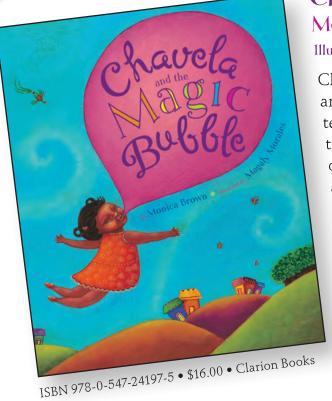
niscussion Guide



Chavela and the Magic Bubble Monica Brown

Illustrated by Magaly Morales

Chavela loves chomping **chicle**—chewing gum—and blowing beautiful bubbles. Her grandmother tells her wonderful stories of the **chicleros** who tend the sapodilla trees deep in the rainforests of Mexico and of the magical tree that produces a very special **chicle**. Soon Chavela is flying through the air, carried aloft by the magic **chicle** bubble. She travels all the way to the rainforests of the Yucatan to see the sapodilla trees and **chicleros** for herself.

Monica Brown's magical text and Magaly Morales's candy-colored paintings combine to create a fantastical story about a young girl connecting with the beauty of the rainforest as well as with her own Latin American heritage.

Before Reading

Brainstorm a list of all of the things that trees can give us and then read the short passage about the sapodilla tree found on the sapodilla tree worksheet (guide page 3). Chart all of the things that come from the sapodilla tree.

After Reading

- * Chavela's gum magically transports her back to a time when her grandmother was a young girl living in Mexico and playing near where the *chicleros* harvested the chicle from the sapodilla trees. If you were transported to the time when your grandmother was your age, what might you see? What would be the same? What would be different?
- The sapodilla trees can be found in the rainforests of Mexico and throughout Central America. The *chicleros* work to use the gifts of the sapodilla trees without destroying them. This approach to harvesting is not used by all who want the treasures of the rainforest. Research how farming has affected the rainforest and what you could do to help preserve this important habitat. Study the Rainforest Facts sheet and take the Rainforest Quiz (guide pages 4 and 5).
- The Author's Note at the end of *Chavela and the Magic Bubble* gives the words and music for a Latin American folk song called "*Tengo una muñeca*/I Have a Doll." Teach the song to your students. Perform it, along with a reading of the book, for parents or other classes as part of a Latin American cultural festival.

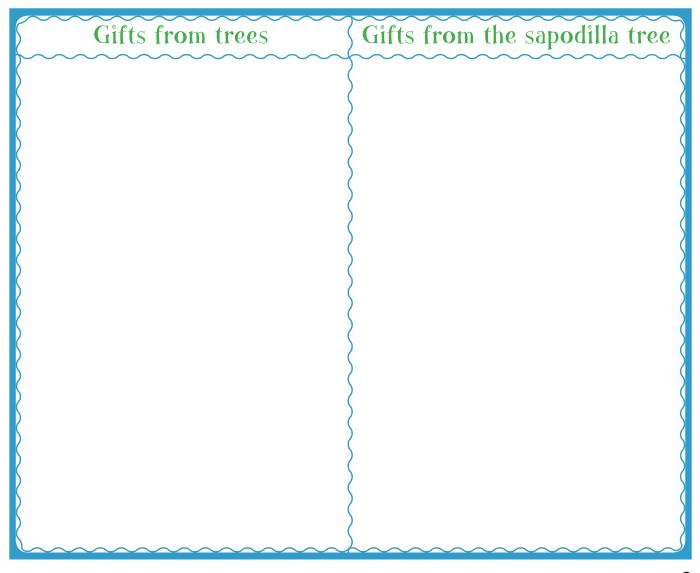
- * Chavela was talented at blowing bubbles in all sorts of shapes, from pink balloons to butterflies. Imagine that you could blow a bubble into any shape you wished. Think of rich, descriptive words to describe the shape that you would create with your gum. Use these words to create a concrete poem. A concrete poem is a poem where the words are arranged in the shape of the object the poem describes.
- ★ With parent and teacher permission, take a break from the school rules and chew gum in class! Chavela liked rainbow-colored gum, sour cherry balls, and many other types of gum. Conduct a taste test experiment to see which type of gum has flavor that lasts the longest. Write a prediction and then chew a variety of types of gum to discover which stays the most flavorful for the longest period of time.
- ★ Using the gum wrappers from the gum taste test, create a picture graph as a class to show which flavors were the favorite of each student. Create a graph on a sheet of butcher paper with an X axis labeled with the names of the gums that were taste tested and a Y axis labeled with the number of students in the class. Have students glue the wrapper of their favorite flavor of gum above the name of the gum written along the X axis. Which was the most popular flavor? Which gum had the least votes?
- * Chavela's *abuelita* shows Chavela a new type of gum. Think of a new flavor of chewing gum. Create an advertisement to get people to want to try it and buy it. What would it taste like? Would it have any special qualities like Chavela's magic gum? What would you name your new brand of gum?
- Create a how-to book called *How to Blow a Bubble with Chewing Gum*. Label each step in order using words like "first" and "next." With permission, have a partner try to blow a bubble using your how-to book. See if your directions are clear or if more information needs to be added.
- Learn the difference between biodegradable products and those that end up in landfills. Do the "How Earth-Friendly Is Your Lunch?" assessment (guide page 6).
- To learn more about the chicle harvesting process and the importance of sustainable farming practices, visit the website of Glee Gum (www.gleegum.com), one of the few U.S. manufacturers of natural chewing gum. Review the section of the website that describes how chicle is harvested; find a link on the bottom of the home page called "Want to See the Process from Tree to Glee?" Have the children complete the "Harvesting Chicle" worksheet (guide page 7). Make chewing gum with the students by purchasing a "Make Your Own Chewing Gum Kit" on the website.

Morica Brown, Ph.D., is the author of several award-winning bilingual and multicultural books, including My Name Is Celia: The Life of Celia Cruz/Me llamo Celia: La vida de Celia Cruz, winner of the Américas Award for Children's Literature and a Pura Belpré Honor. She is a professor of English at Northern Arizona University, specializing in U.S. Latino literature and multicultural literature. She lives with her family in Flagstaff, Arizona. Learn more about her life and work at www.monicabrown.net.

Magaly Morales is the illustrator of A Piñata in a Pine Tree: A Latino Twelve Days of Christmas by Pat Mora and What Would You Do with a Paleta? by Carmen Tafolla. She lives in Mexico.

The Sapodilla Tree

The sapodilla tree is an evergreen tree that can be found in many places in the world but is native to Mexico and Central America. This tree has many gifts to offer people. The sapodilla tree bears fruit that tastes something like a pear and is used in desserts. The seeds from the fruit have been used to help children learn to count. In the past, parts of the tree were used for medicinal purposes in Mexico and Central America. The wood of the sapodilla tress is strong and has been used for many types of flooring and furniture. The supporting beams from Mayan temples were even made from sapodilla wood long ago. Probably the most popular gift from the sapodilla trees is harvested by the **chieleros** who cut zigzag lines in the trunks of the tree so that the sticky chicle can be gathered and used to help make chewing gum. As you can see, the sapodilla tree is rich with gifts for us to use.



Rainforest Facts





The sapodilla trees in Chavela and the Magic Bubble grow in the rainforests of Mexico's Yucatan peninsula. Study these rainforest facts from The Nature Conservancy, then take the Rainforest Quiz. For more facts, visit The Nature Conservancy website at www.nature.org/rainforests/explore/facts.html

Fact: Covering less than 2 percent of the earth's total surface area, the world's rainforests are home to 50 percent of the earth's plants and animals.

Fact: Rainforests are found on every continent across the earth except Antarctica.

Fact: There are two major types of rainforest: temperate rainforests and tropical rainforests.

Fact: The largest temperate rainforests are found on North America's Pacific Coast and stretch from Northern California up into Canada.

Fact: Temperate rainforests used to exist on almost every continent in the world, but today only 50 percent—75 million acres—of these forests remain worldwide.

plants, 750 species of trees, 400 species of birds, and 150 species of butterflies.

Fact: Rainforests provide many important products for people: timber, coffee, cocoa, and many medicinal products, including those used in the treatment of cancer.

Fact: Seventy percent of the plants identified by the U.S. National Cancer Institute as useful in the treatment of cancer are found only in rainforests.

Fact: Less than 1 percent of tropical rainforest species have been analyzed for their medicinal value.

Fact: Rainforests are threatened by unsustainable agricultural, ranching, mining, and logging practices.

Fact: Originally, 6 million square miles of tropical rainforest existed worldwide. But as a result of deforestation, only 2.6 million square miles remain.

Fact: At the current rate of tropical forest loss, 5–10 percent of tropical rainforest species will be lost per decade.

Fact: Every second, a slice of rainforest the size of a football field is mowed down. That's 86,400 football fields of rainforest per day, or over 31 million football fields of rainforest each year.

Fact: More than 56,000 square miles of natural forest are lost each year.

Rainforest Quiz

- 1. What popular products come from the rainforest?
 - a. Chewing gum
 - b. Light bulbs
 - c. Umbrellas

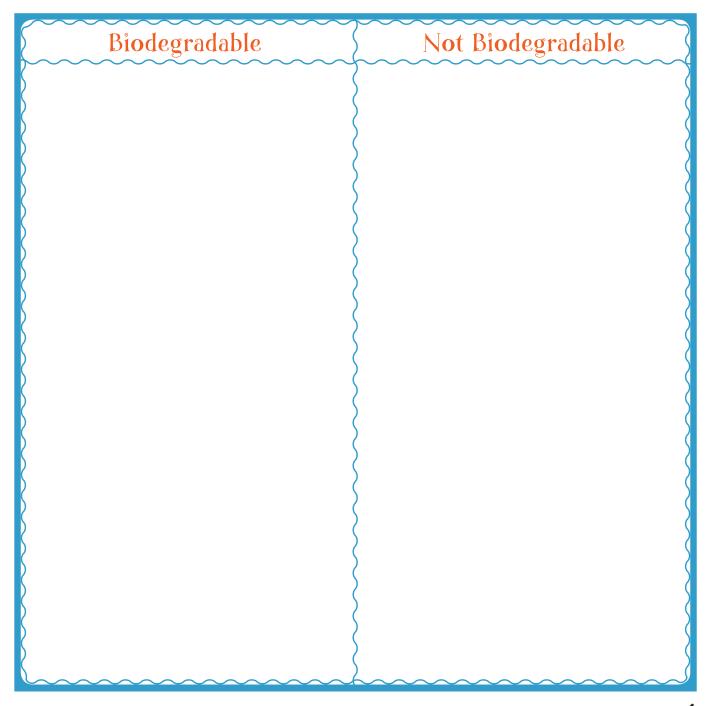


- 2. There are two major types of rainforests. One is called "temperate"; what is the other called?
 - a. Arctic
 - b. Tropical
 - c. Equatorial
- 3. Rainforests cover what percentage of the earth's total surface?
 - a. Less than 2%
 - b. 28%
 - c. 50%
- 4. What causes rainforest destruction?
 - a. Logging
 - b. Mining
 - c. Both a and b
- 5. What percentage of the original temperate rainforests still remain on the earth?
 - a. Less than 2%
 - b. 28%
 - c. 50%
- 6. A typical four-mile square patch of rainforest contains how many flowering plants?
 - a. 5,000
 - b. 1,500
 - c. 500
- 7. Rainforests are home to what percentage of the world's plant and animal species?
 - a. Less than 2%
 - b. 28%
 - c. 50%
- 8. What percentage of tropical rainforest species have been analyzed for medicinal value?
 - a. Less than 1%
 - b. 3%
 - c. 12%

Answers :1a, 2b, 3a, 4c, 5c, 6b, /c, 8a

How Earth-Friendly is Your Lanch?

The **chicleros** who harvest the chicle from the sapodilla trees work to use the treasures of the rainforest without destroying the trees. Gum made from chicle is earth friendly too because it is biodegradable. If something is biodegradable, bacteria or other living organisms can break it down. If something is not biodegradable, it ends up in a landfill. Check out your lunch. What do you have that is biodegradable? What is in your lunch that might not break down and would end up in a landfill?



Chicle Harvesting



How Do Chicleros Get the Chicle Ready to Be Made into Gum?

On the website for Glee Gum (www.gleegum.com), review the steps the **chicleros** take to prepare the chicle to send to Glee Gum to be made into chewing gum. Write the numbers 1–5 next to the sentences to show which step is first, second, third, fourth, and fifth.

 The chicle is left to cool and harden in rectangular molds.
 The chicle is boiled for hours.
Criss-crossing lines are cut in the bark of the sapodilla tree with a machete and chicle sap is collected at the base of the tree.
Once the chicle is cool and solid, the chicle is removed from the molds, marked with the name of the chiclero , and bagged in burlap sacks.
The sacks of chicle bricks are shipped overseas to gum manufacturers.

