

One of the more exciting uses of the coconut is as a source of energy in place of petroleum. Scientists around the world are working on using

coconuts for energy because coconuts are cheap, clean, and renewable. Already, coconut-rich countries such as Papua New Guinea, the Philippines, and Vanuatu² are using coconut oil for this purpose. Engineers from these countries have made an effective biofuel out of coconut oil and alcohol. The fuel can power cars, trucks, ships, and even electric-power plants. In addition, the South Pacific islands of Tokelau³ are using coconut oil along with solar energy as their primary energy source. The two together can produce 100 percent of the electricity the islands need.

Students at Baylor University in Texas received a grant to study the coconut husk. One useful feature of the fibers of the husk is that they can take in water very well. Mixing coconut husks with dry soil helps the soil to hold onto more of the water. The students are also finding that the fibers can replace plastic in some cases. For example, the students are looking into using coconut husk fibers instead of plastic in parts of car interiors. If this is possible, it will help to make vehicles more environmentally friendly.

The husk of the coconut is a perfect package. It protects the coconut from damage. When the coconut falls on the ground or into water, the husk protects it. Its strong husk is the reason the U.S. Postal Service allows people to send the coconut without any extra packaging anywhere in the country. All that is necessary is to stick some stamps right onto the coconut. Each year, tourists on the Hawaiian island of Molokai post about 3,000 of these "coconut postcards."

Coconuts grow naturally in over 80 countries of the world. They require only sun and regular rainfall. No extra care is needed. Every year, these 80 countries produce more than 61 million tons of coconuts. It is not surprising, then, that people want to find multiple uses for the coconut. Because they're an easy-to-grow resource, coconuts really are more than just great souvenirs to bring home after a trip to the tropics.

² *Papua New Guinea, the Philippines, and Vanuatu:* island nations or independent states in the South Pacific

³ *Tokelau:* a territory of New Zealand that consists of three islands

READING COMPREHENSION

Big Picture

A The following statements are the main ideas of some of the paragraphs in Reading 2. Write the correct paragraph number next to its main idea.

- ___ 1. The coconut husk protects the coconut.
- ___ 2. The coconut can be used as an alternative energy source.
- ___ 3. The coconut has many different uses.
- ___ 4. Students are exploring different uses for the coconut husk.

B Every author has a purpose for writing a text. Read the list below. Check (✓) the author's purpose for writing Reading 2.

- ___ 1. To persuade people to grow more coconuts
- ___ 2. To show how valuable and useful the coconut is
- ___ 3. To give people ideas for alternative sources of energy

Close-Up

A Complete the chart below by listing all the past and current uses of the parts of the coconut mentioned in Reading 2.

	Uses
coconut oil	
coconut milk and meat	
coconut husks	
the whole coconut	

money

B Compare answers to Exercise A with a partner. For each part of the coconut, choose what you think is its most important use and least important use. Give reasons for your choices.

Reading Skill

Scanning for Specific Information

After reading a text with a lot of factual information, it may be difficult to remember all of the details or facts. Readers often need to look through a text again to find answers to specific questions. Instead of rereading the whole text, readers should *scan* it to find specific information. When readers scan, they should do the following.

1. Decide on a key word or phrase to search for.
2. Find the part of the text with the information they need (for example, the correct paragraph).
3. Move their eyes quickly over the words until they find the key words or the information the key words refer to.
4. Stop and reread the information more slowly.

A Read the following questions. Focus on the key words in bold. Then quickly scan the paragraph below for the answers. Write short answers.

1. What are **electrolytes**? _____
2. When do people lose **electrolytes**? _____
3. What **kind** of coconut has a lot of electrolytes? _____
4. What other problems in addition to **dehydration** does loss of electrolytes cause?

5. What works in the same way as green coconut water? _____

Most people are familiar with the use of coconut oil in hair shampoo, but less well-known are some of the medical uses of coconuts. For example, the water from a young, or green, coconut is full of electrolytes, minerals in your blood that carry an electric charge. When athletes train, or anyone exercises hard, they sweat. When they sweat, they lose electrolytes. This can lead to dehydration, nausea, and even vomiting. Green coconut water is full of electrolytes. It is a natural solution for these problems. The electrolytes in the coconut water give people energy. Therefore, coconut water works in the same way as popular energy drinks.

B Read the following questions about Reading 2. Underline the key word(s) in each question. Then quickly scan the reading to find the answers. Write short answers.

1. How many years have people been using the coconut? _____
2. What feature of the husk makes it so useful to mix with soil? _____
3. Where is the coconut being used with solar energy? _____
4. Baylor University students are looking into using coconut husks for which part of the car?

5. In how many countries do coconuts grow naturally? _____

VOCABULARY PRACTICE

Academic Vocabulary

A Find the words in bold in Reading 2. Use the paragraph numbers to help you. Use the context to help you understand the meaning. Then match each word to the definition.

- | | |
|---------------------------------|---|
| ___ 1. energy (Par. 2) | a. the thing you want to achieve |
| ___ 2. purpose (Par. 2) | b. the most important or most depended on |
| ___ 3. primary (Par. 2) | c. something a country has and can use to increase its wealth |
| ___ 4. grant (Par. 3) | d. the power that makes machines work |
| ___ 5. vehicles (Par. 3) | e. money given to people to do something specific |
| ___ 6. resource (Par. 5) | f. machines that carry people or things |

B Read the following sentences and choose the best word or phrase to complete each one. The correct word often appears with the word in bold. Write the word on the line.

- The use of _____ **energy** in the future will help solve many environmental problems.
a. unnatural b. renewable c. white
- A team of researchers went to the South Pacific _____ **purpose** of studying wave energy.
a. for the b. out of the c. according to the
- Their **primary** _____ for changing from petroleum to solar power is that solar power is renewable and cheap.
a. tool b. need c. reason
- Many scientists and university professors _____ **grants** from the government or private industry to do their research.
a. make b. serve c. receive
- _____ **vehicles**—that is, vehicles with more than one passenger—can travel in the car-pool lane.
a. Human b. High-occupancy c. Travel
- Sunshine is a(n) _____ **resource**. There's always more, so that's why solar energy is a good solution to our energy problems.
a. renewable b. money c. original

Multiword Vocabulary

A Find the words in bold in Reading 2. Then write the words that come before and/or after them to complete the multiword vocabulary.

- | | |
|-----------------------------------|----------------------------------|
| 1. _____ stamp (Par. 1) | 4. hold _____ (Par. 3) |
| 2. in place _____ (Par. 1) | 5. in some _____ (Par. 3) |
| 3. along _____ (Par. 2) | 6. looking _____ (Par. 3) |

B Complete the following sentences with the correct multiword vocabulary from Exercise A. Use the words in parentheses to help you.

1. The price of a(n) _____ (a small piece of paper that shows you have paid to mail something) goes up all the time.
2. Students usually need four years to graduate, but _____ (sometimes) they can finish faster.
3. Hybrid cars use battery power _____ (in addition to) gasoline to power the car's engine.
4. The fastest solution is not always the best solution. Taking your time and _____ (exploring) all the possibilities is sometimes better than acting quickly.
5. People with certain illnesses are unable to _____ (keep) the nutrition they get from the food they eat.
6. Schools are trying to get children to eat nutritious snacks such as fruit and vegetables _____ (instead of) fattening foods such as cookies and chips.

Use the Vocabulary

Write answers to the following questions. Use the words in bold in your answers. Then share your answers with a partner.

1. Think of a country that you know well. What natural **resources** does it have and how are they used?
2. Do you know any people who **hold onto** old-fashioned or traditional ideas? Give examples of the ideas they are **holding onto**.
3. How many different career paths or college programs is it important to **look into** before choosing one?
4. If you needed to eat healthier food, what changes could you make in your life? What things could you eat **in place of** some of the things you usually eat now?
5. If you received a **grant** to study something, what would you study?
6. What do you think the future of the **postage stamp** will be now that most people communicate less and less by regular mail?
7. What do you think is the **primary purpose** of taking tests in English classes?

THINK AND DISCUSS

Work in a small group. Use the information in the reading and your own ideas to discuss the following questions.

1. **Apply knowledge.** What kinds of companies would be interested in giving students grant money to study coconut husks? Give reasons for your answers.
2. **Synthesize.** Why do you think small island nations in the South Pacific are among the first nations to become independent of petroleum? Are these island nations good models for other countries? Why, or why not?
3. **Analyze.** Why do you think some islanders used coconuts in place of money? What things do we use in place of money now?

Vocabulary Review

A Complete the paragraphs with the vocabulary below that you have studied in the unit.

along with
exploring the possibility
for the purpose of

in place of
not surprisingly
primary source

renewable energy
threw away

Many things that we eat can have other important uses. For example, some foods are used as fuel, ink, or medicine.

Corn. Corn can be made into ethanol. It can be used instead of gasoline in cars.

_____, many people think that using corn instead of gasoline is a good thing.

Corn is a _____ source that can last forever and help keep our planet clean.

Soybeans. Soy is a _____ of food for many people in many parts of the world. Soybeans can be used _____ making environmentally friendly ink. In the past, inks used for printing contained petroleum. This made ink expensive and dangerous for the environment when people _____ printed paper. Using soy

_____ petroleum is healthier for the environment and for the people who work with ink.

Chili Peppers. _____ adding flavor and nutrition to cuisines all over the world, peppers also play an important role in medicine. Capsaicin, a chemical in peppers, can help people who have pain on their skin, in their muscles, or in their joints. Researchers are also

_____ of using capsaicin in weight reduction.

B Compare answers to Exercise A with a partner. Then discuss the following question.

Which use of food in Exercise A seems the most important? Why?

C Complete the following sentences in a way that shows that you understand the meaning of the words in bold.

1. You can avoid having things **end up** as garbage if you _____.
2. In my life, nothing can **take the place of** _____.
3. An example of a **resource** that is not **renewable** is _____.
4. One advantage of having a **high-occupancy vehicle** is _____.

D Work with a partner and write four sentences that include any four of the vocabulary items below. You may use any verb tense and make nouns plural if you want.

a fire-resistant structure
hold onto

look into
a musical instrument

range from . . . to
receive a grant

Connect the Readings

A Look back at Readings 1 and 2 to complete the chart below. Put a check (✓) in the boxes to show which topics appeared in each reading. Note that some topics appeared in both readings.

	Reading 1	Reading 2
1. Fun uses for foods		
2. Artistic uses for foods		
3. Practical uses for foods		
4. Environmental uses for foods		

B With a partner or in a small group, compare answers to Exercise A. Then discuss the following questions.

1. What are some examples from the readings of each of the topics in Exercise A?
2. What are some examples of fun, artistic, practical, and environmental uses for foods that are not mentioned in the readings?

C Discuss the following questions with a partner. Use your understanding of the readings and your own ideas.

1. Which ten foods do you think it would be most difficult for humans to live without? Explain your answer.
2. What is another food that has many different uses?
3. What are some other natural, non-food materials that have many different uses?