

The Toothpaste Millionaire

A Chapter-by-Chapter Teacher Guide

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Grades K-1

Chapter 1: A New Name, a New Business

Chapter 2: Two Notes from Rufus

In these chapters, Kate introduces us to her friend Rufus Mayflower. We learn that Rufus became a millionaire while making toothpaste. Not only does he produce toothpaste, he also makes durable saddlebags. We discover that he is a creative problem solver and is very good at math.

This is a good time to help students learn the concept of human capital. Human capital is how you “train your brain” to develop skills, education, talents and abilities that enable you to be a productive worker.

Concepts

Human capital, human resource

Standards

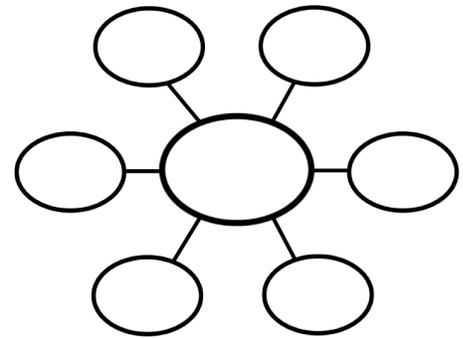
- E.5.K.1 Identify human, natural, and capital resources.
- E.5.1.1 Explain ways human resources earn income.

Lessons about Human Capital

- *Grab & Go Economics—Concept Guides, Guide 9: People earn income when they sell their resources* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *Morris Goes to School (1-2)* <https://www.stlouisfed.org/education/morris-goes-to-school>
- *Why Do We Need Skills?* <https://www.stlouisfed.org/education/personal-finance-language-arts-mathematics-kindergarten> (Lesson 3, pages 3.1-3.11)

Quick Assessment Activity

Give each student a sheet of paper or graphic organizer. Have them write their name or draw their picture in the center of the page. Have students draw 6 large circles around their name or picture. Each student should write or draw an example of skills, talents, etc. that he/she has inside each circle. Help students understand that investment in their human capital develops their skills and prepares them to be productive workers and income earners in the future.

**Chapter 3: Toothpaste and Eye Shadow****Chapter 4: Peppermint, Clove, Vanilla, Curry or Almond?**

In Chapter 3 we learn how Rufus started his company. Many entrepreneurs start businesses to solve problems or bring new goods and services to the marketplace. Rufus starts his business because he refuses to pay the price for the toothpaste in the store. He is certain he can save money by producing his own. Kate begins to reflect on decisions she makes when shopping. She realizes that she doesn't always have a plan when she goes shopping and is often influenced by her friends.

In Chapter 4, Kate arrives at Rufus' house to find he has created many Do-it-Yourself (DIY) toothpaste alternatives. He challenges Kate to put the alternatives to the test and identify the toothpaste that she thinks has the best taste.

Concepts

Alternatives, benefits, choice, consumer, cost, decision-making, goods, human resource, market, opportunity cost, price, producer, saving, seller, services, spending

Standards

- E.4.K.2 Explain reasons behind a personal decision.
- E.5.K.3 Identify markets in the community.
- E.6.K.1 Recognize consumers use money as a medium of exchange to satisfy economic wants.
- E.4.1.2 Identify benefits and costs of making a decision.
- E.5.1.3 Recognize markets exist wherever buyers and sellers exchange goods and services.

Lessons and Videos on Choices with Saving and Spending

- *Bunny Money* <https://www.stlouisfed.org/education/bunny-money>
- *Cha-Ching: Please Little Spender, Think* <https://www.youtube.com/watch?v=OjxeQD4NmxQ>
- *Curious George Saves His Pennies* <https://www.stlouisfed.org/education/curious-george-saves-his-pennies>
- *Dream Big Club*. Sammy Rabbit is a great character to introduce your students to the concept of saving and sharing. Set up a free account at www.dreambigclub.org. You will have access to songs,

stories, activities, a word bank and more.

- *Every Penny Counts* <http://www.econedlink.org/teacher-lesson/461/Every-Penny-Counts>
- *Grab & Go Economics—Concept Guides, Guide 10: People incur expenses when they buy goods and services* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *The ABCs of Saving* <https://www.econedlink.org/teacher-lesson/414/ABCs-Saving>

Lessons on Decision-Making

- *The Berenstain Bears Get the Gimmies* <https://www.stlouisfed.org/education/the-berenstain-bears-get-the-gimmies>
- *Decisions, Decisions* http://www.economicsarkansas.org/for_teachers/lesson-plans-k-3.html
- *Grab & Go Economics—Concept Guides, Guide 4: Scarcity requires people to make choices that involve trade-offs and have opportunity costs.* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *It's All About Priorities (Lesson 4)* <https://www.stlouisfed.org/education/personal-finance-language-arts-mathematics-kindergarten>
- *Weighing Costs and Benefits (song)* <https://www.kidseconposters.com/weighing-costs-and-benefits>

Lessons on Producing Toothpaste

Challenge your class to produce your own toothpaste. How does it compare to toothpaste in the store? Why would buyers be interested in purchasing it?

- *DIY Kids Toothpaste* <https://askthedentist.com/recipe/diy-kids-toothpaste/>
- *Toothpaste Science Experiment for the Classroom* <https://blog.reallygoodstuff.com/science-experiment-for-kids-making-toothpaste/>

Quick Assessment Activities

- Have students illustrate a picture to demonstrate evidence of why they consider themselves a saver or a spender.
- Play the *Savings Roll Along Game*. <https://www.councilforeconed.org/programs-2/never-too-young-personal-finance-for-k-5-learners/>
- Complete Chapter 9 of *Never Too Young: Personal Finance for K-5 Learners*, <https://www.councilforeconed.org/programs-2/never-too-young-personal-finance-for-k-5-learners/> Chapter 9, (pages 96-103). This curriculum offers a great lesson to help students understand about depositing and withdrawing money and saving. Prep is easy for this lesson. Print a piggy bank, set of withdrawal and deposit cards and a copy of the savings register for each group. Give each group a dice or spinner for each group, and they are ready to play. The directions are explained in the lesson.
- Sing *Get in the Habit Like Sammy Rabbit* (Karaoke sing-along) <https://www.youtube.com/watch?v=A2G4HT72FCQ>
- Give each student an index card and a scenario. Challenge students to consider they have money to buy one item in a dollar store. Have them consider alternatives they would be interested in having.

Challenge them to narrow down their options to two alternatives and write or draw an alternative on one side and then the other alternative on the other. Tell students to circle their decision and “x” out their next best choice, their “opportunity cost”. Allow students to share their choices.

- The decision apron in the Decisions, Decisions lesson is a great application activity. Give students a prompt to address such as: Which healthy snack should I choose? You get to choose where your family will eat tonight. Where will you go? You get to choose what to bring for show and tell at school. What will you bring?

Chapter 5: Another Nice Thing About Rufus

Chapter 6: Another Math Problem

Rufus is always solving problems in his head and on paper. In these chapters, he is calculating the number of people who live in the United States and how many of them might like to purchase his new toothpaste in the market.

One item that is on almost everyone’s shopping list is toothpaste. A great concept to introduce in this chapter is the importance of dental health.

Concepts

Alternatives, benefits, buyers, choice, cost, decision-making, opportunity cost, sellers

Standards

- E.4.K.1 Recognize that all people have unlimited wants and limited resources.
- E.4.K.2 Explain reasons behind a personal decision.
- E.5.K.3 Identify markets in the community.

- E.4.1.1 Explain ways scarcity necessitates decision making.
- E.4.1.2 Identify benefits and costs of making a decision.
- E.5.1.3 Recognize markets exist wherever buyers and sellers exchange goods and services.

Lessons on Dental Health and Decision-Making

- *Brush Along with Bud* <https://www.youtube.com/watch?v=KcQlp4ejyZ4>
- *Colgate Bright Smiles, Bright Futures* Free Teaching Kits <https://smiles.colgate.com/page/content/2019-classroom-kits>
- *Delta Dental of Arkansas* <http://www.deltadentalar.com/Resources/classroom-materials>
- *Everyday Opportunities* <https://www.econedlink.org/teacher-lesson/738/Everyday-Opportunities>
- *How to Brush Correctly* <https://www.colgate.com/en-us/oral-health/basics/brushing-and-flossing/how-to-brush>

Quick Assessment Activities

- Have students write and illustrate why it is an important decision to brush their teeth.
- *Egg-Citing Experiment*: Delta Dental has a fun experiment to help students understand how important it is to brush daily and make wise decisions about what to eat and drink. This experiment requires two hard-boiled eggs, two toothbrushes, toothpaste, dark soda pop and milk or water. Full directions are found at <http://www.deltadental.com/Resources/classroom-materials> (first grade lesson).
- Have students write how they use their teeth using the template found at <http://www.deltadental.com/Resources/classroom-materials> (big tooth).
- The same tooth could be used as an art activity as students disguise the tooth in a creative way (similar to how a turkey might be disguised at Thanksgiving.)

Chapter 7: The Joe Smiley Show**Chapter 8: In Which I Became a Stockholder**

Rufus took recycled items, such as baby food jars, and used them to package his toothpaste. This cut down greatly on his expenses. Rufus' appearance on *The Joe Smiley Show* allowed people to learn about his toothpaste and created quite a demand. We get a great description in this chapter of what Rufus is like as a business leader and provides a great introduction to Rotary's 4 Way Test.

We get a chance to see how Rufus' friends step in to help produce toothpaste in this chapter, and we learn how he negotiates a deal to compensate them for their services.

Concepts

Entrepreneur, capital resources, human resources, incentives, natural resources, productive resources, rewards, risks

Standards

- E.5.K.1 Identify human, natural, and capital resources.
- E.5.K.2 Discuss ways producers use human, natural, and capital resources in the production of goods and services.
- E.5.1.1 Explain how human resources earn income.
- E.5.1.2 Categorize human, natural, and capital resources used in the production of goods and services.

Lessons on Business Etiquette

- Show the *4 Way Test Rotary Test Video* (<https://www.youtube.com/watch?v=MqZK1G1-r6A>; start at 0:17, end at 1:55). Challenge students to find examples of these four questions throughout the story.

- Is it the TRUTH? (Is Rufus truthful about his toothpaste?)
- Is it FAIR to all concerned? (Was Rufus thinking about everyone or only himself when he started making toothpaste? Was he offering his customers a quality product at a fair price?)
- Will it build GOODWILL and BETTER FRIENDSHIPS? (Do Rufus' actions build goodwill with his classmates, family, town?)
- Will it be BENEFICIAL to all concerned? (Who benefited from Rufus's actions? Everyone or only Rufus?)
- Watch a great read aloud version of *Andy and Elmer's Apple Dumpling Adventure*. <https://www.youtube.com/watch?v=YoV2WZy0KjU> (8:17) Have students write and illustrate what they learned about the 4 Way test from Andy.

Lessons on Productive Resources and Production

- *Grab & Go Economics—Concept Guides, Guide 2: Resources are used to produce goods and services* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *Mr. Cookie Baker* <https://www.stlouisfed.org/education/mr-cookie-baker>
- *Mr. Rogers Visits a Toothpaste Factory* <http://mentalfloss.com/article/29076/mister-rogers-vis-its-toothpaste-factory>

Lessons on Incentives

- *Tricks for Treats* <https://www.econedlink.org/resources/tricks-for-treats/>

Quick Assessment Activity

- Select one of the questions in the 4 Way test. Explain how Rufus answered it and draw a picture to illustrate.
- Bring in recycled items, and challenge students to create new products or uses for them just like Rufus did.

Chapter 9: With a Little Help from My Brother James

Chapter 10: A Gross Mistake

Chapter 11: 7,200 Toothpaste Tubes

Kate finds the perfect birthday present for Rufus at an auction. This is a good time to discuss different types of markets. Markets can be “face to face” where the buyer and seller meet, but many times the buyer and seller never see each other. Making an “x” with your hand as you explain that a market occurs any time there is an “exchange” between buyer and seller provides a nice visual. This is also a good time to discuss price. The toothpaste has a set price at the store, but the tubes are determined by highest bidder at the auction.

Kate's math skills are not on target when she buys the empty tubes and causes quite a problem as she realizes she has purchased 7,200 tubes with no way to transport them. Decision-making comes into play again as Rufus has to plan how to move the tubes from the auction to Kate's garage.

Concepts

Buyer, decision-making, exchange, market, price, seller

Standards

- E.5.K.3 Identify markets in the community.
- E.5.1.3 Recognize markets exist wherever buyers and sellers exchange goods and services.

Lessons on Markets

- *The Berenstain Bears' Mad, Mad Toy Craze* <https://www.stlouisfed.org/education/the-berenstain-bears-mad-mad-mad-toy-craze>
- *Grab & Go Economics—Concept Guides, Guide 3: Because many things are scarce, people need ways to allocate them.* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *To Market To Market* <https://www.econedlink.org/resources/to-market-to-market/>

Quick Assessment Activities

- Have students find or draw or find examples of two markets in the community. Have them explain what goods or services they provide.
- As a class, discuss different ways Kate could have moved the tubes from the auction to her house.

Chapter 12: The Toothpaste Machine**Chapter 13: Hector and the Happy Lips Plant**

In Chapters 1 and 2, students learned about the concept of human capital. Now they learn how the toothpaste workers have to invest in their human capital as they learn how to fill the toothpaste tubes. Students will see specialization in action and learn how important capital resources are to human resources.

Concepts

Capital resource, human capital, human resource, specialization

Standards

- E.5.K.1 Identify human, natural, and capital resources.
- E.5.K.2 Discuss ways producers use human, natural, and capital resources in the production of goods and services
- E.5.1.1 Explain ways human resources earn income.
- E.5.1.2 Categorize human, natural and capital resources used in the production of goods and services.

Lessons on Human Resources and Capital Resources

- *Grab & Go Economics—Concept Guides, Guide 2: Resources are used to produce goods and services.* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *Human Resources and Capital Resources: It's A Match!* <https://www.econedlink.org/resources/human-resources-and-capital-resources-its-a-match/>
- *Specialists Light Up Our Lives!* <https://www.econedlink.org/resources/specialists-light-up-our-lives/>

Quick Assessment Activities

- Have students draw 3 capital resources a dentist would use.
- Play thumbs up/thumbs down. If students agree with the statement, they will put their thumb up. If they disagree, they will put their thumb down.
 - Hector is a capital resource. (thumbs down)
 - Hector is a human resource. (thumbs up)
 - The toothpaste machine is a capital resource. (thumbs up)
 - A dentist would use a hammer as a capital resource. (thumbs down)
 - Kate knows how to operate the toothpaste machine. (thumbs down)
 - Human capital is how you “train your brain” to learn how to do a special task. (thumbs up)
 - A thermometer is a capital resource a nurse would use. (thumbs up)

Chapter 14: The Trouble with Adults**Chapter 15: An Exception to the Rule about Adults**

These chapters lead us into the financial aspect related to entrepreneurship. Kate and Rufus realize they need services a bank can provide when they are looking for funding to operate their toothpaste factory. It is never too early to introduce students to the idea of credit as responsible borrowing and the role of a bank in securing loans.

Concepts

Bank, credit, saving, interest, loan

Standards

- E.6.K.2 Discuss reasons people save money.
- E.6.1.2 Identify places people save money (e.g., piggy banks, wallets, banks).

Lessons on Banks

- *Ella Saves Today* (read aloud with interactives) https://www.econlowdown.org/ella_saves_today?p=yes

- *Giving Vicki Credit* (online activity) <http://wisepockets.umsl.edu/clubhouse/library/GivingVicki-Credit/01.htm>
- *Just Saving My Money* <https://www.stlouisfed.org/education/kiddynamics-an-economics-curriculum-for-young-learners> (Lesson 4)

Quick Assessment Activities

- Have students draw a picture of a bank and explain how a bank helps them.
- Watch *Matilda the Moocher* <https://www.youtube.com/watch?v=sTLSOkD1OWg> (3:21). Ask them to decide which person they would loan money to—Matilda or Rufus—and explain why.
- Have students write and illustrate about a time they have been a responsible borrower.

Chapter 16: Toothpaste 1

Chapter 17: The Absolutely Honest Commercial

Rufus had to do a lot of math to calculate his expenses in his growing toothpaste production. His profit is not rising, but his costs of production certainly are as he realizes he needs more resources. These chapters address the impact of marketing and advertising on consumers' buying behaviors. Students are introduced to the idea of competition in this chapter also.

Concepts

Advertising, competition, consumer, expenses, profit, spending decisions

Standards

- E.7.K.1 Discuss why people trade goods and services.
- E.5.K.2 Discuss ways producers use human, natural, and capital resources in the production of goods and services.
- E.7.1.1 Identify goods and services that are traded.
- E.5.1.2 Categorize human, natural, and capital resources used in the production of goods and services.

Lesson on Advertising

- *Commercials* (song) <https://www.kidseconposters.com/commercials>
- *Entrepreneurship and Problem Solving* <https://www.councilforeconed.org/programs-2/never-too-young-personal-finance-for-k-5-learners/> Lesson 6 (pages 62-75)

Quick Assessment Activities

- Cut out advertisements from newspapers representing a variety of stores in your community. Make

a chart comparing the prices of goods and services from different stores. Discuss why these prices vary.

- Create an advertisement for Rufus' toothpaste.
- Design the label that you think should be on Rufus' toothpaste.

Chapter 18: The Toothpaste War

Chapter 19: A Movie Script by Mac Kinstrey

Competition is strong in these chapters. Because Rufus is able to sell his toothpaste for much less than the competitors, the competitors get very worried about their sales.

Decision-making comes back in discussion in chapter 19 as *Consumer's Friend* magazine evaluates toothpaste on performance, safety, taste, and price and selects Rufus' Toothpaste as the best alternative.

Concepts

Alternatives, benefits, competition, costs, decision-making, goods, market, price, sellers

Standards

- E.4.K.2 Explain reasons behind a personal decision.
- E.4.1.2 Identify benefits and costs of making a decision.
- E.5.K.3 Identify markets in the community.

- E.5.1.3 Recognize markets exist wherever buyers and sellers exchange goods and services.

Lessons on Market, Price

- *The Berenstain Bears' Mad, Mad Toy Craze* <https://www.stlouisfed.org/~media/Education/Lessons/pdf/The-Berenstain-Bears-Mad-Mad-Mad-Toy-Craze.pdf>
- *Grab & Go Economics—Concept Guides, Guide 4: Scarcity requires people to make choices that involve trade-offs and have opportunity costs.* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *The Market Song* <https://www.kidseconposters.com/the-market-song>

Quick Assessment Activities

- Distribute ads to students. Ask students to identify the product or service being advertised, the price of the good or service and why someone might want the good or service being sold.
- Create a class chart on their individual favorite toothpaste choices. Ask students what type they use and why they selected it.

Chapter 20: The Blowup**Chapter 21: The Board of Directors**

Unfortunately, the toothpaste factory was destroyed by the competitors in the toothpaste industry. Rufus learns a lot of hard lessons about the risks of being an entrepreneur.

Concepts

Business, entrepreneur, profit risk, reward

Standards

- E.5.K.1 Identify human, natural, and capital resources.
- E.5.K.2 Discuss ways producers use human, natural, and capital resources in the production of goods and services.
- E.5.K.3 Identify markets in the community.

- E.5.1.1 Explain ways human resources earn income.
- E.5.1.2 Categorize human, natural, and capital resources used in the production of goods and services.
- E.5.1.3 Recognize markets exist wherever buyers and sellers exchange goods and services.

Lessons on Entrepreneurship

- *Grab & Go Economics—Concept Guides, Guide 11: Entrepreneurs and businesses incur costs when they buy resources and earn revenues when they sell the good and services produced with those resources.* https://www.economicsarkansas.org/for_teachers/grab-go-economics-concept-guides.html
- *Open for Business* <https://www.econedlink.org/resources/open-for-business/>

Quick Assessment Activity

As a class, create a T-Chart about the risks and rewards of being an entrepreneur.

(Answers might include: RISKS: no one would demand your product, your workers won't show up for work, the product might not be quality, you could have damage to your business, competition is too great. REWARDS: you can be your own boss, you can bring a new product into the market that benefits everyone, you can be a problem solver, you can earn a profit.)

Chapter 22: Rufus Retires

Rufus announces his retirement in this chapter. For him, it is not all about the profit. He loves the challenge of figuring out problems. We see in this chapter that Rufus is still frugal even though he is a millionaire. We are left to imagine what business he might start next.

Concepts

Business, entrepreneur, incentives, risk, reward

Standards

- Review all standards.

Quick Assessment Activities

- Have students write about what their favorite part of the book was and explain why.
- Challenge students to reflect on what they have learned from Rufus, Kate or Hector.
- Draw a picture of what you think Rufus' next business will be.
- Play a fun review game. Find examples in the LiveBinder at <https://www.livebinders.com/b/2533717>.