



The Lemonade War

A Chapter-by-Chapter Teacher Guide

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Economics Arkansas

Grades 2-3

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

Money, save, spend, choice, benefits, costs

Standards

- E.4.2.1 Discuss the importance of scarcity in relation to choices and opportunity cost.
- E.4.2.2 Explain a decision in terms of costs and benefits.
- E.6.2.2 Describe reasons for saving money in banks.

Lessons on Choices with Saving and Spending

- *Alexander, Who Used To Be Rich Last Sunday* <https://www.stlouisfed.org/education/alexander-who-used-to-be-rich-last-sunday>
- *Less Than Zero* <https://www.stlouisfed.org/education/less-than-zero>
- *The Grasshopper and the Ant* <http://www.econedlink.org/teacher-lesson/1288/Grasshopper-Ant>
- *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. <http://www.econedlink.org/afterschool/parent-resources.php>

Quick Assessment Activity

Distribute an index card or sticky note to each student. Challenge students to decide if they are an ant or grasshopper as it relates to saving and money. An ant is a saver. A grasshopper enjoys spending and enjoying instant gratification. Graph results.

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.

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

Standards

- E.5.2.2 Describe goods and services that people in the local community produce and those that are produced in other communities.
- E.5.3.2 Articulate ways entrepreneurs and businesses organize human, natural and capital resources to produce goods and services in Arkansas.

Lessons on Productive Resources and Securing Loans

- *How to Make an Apple Pie and See the World* <https://www.stlouisfed.org/education/how-to-make-an-apple-pie-and-see-the-world>
- *One Hen: How One Small Loan Made a Big Difference* <https://www.stlouisfed.org/education/one-hen-how-one-small-loan-made-a-big-difference>
- *The Little Red Hen* <http://www.econedlink.org/teacher-lesson/389/Little-Red-Hen>

Quick Assessment Activity

Have students divide their paper in half and then half again to create four sections. Have them label the columns: human resources, capital resources, natural resources and products.

Challenge them to brainstorm as many resources as they can in each category.

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/consumers, sellers/producers

Standards

- E.5.2.3 Describe ways markets exist in various places (e.g., home, physical location, Internet).
- E.5.3.3 Analyze economic factors in a market (e.g., supply, demand, competition, incentives).

Lessons on Markets, Factors that Impact Consumer Spending, and Entrepreneurship

- *Open for Business: Arthur’s Pet Business* <http://www.econedlink.org/teacher-lesson/920/Open-Business>
- *Forecasting Economics.* <http://www.econedlink.org/teacher-lesson/1062/Forecasting-Economics>
- *Lemonade for Sale* https://www.richmondfed.org/~media/richmondfedorg/education/for_teachers/lesson_plans_and_classroom_activities/pdf/lemonade_for_sale.pdf
- *Lemonade in Winter* <http://vcee.org/elementary-school/reading-makes-cents/2016-17-featured-books/>
- *NOT Your Grandma’s Lemonade Stand (A MUST)* <http://www.econedlink.org/teacher-lesson/276/NOT-your-Grandma-s-Lemonade-Stand>
- *We are Consumers and Producers* <http://www.econedlink.org/teacher-lesson/457/We-are-Consumers-Producers>

Quick Assessment Activity

Challenge your students to operate their own lemonade stand for 14 days. The link is provided in the *NOT Your Grandma's 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.

(**Note:** Scarcity is a confusing concept for students as they often think of a one-to-one relationship. Scarcity is defined as not being able to have all the goods and services that one wants. Consider there being 5 apples in a class of 20 students. If you asked the students to raise their hands if they wanted an apple and only 4 students raised their hands, then there isn't a scarcity problem. If you had 5 apples and all 20 students wanted their own apple, then there is a scarcity problem.)

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

Decision, choice, benefits, cost, opportunity cost, supply, demand

Standards

- E.4.2.1 Discuss the importance of scarcity in relation to choices and opportunity cost.
- E.4.2.2 Explain a decision in terms of costs and benefits.
- E.5.2.3 Describe ways markets exist in various places (e.g., home, physical location, Internet).
- E.5.3.3 Analyze economic factors in a market (e.g., supply, demand, competition, incentives).

Lessons on Decision Making and Human Capital

- *Morris Goes to School* <https://www.stlouisfed.org/education/morris-goes-to-school>
- *Digging into Decision-Making. Miss Bridie Chose a Shovel.* An Economics Arkansas original lesson plan. http://www.economicsarkansas.org/for_teachers/lesson-plans-k-3.html
- *Once Upon A Decision* <https://www.econlowdown.org/decision-making-lem?p=yes>

Quick Assessment Activities

- Give students a scenario and have them identify the benefits and costs of alternatives and make a decision.

Sample scenarios include:

1. You have received \$20 as a gift. What will you do with your money?
2. It's Saturday afternoon, and you have free time. You have a big test coming up Monday that you need a good grade on, a couple of your friends want you to come play video games, your neighbor wants you to ride bikes, and your family is going to the mall. What will you do? What is your 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.

- Pretend Jessie asked you to be her partner. What special skills could you take into the partnership? How could you increase your human capital to be a better partner? Write a quick note to Jessie explaining about your special skills that would make you a great partner.

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, markets, incentives, supply, demand

Standards

- E.5.2.3 Describe ways markets exist in various places.
- E.5.3.3 Analyze economic factors in a market. (e.g., supply, demand, competition, incentives).

Lessons on Economic Competition

- *Video (3.33)* <http://www.smckids.com/episodes/?vidlink=11>
- *Companion Guide* http://smckids.com/learnandearn/images/stories/pdfs/SMC_Afterschool_Wb11_ItTakesTwo.pdf
- *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*)
- As a class, think of a project that would allow you to donate to a local organization.

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

Price, supply, demand, sale, incentives

Standards

- E.5.2.3 Describe ways markets exist in various places.
- E.5.3.3 Analyze economic factors in a market. (e.g., supply, demand, competition, incentives).

Lessons on Incentives

- *Economic Incentives in Our Community* <http://www.econedlink.org/teacher-lesson/390/>
- *Incentive Incentive* <http://www.econedlink.org/teacher-lesson/260/>
- *Incentives Influence Us* <http://www.econedlink.org/teacher-lesson/378/>
- *Lemon Squeeze—The Lemonade Stand (A Must for Grade 3)* <http://www.econedlink.org/teacher-lesson/369/Lemon-Squeeze-Lemonade-Stand>
- *What are Incentives?* <http://www.econedlink.org/teacher-lesson/379/What-Are-Incentives>

Quick Assessment Activities

- Look for examples of ads in the newspaper or magazines that offer consumers incentives. (*Buy One Get One, Percentage Off, Coupons, etc.*)
- Conduct a survey of friends and family to find out what incentives encourage them to make purchases. Share findings with the class.

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

Public goods and services, decisions, choice, opportunity cost

Standards

- E.4.2.1 Discuss the importance of scarcity in relation to choices and opportunity cost.
- E.4.2.2 Explain a decision in terms of costs and benefits.
- E.6.2.3 Explain benefits of public goods and services.
- E.6.3.3 Explain the difference between public and private goods and services.

Lessons on Business Location and Public Goods and Services

- *Lemons to Lemonade* video (4.16) <http://www.smckids.com/episodes/?vidlink=01>
- *Lemons to Lemonade Teacher Guide* <http://smckids.com/learnandearn/teachers/webisode-activities/>
- *Lemons to Lemonade Digital Comics* <http://www.smckids.com/digital-comics/issue-01/>
- *Who Pays for City Hall?* <http://www.econedlink.org/teacher-lesson/281/Who-Pays-City-Hall>

Quick Assessment Activities

- *Location, Location, Location!* Have students explain what this phrase means to them in relation to business.
- Challenge students to make a list of features about a location that would make it a good spot to open a lemonade stand.
- Create a collage of public goods and public services in the community. The collage can consist of newspaper clippings, drawings, and words to represent public goods and services.

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.

Concepts

Franchise, global market, entrepreneur

Standards

- E.5.2.2 Describe goods and services that people in the local community produce and those that are produced in other communities.
- E.5.3.3 Articulate ways entrepreneurs and businesses organize human natural and capital resources to produce goods and services in Arkansas.
- E.5.3.3 Analyze economic factors in a market (e.g., supply, demand, competition, incentives).

Lessons on Entrepreneurship

- *Open for Business!* <http://www.econedlink.org/teacher-lesson/920/Open-Business>
- *Lemonade For Sale!* <http://www.econedlink.org/teacher-lesson/695/Lemonade-Sale>

Quick Assessment Activities

- Make a list of franchise businesses in the community.
- Have students pretend they have accepted the opportunity to be part of Jessie and Megan's franchise opportunity. Challenge them to design an advertisement for their business to attract customers.

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

Decision, choice, opportunity cost, benefits, costs

Standards

- E.4.2.2 Explain a decision in terms of costs and benefits.
- E.4.3.2 Identify problems, alternatives, and trade-offs involved in making a decision.

Lessons on Choice, Costs, Benefits and Opportunity Cost

- *Alexander, Who Used to Be Rich Last Sunday* <https://www.stlouisfed.org/education/alexander-who-used-to-be-rich-last-sunday>
- *Mousetropolis* <https://www.stlouisfed.org/education/mousetropolis>

Quick Assessment Activities

- 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.)

- Share the following scenario:

Sam has really been saving his money for a new video game. He has worked hard raking leaves and doing jobs around the house to earn income and has saved the money he has received as gifts. Sam almost has enough money when his friend calls wanting to go to the movies. Sam really wants to see the movie and likes hanging out with his friend, but he also wants that video game.

Make a list of the benefits and costs of each option for Sam and help him to understand what his opportunity cost would be for each choice.

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, opportunity cost, benefits, costs

Standards

- E.4.2.2 Explain a decision in terms of costs and benefits.
- E.4.3.2 Identify problems, alternatives, and trade-offs involved in making a decision.

Lessons on Choice and Opportunity Cost

- *So Few of Me* <https://www.stlouisfed.org/education/so-few-of-me>

Quick Assessment Activity

Open *Common Cents: It's Free, But At What Costs* <https://www.kansascityfed.org/~//media/files/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 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?

Concepts

Choice, cost, benefit, decision making, opportunity cost

Standards

- E.4.2.2 Explain a decision in terms of costs and benefits.
- E.4.3.2 Identify problems, alternatives, and trade-offs involved in making a decision.

Lessons

- *Cancel My Reputation Video (4:12)* <http://www.smckids.com/episodes/?vidlink=26>
- *Cancel My Reputation Companion Activity Guide* http://smckids.com/learnandearn/images/stories/pdfs/SMC_Afterschool_Wb26_CancelMyReputation.pdf
- *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* http://smckids.com/learnandearn/images/stories/pdfs/SMC_Afterschool_Wb14_SorryICantHairYou.pdf

Quick Assessment Activity

Common Cents: Money Ethics—Teaching Kids to Follow Their Moral Compass https://www.kansascityfed.org/~media/files/publicat/education/teachingresources/common_cents_money_ethics.pdf

Page 3 of this publication has some scenarios that challenge students to identify the problem, consider the costs and benefits and make an ethical decision. Either assign all students the same scenario, or make enough copies for each student to draw and respond to an ethical issue.

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

Save, spend, bank, interest

Standards

- E.6.2.2 Describe reasons for saving money in banks.
- E.6.3.1 Explain functions and characteristics of money in the United States.
- E.6.3.2 Explain functions of banks.

Lessons on Saving, Spending and Banks

- *Ella Saves Today*. This is a great online course you can show in your classroom on topics of saving, banks, interest, and more. You may also assign the course for students to work on independently. <https://www.stlouisfed.org/education/ella-saves-today-online-course-for-consumers>
- *Saving Strawberry Farm* <https://www.stlouisfed.org/education/saving-strawberry-farm>
- *The Berenstain Bears' Trouble with Money* <https://www.stlouisfed.org/~media/Education/Lessons/pdf/The-Berenstain-Bears-Trouble-with-Money.pdf>
- *There's No Business Like Bank Business* www.kansascityfed.org/publicat/education/teachingresources/No_Business_lesson.pdf

Quick Assessment Activity

A great assessment for this lesson is a great way for students to evaluate the best place to keep their money safe. <http://www.econedlink.org/afterschool/ebook/978-1-56183-698-7.pdf> (p.13).

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, benefits, costs, opportunity cost

Standards

- E.4.2.2 Explain a decision in terms of costs and benefits.
- E.4.3.2 Identify problems, alternatives, and trade-offs involved in making a decision.

Lesson on Decision Making

2nd Grade: The 4 Way Test Rotary Test Video (start at 0:17, end at 1:55)

3rd grade: The Four Way Test (stop at 2:00) <https://www.youtube.com/watch?v=O1rQQlhVm3c>

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.)

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 _____.