

# Love That Chocolate!

Drop a spoonful of powdered chocolate into milk. Spread chocolate frosting on a graham cracker. Drizzle chocolate syrup over ice cream. Celebrate a holiday with foil-wrapped chocolate coins, a chocolate Santa, or a cream-filled chocolate egg. Better yet, open a box of aromatic chocolates with soft, gooey, or chewy centers—after dinner, of course.

Wait! Even if you ate all your vegetables, don't scoop up those chocolates just yet. Take a deep breath or two—or three! Enjoy the tantalizing smell. Next, survey the chocolate circles, squares, and rectangles. Which ones are hiding your favorite creams, nuts, or caramels? No fair poking holes in the bottoms to find the ones you want. Be adventurous! You can always try again if you don't get what you expected. Just be careful that you don't eat them all. You'll want to save some for tomorrow.

## From Cacao Trees to Cocoa Beans

Chocolate comes from cacao trees, most of which are grown on large plantations. Although native to Mexico, cacao trees now grow all over the world in the tropical zones near the equator. They thrive where temperatures are in the 80s all year round and never drop below about 60° Fahrenheit (16° Celsius).

In the wild, cacao trees can grow up to 50 feet (15 meters) tall. On plantations, they are pruned to be no taller than 25 feet (8 m). Pods full of cocoa beans hang from

the trunk, not the branches, of the tree.

Blossoms form on the trunk throughout the year, and football-shaped pods develop from the flowers. It takes five to six months for a pod to change in color from green to a ripe purple. When the pod is ripe, it can be harvested.



Cacao pods are usually harvested twice a year, in fall and in spring. Each pod has 20 to 40 white, almond-sized seeds (cocoa beans) inside, surrounded by white pulp. At this stage, the cocoa beans and the pulp taste bitter. A lot of processing goes into creating that mouthwatering chocolate flavor you enjoy when you bite into a chocolate chip cookie.

First, the seeds and pulp are cut out of the pod. Then, they are either heated or left in the hot sun. Heat turns the pulp into a liquid, which is drained off the beans so that the beans will dry. After the beans are thoroughly dried, they turn a dark brown color. The smell and flavor of the beans is now more like the sweet odor of chocolate in a candy bar—but it isn't chocolate yet!

### **Chocolate at Last!**

Cocoa beans are shipped to candy factories all over the world. There, the beans are brushed clean and roasted. The outer shells of the beans are removed either before or after roasting. The inside of a cocoa bean is called a nib. After cocoa nibs are roasted, they're crushed. The heat of the crushing process melts the cocoa butter in the nibs. Depending on how much melted cocoa butter is removed, different types of rich chocolate paste remain and are processed further to make different types of chocolate.

Sometimes, the chocolate paste is used to make hard brown blocks of unsweetened baking chocolate, or the paste might be mixed with sugar, milk, and other ingredients to make melt-in-your-mouth chocolate bars and candies. It might even be used to flavor a truckload of rocky road ice cream or be added to bitter medicines to make them taste better.

### **Chocolate Conquers the World**

Long before people from Europe settled in the Americas, the Native Americans enjoyed chocolate. They used chocolate to



make a special drink for royalty. The Aztec kings added chocolate to a mixture of seasonings and corn mash to make a bitter, peppery tasting beverage. Sometimes, they added honey, vanilla, and chili peppers to the drink, too. Chocolate was so valuable to the Native Americans that it was often used as money in the marketplace.

When Spanish explorers brought cocoa beans back to Spain, they used the beans to make a drink that became popular with the royal family and the nobles of the Spanish court. Wooden beaters were used to whip the chocolate until it was foamy, and then sugar was added to the drink. Orange water, white rose powder, cloves, and other spices were also mixed into the chocolate.

The Spaniards tried to keep chocolate a secret, but eventually, visitors to the royal court took the drink back to their own countries. In the 1600s, its popularity spread across Europe. One hundred years later, chocolate was shipped from England to the British colonists in North America. The colonists became very fond of chocolate drinks, and their doctors prescribed chocolate for energy and good health.

### **Chocolate in Your Diet**

During World War II, soldiers ate chocolate bars to add extra calories to their diets. The extra calories gave them more energy. Explorers in cold climates also eat chocolate for energy. The calories from the chocolate help them stay active. For most people, however, chocolate should be eaten only occasionally and in small amounts. It is a good source of minerals and vitamin B, but, like coffee, it contains caffeine, which can keep you awake when your body needs rest.

In almost all forms, chocolate is very rich and has a lot of calories. One small chocolate bar has about the same number of calories as two bananas, two slices of cheese, or three slices of white bread, but more of the chocolate bar's calories typically come from fat. Nevertheless, chocolate is enjoyed in great quantities throughout the world. People just love that chocolate!

## Questions about Love That Chocolate!

1. What do cacao trees have to do with chocolate?
2. Where do the pods grow on a cacao tree?
3. How long does it take for a cacao pod to ripen, and how can you recognize a ripe pod?
4. Could you grow a cacao tree where you live? Explain why or why not.
5. Chocolate was first enjoyed by the Aztecs as a drink. What ingredients did the Aztecs add to the chocolate?
6. What ingredients did the Spanish use to make chocolate drinks?
7. What is a nib, and how are nibs used to make different types of chocolate?
8. What fact about chocolate were you surprised to learn?

## Vocabulary

A. Use these words from the story to complete the analogies below.

aromatic    caffeine    drizzle    plantations    pods    survey    tropical

1. **Peanuts** are to **shells** as **cocoa beans** are to \_\_\_\_\_.
2. **Apples** are to **orchards** as **cacao trees** are to \_\_\_\_\_.
3. **Ice-cold** is to **polar** as **hot** is to \_\_\_\_\_.
4. **Smelly** is to **stinky** as **fragrant** is to \_\_\_\_\_.
5. **Smear** is to **spread** as **trickle** is to \_\_\_\_\_.
6. **Vitamin C** is to **oranges** as \_\_\_\_\_ is to **coffee**.
7. **Listen** is to **ears** as \_\_\_\_\_ is to **eyes**.

B. Use each of these words in a complete sentence to answer the questions below.

**Hint:** Two words can be used in the same sentence.

cacao    equator    harvested    native    pulp    tantalizing    zones

1. Where did cacao trees originate?
2. Where do cacao trees grow best?
3. Where are cocoa beans found?

4. What happens to ripe cacao pods?

5. What is one reason that people are tempted to eat chocolate?

## Create a Candy Bar

A. List adjectives on the lines below that describe the taste and texture of chocolate.

**Examples:**      sweet (taste)              buttery (texture)

**Taste**

**Texture**

1.

1.

2.

2.

3.

3.

4.

4.

5.

5.

B. Create your own chocolate candy bar and draw it. Give the candy bar a name and a wrapper that will appeal to kids. Under your drawing, list some of the ingredients and write a description of your candy bar that would convince someone to try it. Use some of the adjectives listed above.

**Ingredients:**

**Description:**

## Main Ideas and Details

The subheads in the story give clues about each section's main idea. Under each subhead below, list four important details that support that section's main idea.

1. From Cacao Trees to Cocoa Beans

a.

b.

c.

d.

## 2. Chocolate at Last!

- a.
- b.
- c.
- d.

## 3. Chocolate Conquers the World

- a.
- b.
- c.
- d.

## 4. Chocolate in Your Diet

- a.
- b.
- c.
- d.