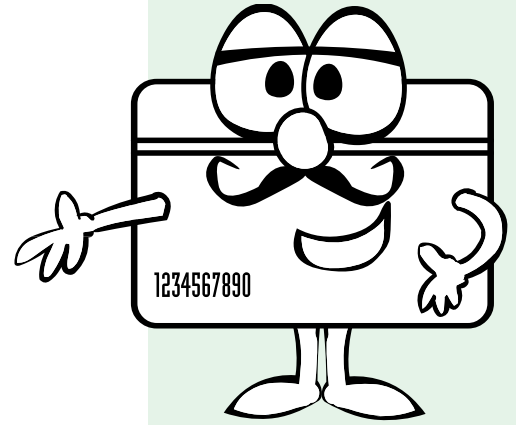


Grade Five

# Starting Your Own Business



## Overview

Students listen to several chapters from *The Toothpaste Millionaire*, by Jean Merrill, to learn about starting a business and earning a profit. They complete worksheets on costs and profits and play a game about the risks and incentives of starting a business.

## Lesson Objectives

Students will be able to:

- Define the word “entrepreneur”
- Discuss how prices are determined
- Explain how to make a profit

## Materials List

1. Book: *The Toothpaste Millionaire*, by Jean Merrill (Houghton Mifflin Company, 1972)
2. Chart paper or chalkboard
3. Handouts:
  - **Frozen Juice Bar Stand** worksheet
  - **Risks and Incentives** cards

## Large-Group Activity

### Materials

- Book: *The Toothpaste Millionaire*
- Chart paper or chalkboard
- Handout: **Frozen Juice Bar Stand** worksheet

## Content Standards

The activities in this lesson correlate to national standards in economics, math, and language arts. See the end of this lesson for content standards information.

## Vocabulary

cost  
entrepreneur  
incentive  
loss  
price  
produce  
profit  
risk

1. Gather students to share the book *The Toothpaste Millionaire*.

○ Say:

**Today we are going to talk about starting a business. Do any of you know someone who owns his or her own business? If so, what kind of business does that person own?** Allow students to respond.

**I'm going to read several chapters from the book *The Toothpaste Millionaire*, by Jean Merrill. This book describes how twelve-year old Rufus Mayflower made a million dollars by selling toothpaste.**

**Let's see how Rufus got into the toothpaste business.**

○ Read the chapters 3 through 8 aloud to the class.

2. Discuss the book with the class.

○ **Why did Rufus decide to make toothpaste?**

He was upset because a tube of toothpaste at the store cost 79 cents. Rufus thought that he could make toothpaste much cheaper.

○ **Why did Rufus decide to sell one jar of toothpaste for 3 cents?**

Rufus calculated that it would cost about 2 cents to make a tube of toothpaste. If he sold a jar of toothpaste, which holds about as much as a tube, he would make a one-cent profit.

○ **If there are 2.5 billion tubes of toothpaste sold in the United States in one year, and 1 out of 10 people switched to a new brand, how many tubes of the new brand would they be buying?**

Help students solve this problem. You may want to write the equation on the chalkboard or on chart paper.

$$\bullet \quad 2,500,000,000/10 = 250,000,000$$

○ **If Rufus made a profit of 1 cent a tube on his toothpaste, what would his profit be at the end of the year?**

Help students solve this problem. You may want to write the equation on the chalkboard or on chart paper.

$$\bullet \quad 250,000,000 \times .01 = 2,500,000$$

○ **How did Rufus pay the kids who helped him?**

He gave them shares of stock in his company.

○ **What are stocks?**

A stock is a share of ownership in a company.

3. Discuss today's economic concepts: entrepreneurs, risk, incentives, market, price, and profit.

○ ***Entrepreneurs, Risk, and Incentives***

**Does anyone know another word for businessperson?**

Another word for businessperson is "entrepreneur."

**Entrepreneurs** own and manage a business in which they make and sell goods and services. In this story, Rufus became an entrepreneur when he decided to make and sell toothpaste.

Entrepreneurs take a **risk** when they start their new business. What are some of the risks Rufus took when he started the toothpaste business?

When Rufus started the toothpaste business, he was not sure if people would really buy his toothpaste. He had to use his own money to pay for the cost of making the toothpaste. If no one bought his toothpaste, he would lose this money.

A **cost** is the amount of money that must be paid to buy or make something. Rufus risked losing the money he used to pay for the cost of making the toothpaste.

Why do you think entrepreneurs are willing to take risks?

Entrepreneurs are willing to take risks because they hope to make money.

Entrepreneurs hope to make money. This is an **incentive**. Rufus decided to start a toothpaste business because he thought he could earn one cent for every tube he sold. In one year he could earn \$2,500,000.00.

### ○ *Markets and Prices*

Rufus created a **market** for toothpaste. A market exists whenever buyers and sellers exchange goods and services. Name some examples of markets.

Students may name stores or restaurants.

Stores list **prices** on the goods they sell. A price is the amount you have to pay for a good or service. What was the price of Rufus's toothpaste?

One jar of toothpaste costs 3 cents.

Later in the story, Rufus is able to sell his toothpaste to customers throughout the United States. How do you think the other toothpaste companies reacted?

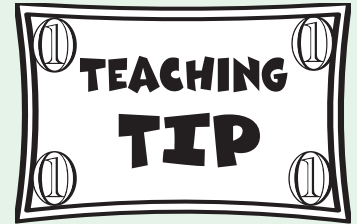
The other toothpaste companies may have been scared that they would lose all their customers.

The other toothpaste companies did not want to lose their business. Eventually the other toothpaste companies started lowering the price of their toothpaste.

### ○ *Profit*

All entrepreneurs hope to earn a **profit**. A profit is the amount of money an entrepreneur has earned after he or she has paid for the price of producing the good or service. It cost Rufus 2 cents to make one tube of toothpaste. He sold the toothpaste for 3 cents a tube, so he made a profit of 1 cent for every tube of toothpaste he sold.

Why do you think Rufus was able to earn a profit?



If needed, remind students that a risk is a chance of losing something or failing.

Rufus earned a profit because the cost of producing a tube of toothpaste was lower than the price.

**In order for an entrepreneur to make a profit, he or she must sell the good at a price high enough to cover the costs of production.**

Hold up a copy of the **Frozen Juice Bar Stand** worksheet.

**When Rufus started his business, he had to determine the cost of making the product and decide how much to sell it for. Imagine that you are going to set up a frozen fruit juice bar stand at your school.**

- How much do you think it would cost to make frozen fruit juice bars?
- How much should you charge for the frozen fruit juice bars in order to make a profit?
- How many frozen fruit juice bars do you think you can sell?
- How much do you think you can make in one year?

**To find the answers to these questions, read the facts and figures on this worksheet, and answer each question.**

Allow students to work on the worksheet while you work with individual groups in the following small-group activities. After small-group work, you might want to go over the answers with the students.

## Small-Group Activity One: Risks and Incentives of Starting a Business

### Concepts Taught

Entrepreneurs, Risks, Incentives

### Materials

- Book: *The Toothpaste Millionaire*
- Chart paper or chalkboard
- **Risks and Incentives** cards, colored and cut apart (**NOTE: You may want to laminate these cards for durability.**)

1. Begin Activity One: Risks and Incentives of Starting a Business.

○ Say:

**Entrepreneurs take risks when they produce goods and services. Rufus risked losing the money he used to pay for the cost of making the toothpaste. Explain the risks involved with opening your own restaurant.**

When you open your own restaurant, you must buy or rent a building, purchase the equipment and ingredients needed to cook food, and hire people to cook and serve the food. You must pay for these costs before you open your restaurant. If you do not make a profit, you will lose all of your money.

**Profit is a positive incentive that encourages entrepreneurs to accept the risks of business failure. Rufus hoped to earn a profit of \$2,500,000.00 within a year.**

2. Lay the stack of **Risks and Incentives** cards face down on a table.

○ Tell students:

**I put a stack of cards on the table. We are going to take turns picking up a card and reading it to the rest of the group. We will then decide if the card states a risk or an incentive of being an entrepreneur.**

Create a table on the chalkboard or on chart paper with two columns. Label one column “Risk” and the other column “Incentive.” Have each student pick a card and read the statement. Then have the group decide if it is a risk or an incentive. If it is a risk, write it in the Risk column. If it is an incentive, write it in the Incentive column.

**Look at the list of risks and incentives. Do you think you would be willing to become an entrepreneur and start this business? Why or why not?**

Allow students to respond.

## Small-Group Activity Two: Earning a Profit

### Concept Taught

Profit

### Materials

- Book: *The Toothpaste Millionaire*
- Chart paper or chalkboard
- Writing (or notebook) paper

1. Begin Activity Two: Earning a Profit.

○ Say:

**How can entrepreneurs make a profit?**

In order to make a profit, entrepreneurs must be able to sell their goods at a price that is higher than the cost of producing the good.

**At the end of *The Toothpaste Millionaire*, Rufus earns a little more than \$2 million because the cost of making his toothpaste is lower than the price.**

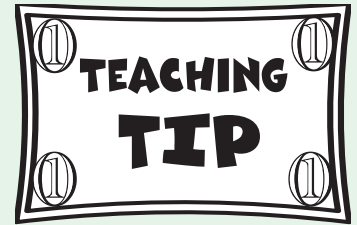
2. Have students determine if they can make a profit selling bead bracelets.

○ Write the following items on chart paper or the chalkboard:

- It costs \$8.00 to buy enough beads to make 10 bracelets.
- It costs \$5.00 to buy enough string to make 10 bracelets.

**Let’s pretend that we are going to start a bracelet business. It costs \$8.00 to buy enough beads to make 10 bracelets. It costs \$5.00 to buy enough string to make 10 bracelets. How much does it cost to produce 10 bracelets?**

It costs \$13.00.



Point out that positive incentives are rewards that make people better off. Negative incentives are penalties that make people worse off.

**Let's say you think that we can sell at least 200 bracelets. How much do you think you should charge for the bracelets?**

Answers will vary. Students should charge at least \$1.31 to make a profit of 1 cent. Students will probably want to charge more.

**Now suppose that we don't have the money needed to make 200 bracelets. We need to get a loan. Remember, if you take out a loan, you have to pay it back. So it is very important that we are sure we can pay the loan back and make a profit.**

**In order to get a loan, we need to create a plan for our business. We need to:**

- **explain how much it costs to produce the bracelets,**
- **explain how many people we can sell bracelets to, and**
- **convince someone that our business will make enough money to pay the loan back.**

You should write these three items on the chalkboard or on chart paper.

**As a group, prepare a presentation to give to a lender.**

Have students prepare a presentation. If there is time, you may want to have each group share its presentation with the class.

## Assessment

Check students' understanding by listening carefully to the responses they give during group discussions and on the **Frozen Juice Bar Stand** worksheet. Give each student a blank piece of notebook paper. Ask students to imagine that they are going to start a lemonade stand business. Ask them to list the risks and benefits of starting this business.

## Suggested Online Activity

**NOTE:** Teachers should preview all sites to ensure they are age-appropriate for their students. At the time of publication, all URLs listed here were valid. In addition, some Web sites provide lessons via pop-up screens, so you may have to disable your computer's pop-up blocker software to access them.

### *Kids Money.Org*

Have students visit the Kids Money Web site at [www.kidsmoney.org/makemone.htm](http://www.kidsmoney.org/makemone.htm) and learn how kids can earn money. Students can also take an online survey and recommend ways to earn money.

## National Standards Correlations

### *Economics*

The activities in this lesson correlate to the following Voluntary National Content Standards in Economics, as determined by the National Council on Economics Education, found at: [www.ncee.net/ea/standards](http://www.ncee.net/ea/standards).

## Standard 7: Markets–Price and Quantity Determination

Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

K–4 Grade Benchmarks:

- A price is what people pay when they buy a good or service, and what they receive when they sell a good or service.
- A market exists whenever buyers and sellers exchange goods and services.

5–8 Grade Benchmarks:

- Market prices are determined through the buying and selling decisions made by buyers and sellers.

## Standard 14: Profit and the Entrepreneur

Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure.

5–8 Grade Benchmarks:

- Entrepreneurs compare the expected benefits of entering a new enterprise with the expected costs.
- Entrepreneurs accept the risks in organizing resources to produce goods and services because they hope to earn profits.
- Entrepreneurs and other sellers earn profits when buyers purchase the product they sell at prices high enough to cover the costs of production.

## Mathematics

In addition to economics, the activities in this lesson also correlate to the following *Principles and Standards for School Mathematics*, from the National Council of Teachers of Mathematics, found at: [standards.nctm.org/document/index.htm](http://standards.nctm.org/document/index.htm).

### Numbers and Operations Standards

Understand numbers, ways of representing numbers, relationships among numbers, and number systems

3–5 Grade Benchmarks:

- Develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

### Algebra Standards

Represent and analyze mathematical situations and structures using algebraic symbols

3–5 Benchmarks:

- Express mathematical relationships using equations.

### Problem-Solving Standards

Instructional programs from pre-kindergarten through grade 12 should enable all students to

- build new mathematical knowledge through problem solving;
- solve problems that arise in mathematics and in other contexts;
- apply and adapt a variety of appropriate strategies to solve problems;
- Monitor and reflect on the process of mathematical problem solving.

Pre-K–12 Benchmarks:

- Solve problems that arise in mathematics and in other contexts.

### **Language Arts**

This lesson, based on the children’s book *The Toothpaste Millionaire* by Jean Merrill, also correlates to the following *Standards for the English Language Arts*, from the National Council of Teachers of English, found at:

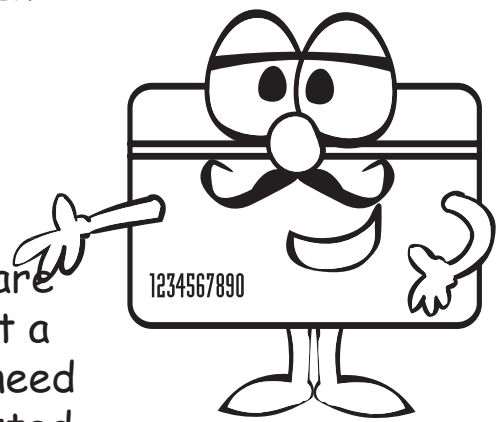
[www.ncte.org/print.asp?id=110846&node=204](http://www.ncte.org/print.asp?id=110846&node=204).

1. Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).



# Frozen Fruit Juice Bar

Name \_\_\_\_\_



Directions: Imagine that you and your friends are going to set up a frozen fruit juice bar stand at a local school. Below is a list of supplies you will need to make frozen fruit juice bars. The price is listed next to each item. Data about a local elementary school is also listed. Carefully read the facts and figures. Then answer each question and determine how much money your class can earn in one year.

## Supplies:

- Fruit Juice: One gallon of fruit juice costs \$3.20.
- Wooden sticks: One hundred sticks cost \$1.00
- Plastic Fruit Juice Bar Tray: One tray costs \$1.00

## Facts:

- One gallon of fruit juice makes 16 fruit juice bars.
- One plastic tray holds 10 fruit juice bars.
- There are 300 students at the local elementary school.

1. How much does it cost to make one fruit juice bar?
2. How much should you charge for the frozen fruit juice bars in order to make a profit?
3. How many frozen fruit juice bars do you think you can sell in one day?
4. How many frozen fruit juice bars do you think you can sell in one school year?
5. At the end of the school year, how much money will you earn?

## Risks and Incentives Flash Cards

**You can be  
your own boss.**

**You can lose  
money.**

**You have to  
work long hours.**

**You can  
produce new or  
improve exist-  
ing products.**

**The job may be  
stressful.**

**You can achieve  
recognition.**

**You have  
a lot of  
responsibility.**

**You can earn a  
profit.**