



The Lemonade War

A Chapter-by-Chapter Teacher Guide

By Marsha Masters Economics Arkansas

Grades 4-5

Note: 5th Grade standards are tied to history. These lessons will help introduce students to economic concepts in 5th grade. Teachers may use these as a springboard to connect present examples with the past to address the standards.

Chapter 1: Slump

In this chapter, we meet Jessie and Evan. Jessie is a saver, and Evan is a spender. The concepts of personal finance and choices are overarching themes throughout the book. It is important for students to understand that choices, whether involving money, how to spend a summer afternoon or other decisions, have benefits and costs. Sometimes the outcome is noticed immediately, and other times it isn't fully understood until sometime in the future.

Concepts

Decisions, alternatives, benefits, costs, opportunity cost, money, save, spend

Standards

- E.4.4.2 Apply economic decision-making models when making decisions.
- E.4.5.2 Analyze historical developments using models of economic decision making.

Lessons on Choices with Saving and Spending

- The Grasshopper and the Ant <u>http://www.econedlink.org/teacher-lesson/1288/Grasshopper-Ant</u>
- Rock, Brock and the Savings Shock <u>http://vcee.org/elementary-school/reading-makes-cents/2016-17-featured-books/</u> scroll down

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- Uncle Jed's Barbershop https://www.stlouisfed.org/education/uncle-jeds-barbershop
- Financial Fitness for Life Parent Guide. This has many great resources for the classroom and/or the home connections to be used throughout the financial literacy project. Available in English or Spanish. <u>http://www.econedlink.org/afterschool/parent-resources.php</u>

Lessons on Decision Making and Opportunity Cost

- Need Help As You Decide? An Economics Arkansas original lesson plan. <u>http://www.economicsar-kansas.org/for_teachers/lesson-plans-4-5.html</u>
- Once Upon a Decision https://www.econlowdown.org/decision-making-elem?p=yes
- Opportunity Cost Video and 5 Question Quiz (1:59) <u>http://www.econedlink.org/tool/190/</u>

Quick Assessment Activities

- Challenge students to identify whether they are an ant or grasshopper based on the lesson above. Distribute an index card and have them identify which character is most like them when it comes to money and explain why they think that about themselves.
- Use the PACED Decision Making Guide to address a problem. Examples: How will I spend my time on a free afternoon? What should I do with \$10 I earned?
- Open Common Cents: It's Free, But At What Cost? <u>https://www.kansascityfed.org/~/media/files/</u> publicat/education/teachingresources/common-cents-free-but-what-cost.pdf.

See *An Opportunity Cost is an Opportunity Lost* on page 3 for scenarios that challenge students to make choices and identify opportunity cost.

Chapter 2: Breakup

Chapter 2 addresses how to produce lemonade and set up a stand. Productive resources include human resources (people who do the mental and physical work to produce goods and services; here: Evan and Scott), natural resources ("gifts of nature" used in the production of goods and services; here: lemon, water) and capital resources (goods that are produced and used to make other goods and services; here: pitcher, spoon, measuring cups, table, ice chest, etc.) necessary to produce lemonade.

Note: Sugar and cups are not considered human, natural or capital resources. They are produced in a factory and are used up in the production of a good or service. Bags of sugar and cups do not grow in nature. The sugar can't be removed from the lemonade and used for other purposes, and people will throw away their cups. For health purposes, a business owner couldn't serve someone else at their stand with that same cup without properly cleaning.

Another important concept to introduce to 4th and 5th grade students is that the natural resource necessary to produce lemonade (lemons) does not grow naturally in Arkansas, which allows a great geography connection, also. We do grow many natural resources in Arkansas that we send to other parts of the United States and around the world to satisfy the wants of consumers. Our economy depends on trade to be able to enjoy the products we enjoy in the market place. This chapter also introduces students to the concept of expenses necessary to start a business. Scott's mom is bankrolling their business, but people often must secure a loan to be able to purchase resources necessary to start a business.

Concepts

Human resources, natural resources, capital resources, production, trade, goods, services

Standards

- E.5.4.2 Articulate ways entrepreneurs and businesses in Arkansas and the United states organize human, natural and capital resources to produce goods and services.
- E.5.5.2 Examine ways human, natural and capital resources were organized to produce and deliver goods and services in periods of history.
- E.7.4.1 Illustrate ways trade has led to economic interdependence between Arkansas, other states, and other countries.
- E.7.4.2 Explain effects of increasing economic interdependence on different regions of the United States.
- E.7.5.1 Explain ways trade leads to economic interdependence among countries.

Lessons on Productive Resources, Loans and Trade

- Lemon Squeeze—The Lemonade Stand http://www.econedlink.org/teacher-lesson/369/Lemon-Squeeze-Lemonade-Stand
- One Hen: How One Small Loan Made a Big Difference <u>https://www.stlouisfed.org/education/one-hen-how-one-small-loan-made-a-big-difference</u>
- The Color of Resources http://www.econedlink.org/teacher-lesson/711/
- Where Did You Come From? <u>http://www.econedlink.org/teacher-lesson/448/Where-Did-You-Come</u>

Quick Assessment Activity

- Select a product and have students identify the human, natural, intermediate and capital resources necessary for production. One example is chocolate, see https://www.hersheys.com/en_us/our-story/how-we-make-chocolate.html.
- Order the Ag Readers from Farm Bureau. They are excellent and allow students to learn more about the natural resources in our state and how they are shipped across the globe to produce goods and services. Ordering information may be found at: <u>http://www.arfb.com/pages/education/class-room-materials/</u>.

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Chapter 3: Joint Venture

Ask students how weather impacts their desire to have certain goods and services. In the winter time, when it is cold outside, would they want to wear shorts and flip flops? (*No.*) They would probably want gloves, caps, coats, and boots to keep them warm. In the summer time, when it is warm outside, would they want hot chocolate to satisfy their thirst? (*Probably not.*) What would quench thirst on a hot, sunny day? (*Answers might include: tea, soft drink, water or lemonade.*) This is a great opportunity for students to see how economic wants change.

This chapter also introduces the concept of a market. Think of the letter "X." A market exists anywhere there is an exchange between buyer and seller. (Raise your left hand to represent the buyer and your right hand to represent the seller. If you cross them, students can actually visualize an "x" and see how the exchange occurs.) Markets can be face-to-face where we see the buyer and seller make the exchange like at the mall, grocery store, toy store, garage sale, or lemonade stand. Sometimes markets are not face-to-face when something is purchased online (eBay, Amazon, etc.)

Concepts

Economic wants, markets, buyers, sellers, supply, demand

Standards

- E.5.4.3 Explain effects of supply and demand on prices.
- E.5.5.3 Evaluate the development of a free market economy.

Lessons on Markets, Supply, Demand and Economic Wants

- All in Business <u>http://www.econedlink.org/teacher-lesson/376/</u>
- Lemon Squeeze—The Lemonade Stand <u>http://www.econedlink.org/teacher-lesson/369/Lem-on-Squeeze-Lemonade-Stand</u>
- NOT Your Grandma's Lemonade Stand (A MUST) <u>http://www.econedlink.org/teacher-lesson/276/</u> NOT-your-Grandma-s-Lemonade-Stand

Quick Assessment Activity

Challenge your students to operate their own lemonade stand for 14 days. The link is provided in the *NOT Your Grandma' Lemonade Stand* lesson above. This is a great activity and helps students understand the costs associated with operating a stand and how weather impacts sales.

Chapter 4: Partnership

Jessie finds a partner to open her lemonade stand. At first, Megan thought the idea of the lemonade stand sounded boring, and she could think of more exciting ways to spend her time. She thought getting Slurpees at the 7-Eleven sounded like much more fun. The concept of scarcity affects everyone. In this case, there was a scarce amount of time, and the girls had to determine how to spend their time. Scarcity occurs when there is not enough of something for everyone who wants it.

Teaching students to understand the benefits and costs of decisions is important. The truth is we cannot have all the things we want, so we have to make choices. The lessons below teach decision making skills.

This chapter also introduces the concept of human capital. Human capital is how you train your brain to become more skilled and equipped for jobs or tasks. Megan is very impressed by how good Jessie is with math. How could you improve your math skills to solve problems like Jessie? Some ways you could improve your human capital include watching a math video to help you solve problems, practicing problems to reinforce skills, or being tutored to get some special help.

Concepts

Decisions, alternatives, benefits, cost, opportunity cost

Standards

- E.4.4.2 Apply economic decision-making models when making decisions.
- E.4.5.2 Analyze historical developments using models of economic decision making.

Lessons on Business Partnership, Entrepreneurship and Human Capital

- It Takes Two! (Partnership) Video <u>http://www.smckids.com/episodes/?vidlink=11</u>
- *It Takes Two!* (Partnership) *Teacher Activity Guide* <u>http://smckids.com/learnandearn/images/sto-ries/pdfs/SMC_Afterschool_Wb11_ItTakesTwo.pdf</u>
- It Takes Two! (Partnership) Digital Comics <u>http://www.smckids.com/digital-comics/issue-11/</u>
- I Can Be An Entrepreneur. <u>http://www.econedlink.org/teacher-lesson/476/I-Can-Be-Entrepreneur</u>
- Learn, Baby, Learn (Human Capital) Video, (4:01) <u>http://www.smckids.com/episodes/?vidlink=13</u>
- *Learn, Baby, Learn* (Human Capital) *Teacher Activity Guide* <u>http://smckids.com/learnandearn/im-ages/stories/pdfs/SMC_Afterschool_Wb13_LearnBabyLearn.pdf</u>
- Learn, Baby, Learn (Human Capital) Digital Comics <u>http://www.smckids.com/comics/?book-link=13</u>

Quick Assessment Activities

- Challenge students to list something they would like to learn to do. Have them list ways they can identify their human capital to achieve that goal.
- Give students a PACED Decision Making Grid and a problem. Examples include what to do with free time, how to spend money received as a gift, or where to go eat dinner if they have the chance to pick. Have them complete the guide and share their opportunity cost.

Note: It is important that students understand that not all other options are their opportunity cost. Their next best choice is their opportunity cost, the opportunity they lost when they chose.

Chapter 5: Competition

Jessie and Evan make a bet to see who can earn \$100 selling lemonade. They cannot count money that has been given to them or money earned from other jobs. In the marketplace, competition is good for consumers because there are more options and generally better prices.

The chapter also introduces the concept of sharing money as Jessie speaks of donating part of her profit to an animal shelter.

Concepts

Competition, supply, demand, free market system, incentives

Standards

- E.5.4.3 Explain effects of supply and demand on prices.
- E.5.5.3 Evaluate the development of a free market system.
- E.7.5.2 Explain effects of increasing economic interdependence on different groups within participation nations (e.g., conflict, competition, cooperation, increased wealth, quality of life).

Lessons on Competition in the Marketplace, Supply and Demand

- Competition: Pizza! <u>http://www.econedlink.org/teacher-lesson/383/Competition-Pizza</u>
- Competition Works in Our Flavor <u>http://www.econedlink.org/teacher-lesson/841/Competi-</u> <u>tion-Works-Our-Flavor</u>
- *Hey Pop!* <u>http://www.econedlink.org/teacher-lesson/453/Hey-Pop</u>
- What is Competition? http://www.econedlink.org/teacher-lesson/509/What-is-Competition

Quick Assessment Activities

Find examples of businesses that compete against each other and make a bulletin board matching the competitors. (*Ex. Wendy's, McDonalds, and Sonic or Family Dollar and Dollar General*)

Chapter 6: Underselling

This chapter allows students to examine how value added and price impact sales for the lemonade stands. Those value added items often serve as an incentive to shape buying behavior. An economic principle is that people respond to incentives in predictable ways and incentives matter.

Concepts

Decisions, alternatives, benefits, costs, opportunity cost, incentives

Standards

- E.4.4.2 Apply economic decision-making models when making decisions.
- E.4.5.2 Analyze historical developments using models of economic decision making.
- E.5.5.3 Evaluate the development of a free market system.

Lessons on Consumer Behavior Decisions Based on Advertising and Incentives

- Be an Ad Detective http://www.econedlink.org/teacher-lesson/645/Be-Ad-Detective
- Believe it or Not? http://www.econedlink.org/teacher-lesson/647/Believe-it-Not
- Did You Get the Message? http://www.econedlink.org/teacher-lesson/634/Did-You-Get-Message
- How E-Commerce Influences Consumer Choice <u>http://www.econedlink.org/teacher-lesson/559/</u> How-E-Commerce-Influences-Consumer-Choice
- Inventive Incentive http://www.econedlink.org/teacher-lesson/260/
- Incentives Influence Us <u>http://www.econedlink.org/teacher-lesson/378/</u>
- Incentives Video and 5 Question Quiz (1:34) <u>http://www.econedlink.org/interactives/</u> EconEdLink-interactive-tool-player.php?iid=188
- The Entrepreneur in You video (1:34) https://www.youtube.com/v/q7K9RXqAK6s
- What's Your Angle? http://www.econedlink.org/teacher-lesson/501/What-s-Your-Angle

Quick Assessment Activities

Look for examples of ads in the newspapers, online or magazines that offer consumers incentives. Have students select one as evidence and write how their example serves as an incentive.

Chapter 7: Location, Location, Location

Evan thinks he has found the perfect location to host his lemonade stand...the middle of town.

Location is an important factor for a business owner to consider when trying to attract consumers. Evan has one small problem. He doesn't have a permit to sell lemonade in town.

Officer Ken is the police officer who shares the law with Evan. Officer Ken provides a valuable service in protecting the city, enforcing the laws and keeping everyone safe. He provides a public service in that he works for everyone. He earns his income from the government. The government provides public highways, traffic lights, bridges, public schools, fire stations, public libraries and more for all to use.

Concepts

Goods, public goods, public services, role of government, taxes

Standards

- E.6.4.3 Examine ways state and local governments pay for the goods and services they provide.
- E.6.5.3 Explain ways state and federal governments pay for the goods and services they provide.

Lessons on Business Location and Public Goods and Services

- Lemons to Lemonade video (4.16) <u>http://www.smckids.com/episodes/?vidlink=01</u>
- Lemons to Lemonade Teacher Guide <u>http://smckids.com/learnandearn/teachers/webisode-activities/</u>
- Lemons to Lemonade Digital Comics http://www.smckids.com/digital-comics/issue-01/
- Goods and Services: Some are Private, Some are Not http://www.econedlink.org/teacher-les-son/978/Goods-Services-Some-are-Private-Some-are-Not
- The Mystery of is it Mine or Ours? <u>http://www.econedlink.org/teacher-lesson/462/Mystery-is-it-Mine-Ours</u>
- Tic Tac Taxes! http://www.econedlink.org/teacher-lesson/370/Tic-Tac-Taxes

Quick Assessment Activities

- Have students write about their favorite store in town. Have them identify the store, where it is located, and explain the impact of the location on their shopping convenience.
- Create a collage of public goods and services using print copies and drawings.
- Challenge students to make a list of features about a location that would make it a good spot to open a lemonade stand.

Chapter 8: Going Global

Jessie has done her math calculations and realizes that she and Megan need help. She wants to get other girls to sell lemonade for Megan and her in exchange for keeping part of the profit. Jessie and Megan would have to risk it all. Many girls agreed and business boomed.

Students will quickly understand the idea that there are a number of businesses that have locations all across our state, nationally and internationally. Many follow the franchise concept that Jessie and Megan started in this chapter. This is a great time to research about a company that offers franchises like Wendy's, McDonalds, Subway, or Sonic. Share the story of how the company started and grew. It's easy to find the stories online. Example: Wendy's: <u>https://www.wendys.com/en-us/about-wendys/the-wendys-story</u>.

Concepts

Entrepreneur, business, franchise, productive resources, risk and reward

Standards

- E.5.4.2 Articulate ways entrepreneurs and businesses in Arkansas and the United states organize human, natural and capital resources to produce goods and services.
- E.5.5.3 Evaluate the development of a free market system.
- E.7.4.1 Illustrate ways trade has led to economic interdependence between Arkansas, other states and other countries.

Lessons on Entrepreneurship and Business

- Entrepreneur Video and 5 Question Quiz (1:53) <u>http://www.econedlink.org/interactives/</u> EconEdLink-interactive-tool-player.php?iid=212
- Isabel's Car Wash https://www.stlouisfed.org/education/isabels-car-wash
- Spotlighting Entrepreneurs: a Technology "iCon" <u>http://www.econedlink.org/teacher-lesson/1074/</u> Spotlighting-Entrepreneurs-Technology-iCon
- Spotlighting Entrepreneurs: The Sweet Success of Milton Hershey <u>http://www.econedlink.org/</u> teacher-lesson/1069/Spotlighting-Entrepreneurs-Sweet-Success-Milton-Hershey
- Sweet Potato Pie <u>https://www.stlouisfed.org/education/sweet-potato-pie</u>
- Entrepreneur Guide https://www.dallasfed.org/en/educate/everyday.aspx
- *E-N-T-R-E-P-R-E-N-E-U-R*. An original Economics Arkansas lesson plan. <u>http://www.econom-icsarkansas.org/for_teachers/lesson-plans-k-3.html</u>
- Lemonade for Sale! <u>http://www.econedlink.org/teacher-lesson/695/Lemonade-Sale</u>
- What Makes an Entrepreneur? <u>http://www.econedlink.org/teacher-lesson/228/What-Makes-Entre-preneur</u>

Quick Assessment Activities

This link shares a list of the top 100 global franchises: <u>http://www.franchisedirect.com/top100global-franchises/rankings/</u>.

Assign students to research one of the franchises to report to class. Challenge them to find the year the company began, the number of franchises, the investment of being a franchise owner, and the global presence.

Chapter 9: Negotiation

Evan has thought about his decision to start the lemonade war, and he now regrets his decision. Share with students that one economic principle is that choices have consequences that lie in the future. He misses having Jessie as his friend to do activities with, so he offers an opportunity to call the entire thing off. When Jessie mentions Megan's name, it's all O-N again.

Concepts

Choice, alternatives, benefits, costs, opportunity cost

Standards

- E.4.4.2 Apply economic decision-making models when making decisions.
- E.4.5.2 Analyze historical developments using models of economic decision making.

Lessons on Choice, Costs, Benefits and Opportunity Cost

- Common Cents: The Art of Negotiation <u>https://www.kansascityfed.org/publicat/ten/pdf/winter2012/</u> Common-Cents.pdf
- You Decide http://www.econedlink.org/teacher-lesson/396/You-Decide

Quick Assessment Activity

Challenge students to write a paragraph about a choice they made and the consequences of that choice they recognized in the future.

(If students need help, one example would be not studying for an upcoming test. Maybe it was a low score on a test, or it kept them from the A/B honor roll.)

Chapter 10: Malicious Mischief

Both Jessie and Evan have had their feelings hurt by one another. They didn't use the decision-making apron or decision-making tree to weigh the benefits and costs before making decisions they now regret. In chapter 10, Jessie puts flies in Evan's lemonade. Yet another chapter to reinforce choice and opportunity cost.

Concepts

Choice, alternatives, benefits, costs, opportunity cost

Standards

- E.4.3.2 Identify problems, alternatives, and trade-offs involved in making a decision.
- E.4.4.2 Apply economic decision making models when making decision.

Lessons on Choice and Opportunity Cost

- The Big Trade-Off Video (3:57): <u>http://www.smckids.com/episodes/?vidlink=08</u>
- The Big Trade-Off Teacher's Guide: <u>http://smckids.com/learnandearn/images/stories/pdfs/SMC_</u> <u>Afterschool_Wb08_TheBigTradeOff.pdf</u>
- The Big Trade-Off Digital Comic: <u>http://www.smckids.com/comics/?booklink=08</u>

Quick Assessment Activity

Open *Common Cents: It's Free, But At What Cost?* <u>https://www.kansascityfed.org/~/media/files/publi-cat/education/teachingresources/common-cents-free-but-what-cost.pdf</u>.

See An Opportunity Cost is an Opportunity Lost on page 3 for scenarios that challenge students to make choices and identify opportunity cost.

Chapter 11: A Total Loss

As expected, there was no demand for the buggy lemonade. In business, the customer is always right, and a business owner wants consumers to be satisfied. When the boy said he wanted his money back and the mother suggested he needed to dump out the lemonade to get rid of the 50 flies inside, there was a problem. Evan had spent \$40 of his hard earned money on that lemonade and another dollar to buy cups.

Just like Jessie, Evan failed to use the decision making steps when he reacted by taking Jessie's money.

Did they weigh the benefits and costs? Do our decisions sometimes affect other people? Does it affect them in good or bad ways? This is a reality often overlooked by decision makers.

Concepts

Consumer, costs, benefits, choice, opportunity cost

Standards

- E.4.4.2 Apply economic decision making models when making decision.
- E.4.5.2 Analyze historical developments using models of economic decision making.
- E.5.4.3 Explain effects of supply and demand on prices.

Lessons on Decision Making and Opportunity Cost

- Sorry I Can't Hair You Video (3:58) http://www.smckids.com/episodes/?vidlink=14
- Sorry I Can't Hair You Companion Activity Guide <u>http://smckids.com/learnandearn/images/stories/</u> pdfs/SMC_Afterschool_Wb14_SorryICantHairYou.pdf
- Sorry I Can't Hair You Digital Comic <u>http://www.smckids.com/comics/?booklink=14</u>
- Satisfaction Please! <u>http://www.econedlink.org/teacher-lesson/630/</u>

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Quick Assessment Activity

- Explain the statement: The customer is always right.
- Challenge students to think of a decision someone else made, they had no input on, that impacted them in a positive or negative manner.
- List things a store or business can do to reduce the number of consumer complaints it receives.

Chapter 12-13: Waiting Period and Crisis Management

These chapters reinforce the idea that it is important to keep money in a safe place. It also is a great way for students to understand the concept of saving for future purposes.

Concepts

Choice, save, spend, financial institutions

Standards

- E.6.4.2 Describe the role of financial institutions in an economy.
- E.6.5.2 Examine roles of early financial institutions on the economy of the United States.

Lessons on Saving and Spending and the Role of Financial Institutions

- Banks, Bankers, Banking <u>http://www.econedlink.org/teacher-lesson/358/</u>
- What's My Interest? <u>http://www.econedlink.org/teacher-lesson/377/</u>
- You Can BANK on This! (4 lesson series) <u>http://www.econedlink.org/teacher-lesson/578/</u>
- There's No Business Like Bank Business www.kansascityfed.org/publicat/education/teachingresources/No_Business_lesson.pdf

Quick Assessment Activity

- Identify a savings goal and outline steps to achieve that goal.
- Explain the benefits of placing your money in a bank account as opposed to placing in a jar at home.

Chapter 14: Reconciliation

Evan and Jessie team up to enter an entry in the Rotary Club Labor Day Contest.

If Evan and Jessie had asked the Rotary Club's 4 Way Test questions as they were making decisions, they might not have ended up in the trouble they found themselves throughout the book.

Concepts

Choice, decision making, benefits, costs, alternatives, opportunity cost

Standards

- E.4.3.2 Identify problems, alternatives, and trade-offs involved in making a decision.
- E.4.4.2 Apply economic decision making models when making decision.

Lesson on Decision Making

- The Four Way Test (stop at 2:00) <u>https://www.youtube.com/watch?v=O1rQQIhVm3c</u> Challenge students to find examples of these four questions in the story.
 - Is it the TRUTH? (There are many examples of this in the story.)
 - Is it FAIR to all concerned? (Putting bugs in the lemonade wasn't fair. Taking Jessie's money wasn't fair. Filling the cups full was fair to the consumer. Creating a fair price was also fair.)
 - Will it build GOODWILL and BETTER FRIENDSHIPS? (In the end, Megan and Jessie became friends and Evan and Jessie became friends again. Goodwill was discussed in chapter 6.)
 - Will it be BENEFICIAL to all concerned? (In the end, the decisions Evan and Jessie make are beneficial. Along the way many decisions were not beneficial to all.)
- *Meet an 11 Year Old Entrepreneur: Video: (1:29)* <u>http://abcnews.go.com/WNT/video/11-year-en-</u> trepreneur-turns-lemonade-38069771

Quick Assessment Activity

Give students one of the following sentence stems:

One thing I learned from the book is _____.

My favorite part of the book was _____.

One thing I learned about money is _____.

If I started a business, I would start ______ because ______.