



Pre-Reading

Think about the following questions.

1. Describe a traditional home in your country.
2. What type of home do you live in?
3. What's special about your home?

Vocabulary Preview

Write the letter of the word or phrase with the same meaning as the underlined word or phrase.

- | | |
|-----------------------------|--|
| a. aspect; characteristic | d. electrical equipment in a house |
| b. make; produce | e. is in the direction of; looks toward |
| c. put into an ordered pile | f. things like wood, water, minerals, etc. |

1. ___ Please stack those old newspapers over there next to the door.
2. ___ People in Europe quickly realized that the Americas were rich in natural resources.
3. ___ The large window in our living room faces the backyard.
4. ___ The newly married couple needs many appliances for their new house.
5. ___ Special panels on the roof collect heat from the sun to generate electricity.
6. ___ One nice feature of this house is the high ceiling in the living room.

Naturally Better Homes



In the 1970s, many people became concerned about energy. People had to face up to the fact that they used too much energy, and energy sources were not going to last forever. One **architect**, Michael Reynolds, decided to do something. He set out to design homes that were cheaper to build and more energy efficient. In addition, he wanted to do something about all the garbage. Finally, he came up with the idea of “earthships.”

Although it sounds like a boat, an earthship is a house. However, unlike regular houses, earthships are constructed from garbage and are built using only ten percent of the energy needed to build a typical house. Moreover, after they are built, earthships use only ten percent of the energy required to heat, light, and cool a regular home. Although earthships sound unique, they can actually be built to look just like any other house.

One of the big benefits of earthships is that they are made from recycled materials. The main construction material of an earthship is used **tires** that are filled with dirt. The dirt-filled tires are then laid flat and stacked like bricks. Because the tires are round, there is lots of extra space between the **columns** of tires. These spaces are filled with used cardboard. The tires and cardboard form the outside walls of an earthship. The inside walls between rooms in the earthship do not need to be as strong as the outside walls; therefore, the inside walls are made with old cans, bottles, and cement that are eventually covered and painted to look just like walls in a typical home.

Another benefit of an earthship is that it saves energy and natural resources. For example, an earthship uses less water. Rain water, which is collected on the roof, is used for drinking and bathing. Furthermore, earthships need much less energy for heating and cooling because they are built into the ground, which keeps the temperature inside the house from getting too hot or too cold. In the long run, this helps earthship owners lower their **utility bills**. As well, one wall of an earthship usually faces south. Therefore, **solar** heat helps to warm the house, and solar **panels** built on the roof generate electricity to run appliances in the house.

All of these features make earthships very environmentally friendly. That’s one of the reasons they have become popular throughout the world. Earthships have been built in Bolivia, Australia, Mexico, Japan, Canada, England, Scotland, and all over the US. Maybe in the near future, an earthship will be landing near you!



Reading Time _____ minutes _____ seconds

433 words

3 *architect*: a person who designs buildings

13 *tire*: a rubber wheel

15 *column*: a tall, thick support post

25 *utility bill*: a statement for the monthly cost of electricity, gas, water, etc.

26 *solar*: of or from the sun

27 *panel*: a rectangular board or section

Choose the best answer.

1. What is the main idea of this reading?
 - a. Environmentalists are concerned about energy.
 - b. Earthships are in many different countries.
 - c. Earthships look like typical houses.
 - d. Earthships are environmentally friendly homes.
2. What is the main building material of earthships?
 - a. Used tires
 - b. Used cardboard
 - c. Old cans and bottles
 - d. Cement
3. Why do earthships need less energy to heat and cool them?
 - a. They are more energy efficient.
 - b. They recycle water.
 - c. They are built into the ground.
 - d. They are typically very small.
4. In an earthship, old boxes would be used to _____.
 - a. recycle water
 - b. build inside walls
 - c. create fertilizer
 - d. fill outside walls
5. What does "environmentally friendly" mean?
 - a. Good for the environment
 - b. Bad for the environment
 - c. Made from natural products
 - d. Found throughout the environment

Idiomatic Expressions

Find these idioms in the reading.

- **face up to** [to acknowledge; to admit that something exists or is true]
He had to **face up to** the fact that he was going to fail.
- **come up with** [to produce or create]
Julia **came up with** a great solution to the problem.
- **in the long run** [finally; in the end]
Fast food may be cheap and taste good, but it is very bad for you **in the long run**.

Fill in the blank with one of the above idioms. Change its form if necessary.

1. As the old saying goes, it is better, _____, to be safe than sorry.
2. You have to _____ your problems now so that they won't get worse.
3. We have to _____ some ideas for the party.

Summary

Fill in the blanks with the correct words.

collect
resources

concerned
stacking

environmentally
tires

generate
typical

A man who was 1 _____ about the environment came up with the idea of earthships. An earthship is a special kind of house that is 2 _____ friendly. On the outside, an earthship looks like a(n) 3 _____ house. However, the outside walls are made by 4 _____ old tires and putting cardboard between the 5 _____. Other nice features of an earthship include solar panels that 6 _____ electricity and tanks that 7 _____ rain water on the roof. Earthships not only help us recycle waste, but they help save natural 8 _____ in the long run.



Listening

Lots of Advantages



Listen to the dialog and choose the best answer.

1. Where is the woman going?
 - a. Bulgaria
 - b. Belgium
 - c. Namibia
 - d. Bolivia
2. What is probably true about the place where she is going?
 - a. It doesn't have utility services.
 - b. It has beautiful scenery.
 - c. It is in a jungle.
 - d. It is a rich area.
3. What other point does the woman mention about earthships?
 - a. Famous people who own them
 - b. The number of rooms they have
 - c. Styles they are built in
 - d. Things that can't destroy them

Discuss the following questions.

1. Would you like to live in an earthship?
2. Are there any earthships in your country? Do you think they could become popular?
3. What do you do to be environmentally friendly?

Grammar

Relative Clauses: Defining or Non-Defining?

A defining relative clause comes immediately after what is defined, while a non-defining relative clause is separated from the main clause by a comma. *That* is not used as a non-defining relative pronoun.

Michael Reynolds set out to design homes (who / that) were cheaper to build and more energy efficient.

Earthships need much less energy for heating and cooling because they are built into the ground, (that / which) keeps the temperature inside the house from getting too hot or too cold.

Writing

Write your own short paragraph by answering the questions below.

Helping the Environment

- (1) What do you do to be environmentally friendly?
 (2) When or how often do you do this? (3) How long have you been doing this? (4) Why did you start doing this? (5) How does this help the environment?

Example

To be environmentally friendly, I turn off the water while I am brushing my teeth. I do this every morning and every evening when I brush my teeth. I have been doing this since high school. I started doing this because someone suggested that I do it. This saves water.

Vocabulary and Idiom Review

A. Choose the best word or phrase to fill in the blank.

1. It is important to try to conserve natural _____ like water.
a. energy b. concerns c. features d. resources
2. The children _____ a long wall on the beach out of sand.
a. generated b. constructed c. stacked d. warned
3. The window next to my office _____ the parking lot.
a. faces b. features c. faces up to d. lasts
4. I know you are _____, but there is really nothing to worry about.
a. generated b. concerned c. typical d. striking
5. He needs to _____ the fact that he is not doing well in school.
a. concern b. face up to c. pass down d. come up with
6. Including the stove, she has five _____ in her kitchen.
a. boxes b. panels c. utilities d. appliances
7. Because we live in a cold country, our _____ bills are higher in winter.
a. solar b. appliance c. speculated d. utility

B. Choose the correct form of the word to fill in the blank.

8. Solar panels can _____ a lot of power.
a. generator b. generate c. generation
9. _____, you can save up to ninety percent of your energy costs.
a. Typical b. Typically c. Atypical
10. This is the report _____ the new house design.
a. concern b. concerned c. concerning