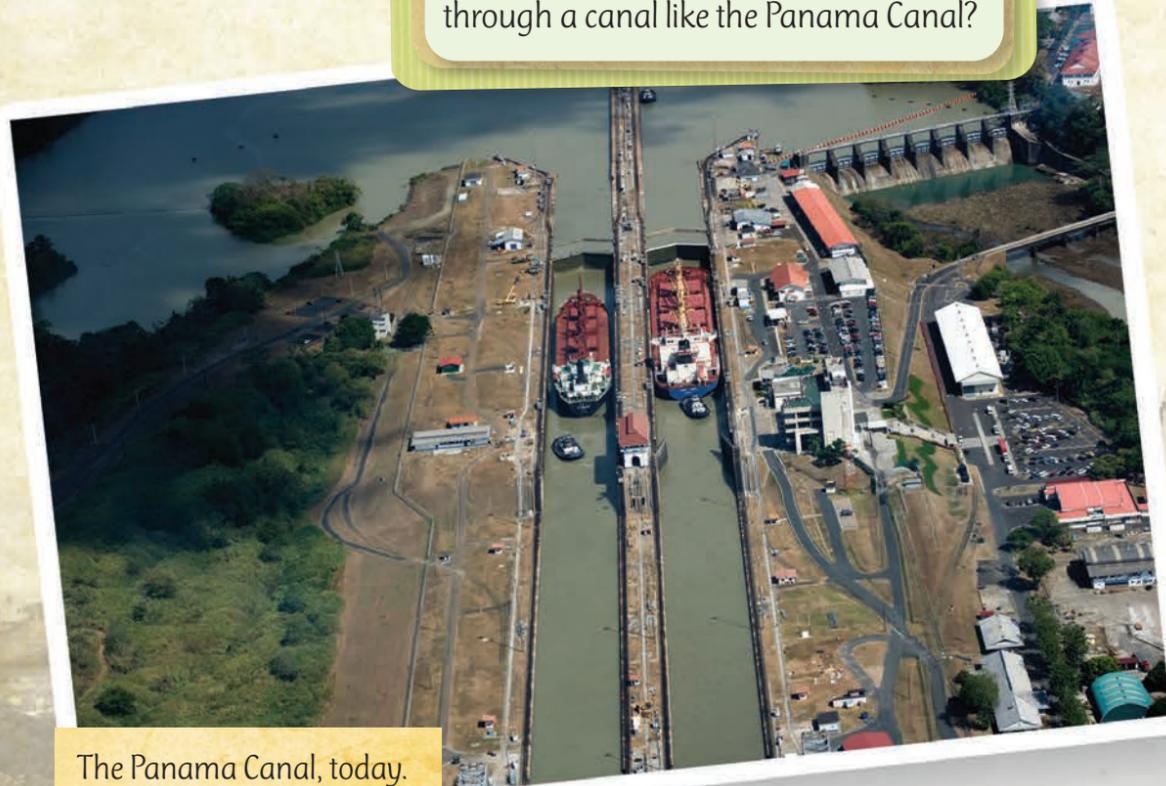


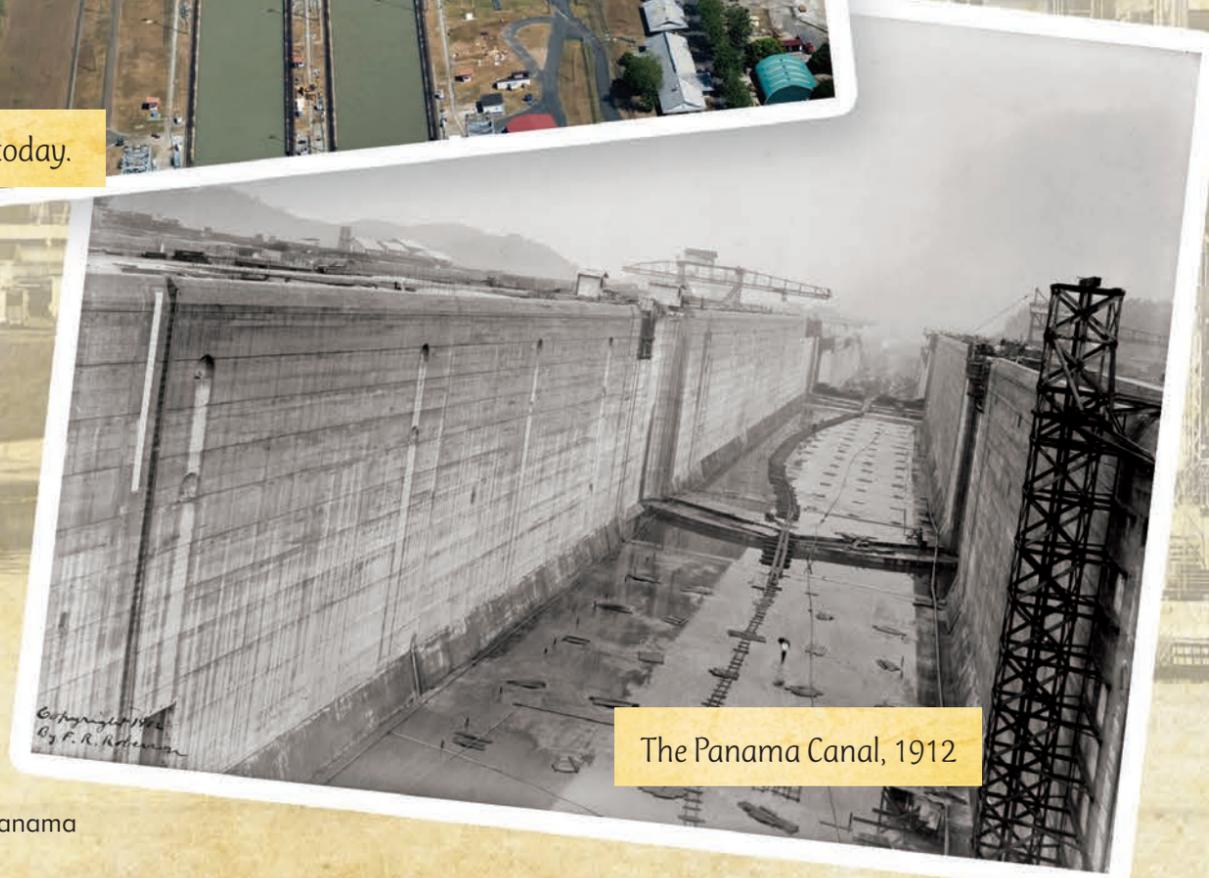
Before You Read

How do ships get from the Atlantic Ocean to the Pacific Ocean?

What are the advantages of navigating through a canal like the Panama Canal?



The Panama Canal, today.



The Panama Canal, 1912

The Panama Canal

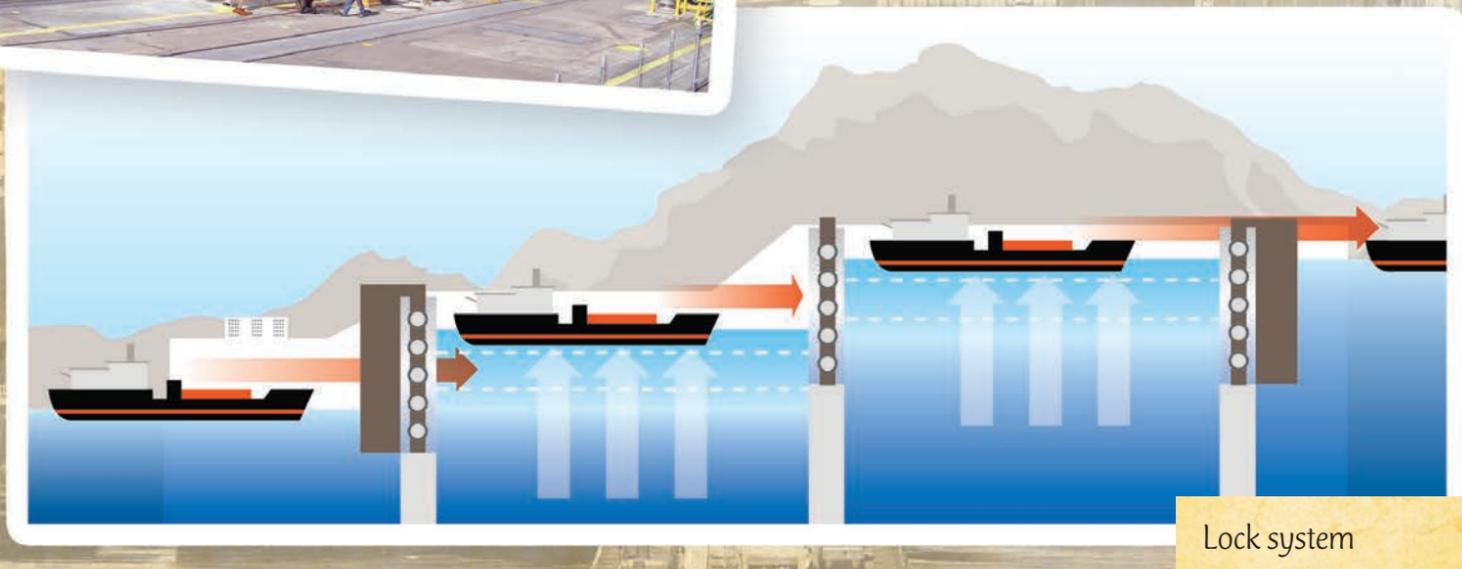
Judy Cortés
Informational Text

- 1 Every year, thousands of **cargo** and **passenger** ships **navigate** through the Panama Canal. The Canal connects two oceans, the Pacific and the Atlantic.
- 2 Panama is located in Central America along with Belize, Guatemala, Honduras, El Salvador, Nicaragua, and Costa Rica. It has a **close relationship** with the United States. The U.S. finished building the Canal in 1914. They **managed** it until December 31, 1999. Panama is now in charge of the Canal.
- 3 Ships from all over the world pass through the Canal. It saves them from having to navigate all the way around South America. The trip through the Canal is much shorter and much quicker!
- 4 The Canal is open 24 hours a day, every day of the week. About 9,000 people work there.



- 5 The Canal uses a lock system. The locks have entrance and exit gates that allow ships to pass from one side to the other.
- 6 Locks are like water **elevators**. The boats are raised and lowered from sea level to the water level at Lake Gatun.
- 7 The Panama Canal is a very important invention for **navigators**. But some boats are too big to pass through the Canal. The Panamanian government is working to make the Canal bigger.

8 In the future, more ships will be able to pass through the Panama Canal.



Reading Comprehension

1. Which two oceans does the Panama Canal connect?
 - a. the Atlantic and the Pacific
 - b. the Pacific and the Indian Ocean
 - c. the Atlantic and the Indian Ocean
2. Why do ships go through the Canal?
 - a. to get to the United States
 - b. because they are navigating around South America
 - c. because it's a shorter and quicker trip
3. About how many people work at the Canal?
 - a. 1,914
 - b. 1,999
 - c. 9,000
4. On which days is the Canal open?
 - a. every day
 - b. Monday to Friday
 - c. Saturdays and Sundays
5. How do ships get from one side to the other?
 - a. by a cargo loading system
 - b. through a lock system
 - c. using a passenger system

Pair and Share

Why will more ships be able to pass through the Canal in the future?

Say It

Remember that some **letters** sometimes have the same sound.

➤ **c** = Canal ➤ **k** = like

1. Complete the words with c or k.

- a. la e
- b. Atlanti
- c. wee
- d. argo

Conjunctions are words that connect two words or phrases in a sentence; for example: **and, but.**

2. Use a conjunction to complete each sentence.

- a. Big small ships use the Panama Canal.
- b. The Canal is big, it needs to be bigger.
- c. Ships enter from the Atlantic exit into the Pacific.

3. Find the words in the text that mean the same as the words below. The numbers tell you the paragraph where you can find the word.

- a. travelers (1)
- b. devices that go up and down (6)
- c. people who move ships on water (7)

4. Use the words from the last activity to complete each sentence.

- a. Some ships are too big for to pass through the Canal.
- b. The that help ships move up and down are known as locks.
- c. enjoy their trip.

Write It

We use **subject pronouns** to name people, animals, and objects without using nouns. The subject pronouns we use are: I, you, he, she, it, we, they.

➤ **The boy** jumps. **He** jumps.
noun: The boy **pronoun:** He

1. Identify the subject pronouns in the following sentences.

- a. She wants to travel through the Panama Canal.
- b. I want to travel with her.
- c. We passed through the Canal.

2. Identify the correct subject pronouns.

- a. Tomorrow, the ship (I/it) will navigate on the ocean.
- b. The ship (it/we) passed through the Canal last week.
- c. In the future, (you/it) will work at the Canal.

Your Turn to Write

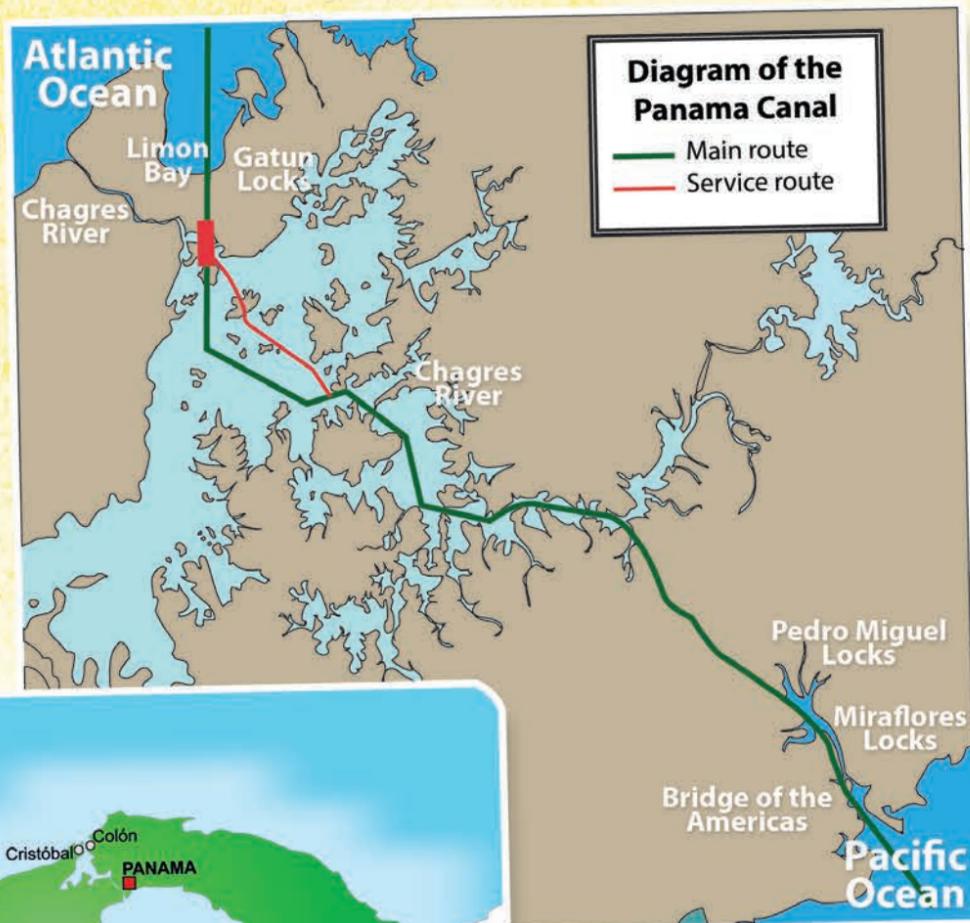
- Where would you like to go by ship? Why? Write three sentences.

Before You Read

What do you know about the Panama Canal?

When was it built?

Who built it?



The History of the Panama Canal

Judy Cortés
Informational Text

- 1 Long ago, **merchants** began **trading** with faraway countries and they looked for shorter **routes** to get to those countries.
- 2 Christopher Columbus reached America when he was trying to find a shorter route between Europe and the Indies.
- 3 Since the arrival of the first Spaniards in America, finding a short route between the Atlantic and Pacific became the dream of governments and sailors. Many of them thought the **Isthmus** of Panama would be the best place.



Vasco Núñez de Balboa crosses Panama and discovers the Pacific Ocean.

European Routes

- 4 In 1514, the Spanish conquistador Vasco Núñez de Balboa found a route that led his ships from the Atlantic coast of Panama to the **Bay** of San Miguel on the Pacific. However, they were unable to complete the trip **due to** poor conditions.
- 5 Spanish explorer and ship captain, Antonio Tello de Guzmán, found a better way to cross the isthmus using old roads made by indigenous peoples.
- 6 Scotland later tried to build a canal, but the project **failed** due to poor planning and local diseases.

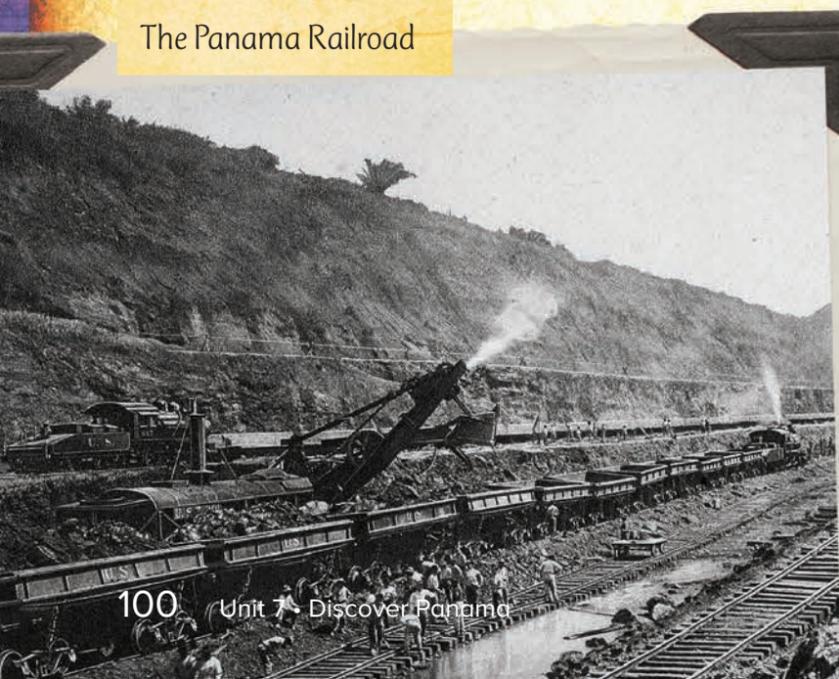
The Railroad

- 7 In 1848, the California Gold Rush began. At the time, there was no transcontinental railroad to connect the east and west coasts of the United States. Therefore, the only way to travel by ship from New York to California was to **sail** all the way around South America. The trip took many months.



Vasco Núñez de Balboa

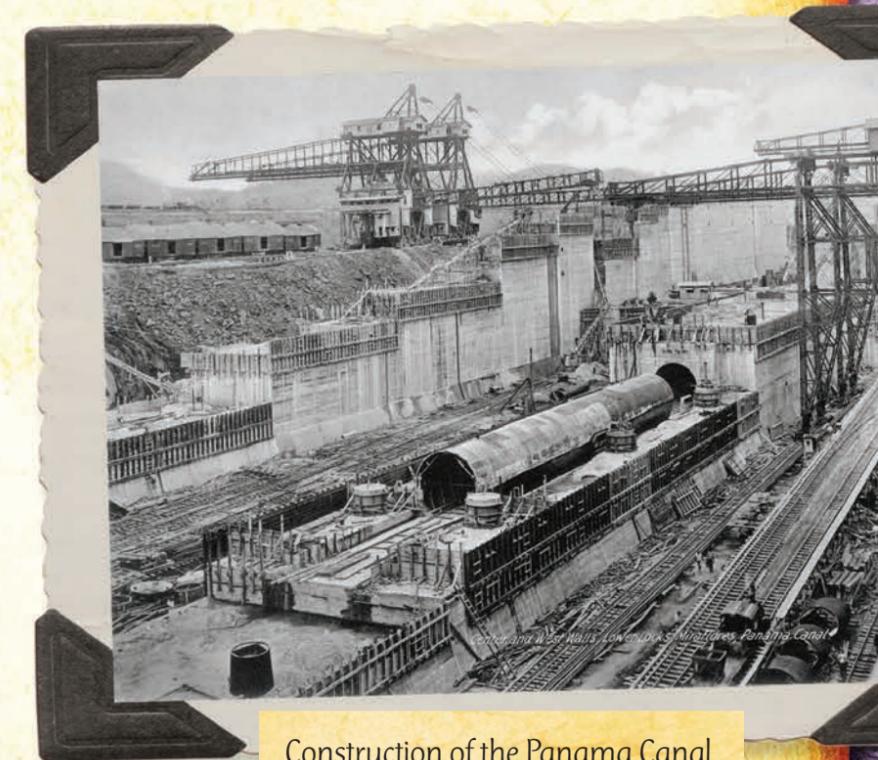
The Panama Railroad



- 8 The California Gold Rush forced the government to find faster ways to cross the Isthmus of Panama. Since building a canal was difficult, they decided to build a railroad.
- 9 The Panama Railroad was built between 1850 and 1855. People from many countries took part in the process. At the time, the Panama Railroad was considered a **masterpiece** of **engineering**.
- 10 Before the Canal opened in 1914, the railroad that crossed the isthmus was the most active in the world. It was one of the main reasons why Panama was chosen for the canal.

Building the Panama Canal

- 11 In 1881, a French company tried to build a canal in Panama, but they failed due to lack of funding and support. Years later, the French sold their rights to build the Canal to the United States.
- 12 The first **excavations** for the new canal began in 1904. It was a complicated job due to the risks involved in digging and relocating soil in the area. State of the art technology and equipment from that time made construction work easier.



Construction of the Panama Canal

13 The construction of the Panama Canal is one of modern engineering's greatest **achievements**. It required moving large amounts of soil. If we poured all the soil that was removed during construction into railroad **cars**, there would be enough cars to go around the world four times.

14 The Canal is 80 kilometers long from the Atlantic Ocean to the Pacific. That's like taking an hour-long car trip. The Canal has two ports, one on each ocean.

15 The first trip across the Canal was completed on January 7, 1914, by the **floating crane** Alexandre La Valley. However, it was not until August 15, 1914, that the **steamboat** Ancon officially **inaugurated** the Panama Canal.



Reading Comprehension

1. What were merchants trying to find for a long time?
 - a. dangerous navigation routes
 - b. shorter routes between countries
 - c. longer routes
2. Where did Europeans decide to establish a route between the Atlantic and the Pacific?
 - a. the Isthmus of Panama
 - b. South America
 - c. California
3. What was built between 1850 and 1855 as a way of crossing the Isthmus of Panama?
 - a. a dirt road
 - b. a canal
 - c. a railroad
4. Which country built the Panama Canal in the end?
 - a. Panama
 - b. the United States
 - c. France
5. When was the Canal officially inaugurated?
 - a. in 1904
 - b. in 1914
 - c. in 1850

Pair and Share

Why do you think the Panama Canal is important?

Say It

Many English words have letters that are not pronounced. The **letter h** and the **letter e** are examples of silent letters.

- **h**onest **mech**anic **w**hile
- **m**ake **t**ime **br**idge

1. Can you find words with silent letters in the text?

Homophones are words that sound the same but have different spellings and mean different things. Use the context of the sentence to understand what the word means.

- Which **pair** of shoes do you want? (pair: two things used together or thought of as a unit)
- Which **pear** do you want to eat? (pear: a fruit)

2. Choose the correct word.

- a. (Our/Hour) house is on a cliff. c. What is your (roll/role) in the play?
- b. I will see you in an (our/hour). d. We need to (roll/role) up these mats.

3. Find the words in the text that mean the same as the words below. The numbers tell you the paragraph where you can find the word.

- a. an inlet from the sea into the land (4) c. making holes in the earth (12)
- b. had a bad result (6) d. success (13)

4. Use the words from the last activity to complete each sentence.

- a. The race winners enjoyed their .
- b. It took many to build the Canal.
- c. The project due to poor planning.
- d. The water in the is calm.

Write It

We double the consonants **f**, **l**, and **s** at the end of a one-syllable word that has just one vowel (*stiff, spell, pass*).

1. Identify the correct words.

- a. stuf / stuff c. fill / fil
- b. miss / mis d. hil / hill

We use **adverbs** to add more information about a verb, an adjective, another adverb, a clause, or a whole sentence. Some examples are:

- adverbs of time: **before, after, later**
After lunch, I will go back to class.
- adverbs of manner: **slowly, well, bad**
She did the job **well**.

2. Identify the adverbs.

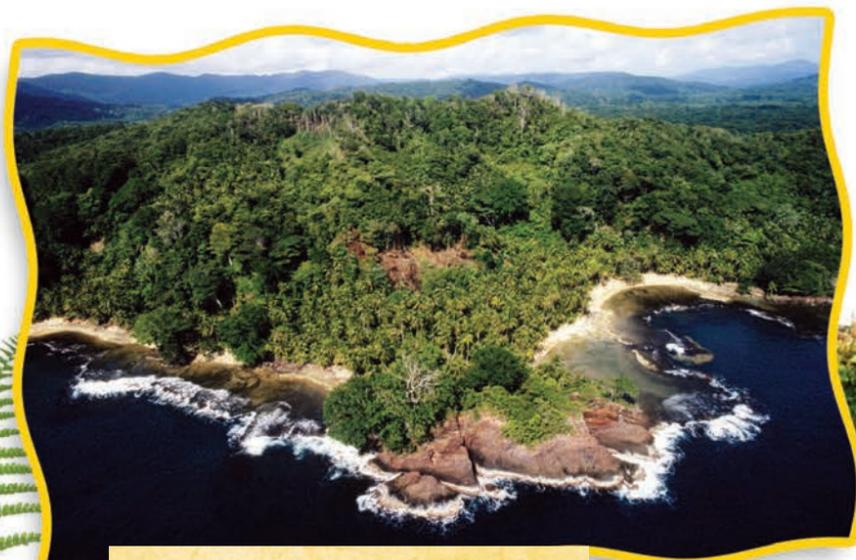
- a. They built a railroad before building the Canal.
- b. To build the Canal, they removed the soil after they excavated.
- c. Ships move slowly through the Canal.

Your Turn to Write

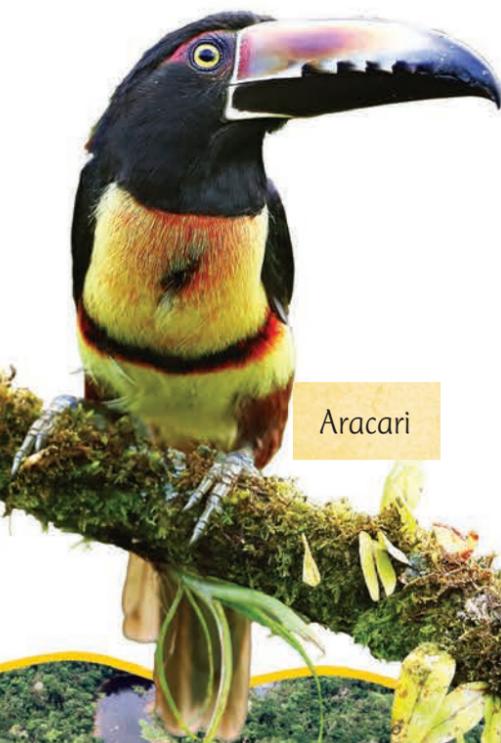
- Think of a work of engineering in your community. What is it like? How was it built? How does it help people? Write three sentences.

Before You Read

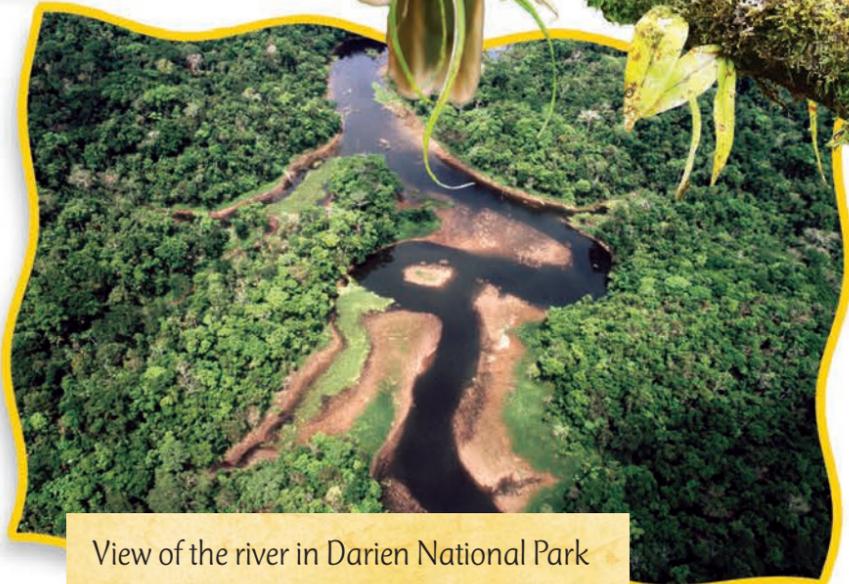
Why are rainforests important to humans?
What kind of animals live in a rainforest?
If you wanted to work in a rainforest, what kind of job would you do?



Kuna Yala, in the San Blas region



Aracari



View of the river in Darien National Park

Panama's Rainforest

Judy Cortés
Informational Text

- 1 Can you imagine “flying” over the rainforest **canopy**, feeling the fresh, humid air on your face, and seeing strange wild animals? Today, this is possible thanks to technology and the skills of tour guides in Panama. In the past, only a few people were able to see the **treasures** of the Panamanian rainforest because it was difficult to reach. But now, people like you and me can observe unique plant and animal **species**.
- 2 Panama is located in southeastern Central America. It is surrounded by Costa Rica, Colombia, the Caribbean Sea, and the Pacific Ocean. Panama is an isthmus, which means it is a thin and short strip of land that connects two continents: Central America and South America. Panama is slightly smaller than South Carolina.



Oropendola



What Is a Rainforest?

- 3 A rainforest is a forest that can only be found close to the equator. The equator is an imaginary line that goes around Earth and divides it into two sections: the northern hemisphere and the southern hemisphere.
- 4 Countries like Panama that are close to the equator do not have seasons. They have year-round rain and sunshine.
- 5 This combination of water and sun helps plants, especially rainforest trees, grow very tall. The canopy can reach a height of 150 feet. This is more or less equivalent to a building that is 10 to 12 stories high.

Panama's Rainforest

- 6 Panama's rainforest is home to animal species that only exist in this region of the world, such as the "golden frog" (which according to folklore brings good luck), and the mantled howler monkey (that howls so loud it can be heard miles away). The diversity of rainforest "flora and fauna," or plants and animals, is impressive. There are 1,400 different species of trees, including the famous "square tree." This tree has a square-shaped trunk and the rings inside the trunk are also squared.



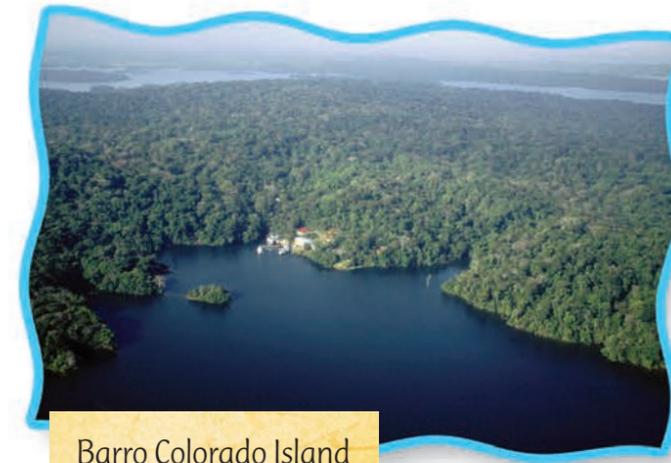
Rainforest



Golden frog

Barro Colorado Island and the STRI

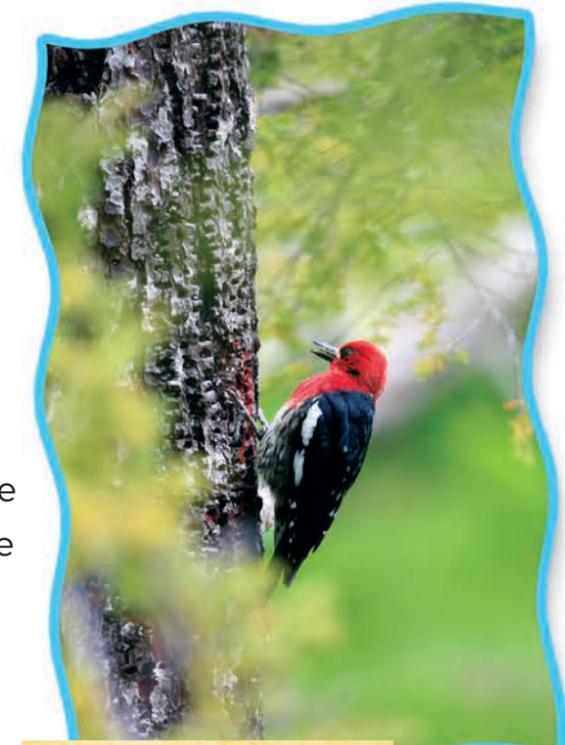
- 7 Barro Colorado Island was formed during the construction of the Panama Canal. In 1923, it was declared one of the most important biological reserves of the Americas.
- 8 During the construction of the Canal, scientists from the Smithsonian Institute came to the area to study fauna and flora. After many years of research, the "Smithsonian Tropical Research Institute," (STRI) was founded and has since been dedicated to preserving Panamanian rainforests.
- 9 The STRI also offers ecotourism opportunities for visitors. For example, you can see the famous Espave tree, which can pump up to 54 kg of water from the ground to its leaves every day. This is equivalent to 1,800 glasses of water per day!



Barro Colorado Island

Soberanía National Park

- 10 Another national ecological reserve is known as the Soberanía National Park. It is located near the banks of the Panama Canal and has a surface area of 22,104 hectares, which is 69 times the size of New York's Central Park.
- 11 This park is home to over 1,300 types of plants and close to 100 animal species, including the yellow-eared toucanet, the red-breasted woodpecker, and the rare harpy eagle.



Red-breasted woodpecker

Anton Valley

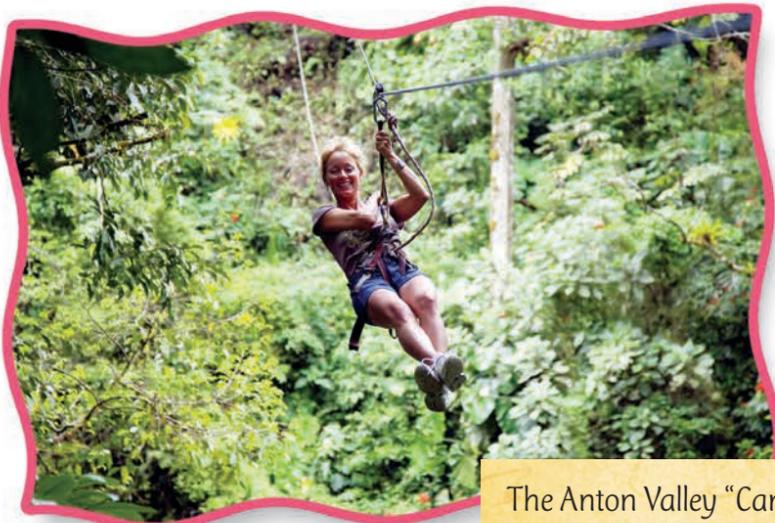
12 If you want an aerial view of the rainforest, you should visit Anton Valley. The Valley is hidden away in the mountains of Panama, inside the largest populated **crater** in the world. It is home to approximately 6,000 people.

13 The forest in Anton Valley is the only place in the world where you will find square trees and golden frogs.

14 The best ecotourism experience you can find in the Anton Valley is a “canopy tour.” Tourists are taken up a mountain to **platforms** that are suspended in the air. These platforms are held together by strong steel cables.

15 Tour guides ensure that tourists are securely harnessed to a cable using heavy duty **straps**. Then, tourists glide from platform to platform, which allows them to see the wonders of the rainforest from the tops of trees.

16 Thanks to new technology and the work of tour guides, people can enjoy a unique view of the rainforest.



The Anton Valley “Canopy tour”

Reading Comprehension

1. What can you see in Panama’s rainforest?
 - a. technology and tour guides
 - b. unique animals and plants
 - c. the equator
2. Why do trees in the rainforest grow so tall?
 - a. because they are 10 to 12 stories high
 - b. because there are no seasons
 - c. because they get year-round sun and water
3. Golden frogs ...
 - a. bring good luck.
 - b. are very loud.
 - c. are square-shaped.
4. What do Smithsonian Institute scientists study?
 - a. Barro Colorado Island
 - b. fauna and flora of the Canal
 - c. the construction of the Canal
5. Where do the people of Anton Valley live?
 - a. in the crater of a mountain
 - b. on platforms suspended in the air
 - c. on a “canopy tour”

Pair and Share

Why is it important to preserve the rainforest?

How do tour guides help in the preservation of the rainforest?

Say It

Some syllables in English words are stronger than others. The emphasis on one syllable is called **word stress**. Below are some words where the first syllable is stressed.

➤ **fin**-ger ➤ **pho**-to-graph ➤ **par**-ent

1. Divide these words into syllables. Then identify which have the stress on the first syllable.

- | | | |
|------------|--------------|-----------------|
| a. equator | c. suspended | e. crater |
| b. forests | d. during | f. construction |

Antonyms are words with opposite meanings.

➤ fast / slow ➤ before / after

2. Choose an antonym for each word.

far

worse

outside

- | | | |
|------------|-------------|-------------|
| a. close / | b. inside / | c. better / |
|------------|-------------|-------------|

3. Find the words in the text that mean the same as the words or phrases below. The numbers tell you the paragraph where you can find the word.

- a. how tall something is (5)
- b. kilograms (9)
- c. a hole at the top of a mountain (12)

4. Use the words from the last activity to complete each sentence.

- a. _____ is measured in feet.
- b. The symbol for kilogram is _____.
- c. The valley is in a _____ in the mountain.

Write It

Capital letters are used when writing names of people, countries, continents, places, oceans, and cities.

➤ **M**exico, **A**merica, **S**oberanía **N**ational **P**ark, **A**tlantic, **M**adrid

1. Correct the following sentences:

- a. Panama is surrounded by the caribbean sea and the pacific ocean.
- b. Panama is in central america.
- c. The panama canal was built 100 years ago.
- d. The anton valley is inside a crater at the top of a mountain.

Verbs are words that express actions. The way a verb is written (sometimes with a helping verb) indicates when the action takes place: in the **past**, **present**, or **future**.

- **past** (before now): Very few people **visited** the jungle.
- **present** (now): Today, many people **visit** the jungle.
- **future** (after now): In 10 years, more people **will visit** the jungle.

2. Identify the verb and its helping verb (when applicable).

- a. The national park has a surface area of 22,104 hectares.
- b. The Espave tree pumps water from the gorund to its leaves.
- c. People will climb the mountain.
- d. Tourists enjoyed the aerial views.

3. Write when the action takes place: past, present, or future.

- a. The water and sun are helping the trees.
- b. The tourists heard the monkey's call.
- c. I will visit Anton Valley on my next summer vacation.

Your Turn to Write

- What part of Panama's rainforest would you like to visit? What will you do there? Write three sentences.