

GRADE 4 BUSINESS & FINANCE

First edition

8 units

32 lessons + bonus business unit

A video for every lesson

FIRST EDITION

COURSE GUIDE

This course follows eight strands of business and finance through one school year: work and trade, the story of money, markets, great businesses, fair rules, entrepreneurship and sales, bookkeeping, and saving, investing and giving. Each unit is built around real moments from history: silk and spices moving along the Silk Road, the merchants of the Hanseatic League, Mansa Musa's gold, the Spanish piece of eight, the Continental dollar that lost its value, the opening of the Erie Canal, the Hudson's Bay Company's trading posts, Isaac Singer's sewing machines sold on installments, Abraham Lincoln's patent, Thomas Edison's invention factory, John Wanamaker's money-back guarantee, and twenty-four brokers signing an agreement under a buttonwood tree on Wall Street in 1792.

Every lesson follows the same path. First comes **the story**. Then **how they figured it out**: what problem stood in the way, what they tried, what failed, what they counted and what they changed. Then **the big idea** underneath, explained for a fourth grader: opportunity cost, specialization, supply and demand, prices as signals, competition, cost and price, profit margin, interest. Then **in business today**: how families, shops and companies use the idea now, and what a wise and honest person does with it. Last, the student does it in miniature with coins, price tags, index cards, receipts and a ledger notebook.

Great businesses are weighed by what they meant for **six stakeholders**: the financiers who lent or invested the money, the risk-takers who started them, the builders who designed and made the product, the workers, the customers and the community. A business is great when it creates real value and serves all six over a long time. The year ends with a family market day, and an optional bonus unit, **Run a Real Business**, walks the student through starting, running and closing the books on a small service business, such as pet care or yard help, with a parent.

Most videos come from the Federal Reserve Bank of St. Louis, museums and historical societies, and trusted teaching channels

such as Learn Bright, Homeschool Pop and a few others chosen lesson by lesson. Every video was checked for content and accuracy before it was chosen, and none comes from a channel that takes sides in present-day public debates. Some channels end with a short invitation to subscribe or a sponsor message; you can stop the video when the teaching ends. Watch together when you can, and pause when the lesson tells you to predict what comes next.

Start with Lesson 1.1 →

WHO IT IS FOR

Written for students in grade 4 (about ages 9–10) who read on their own, can add and subtract money to \$100, and are learning to multiply and divide. A parent or teacher reads along, plays shopkeeper or customer in the projects, and supervises all real selling and money handling. Nothing needs to be bought beyond ordinary household items: coins, play money, a calculator, index cards, receipts and a graph-paper notebook.

HOW TO USE THIS COURSE

1. **The weekly rhythm.** The year has 32 lessons, one a week. Session 1 (about 45 minutes) is the warm-up, the video, the teaching and the picture study. Session 2 (about 45 minutes) is the project and the ledger notebook. In the last week of each unit, add a third session for the unit review and the portfolio project.
2. **Story, then the big idea.** The core ideas are written to be read aloud together or read by the student. The paragraphs marked *The story* and *How they figured it out* tell what happened; *The big idea* explains the money or business principle underneath; *In business today* shows how people use it now. After each paragraph, ask the student to tell it back in his or her own words.
3. **Picture study.** Each lesson has one public-domain painting, print, map, coin or historic photograph. Look at it quietly for two minutes. Then put it away and have the student tell everything he or she remembers. Bring it back and work through the “look for” items and questions, which point to the work, trade or money in the picture.
4. **The ledger notebook.** Use one graph-paper composition book for the whole year. Every project ends with something counted and written down: a log of trades, a price table, a tally, a ledger page, an inventory count, a budget or a stakeholder

scorecard. Date every page and write one sentence about what you would change. Honest records matter more than big numbers: “a just weight is his delight” (Proverbs 11:1).

5. **The six stakeholders.** Whenever the course looks at a business, ask what it meant for the financiers, the risk-takers, the builders, the workers, the customers and the community. Unit 4 teaches a simple stakeholder scorecard; use it all year, for businesses in history and for shops in your own town.
6. **Optional books and games.** Some units list free classics such as Benjamin Franklin’s *The Way to Wealth*, free teaching sites and family games. They are extras. Every lesson can be completed without them.
7. **Unit review and portfolio.** Each unit ends with a short review (50 points) and a portfolio project that pulls the unit together, such as a trade-route map, a money timeline, a price survey, a stakeholder report, an advertisement with a guarantee, a month of ledger pages or a real budget. Keep the portfolio pages in one folder for the year.
8. **Money and selling safety.** A parent supervises all selling and all handling of real money. Never sell door to door or meet strangers alone, never give out personal information, passwords or card numbers, and do not sell online without a parent. Check your town’s rules before selling food or setting up a stand. The student never borrows or lends money without a parent, and any investing in this course is practice with pretend money.
9. **The family market day.** In the last week of Unit 8, the student sets up a table with the best project from each unit and its ledger pages, sells or shows something he or she has made, and explains to family and guests how it was priced and what it earned.
10. **Run a Real Business (optional bonus unit).** Unit 9 walks the student through choosing, planning, pricing, doing and closing the books on a small service business with a parent: feeding a neighbor’s pets, watering plants, raking leaves or pulling weeds for people the family knows. Use it after market day, over the summer, or alongside the year.

SCOPE AND SEQUENCE

UNIT 1 • WEEKS 1–4

Work and Trade

Work as a calling and every choice's hidden cost; why people specialize and trade; the Silk Road; and the merchant towns of the Hanseatic League.

- 1.1 Made to Work, Free to Choose: Opportunity Cost
- 1.2 A Printer Buys His Bread: Specialization and Trade
- 1.3 The Silk Road: Why Both Sides Gain from Trade
- 1.4 The Hanseatic League: Merchant Towns That Kept Their Word

UNIT 3 • WEEKS 9–12

Markets

Supply and demand; prices as signals; competition and the end of the New York steamboat monopoly; and how the Erie Canal opened new markets.

- 3.1 Supply and Demand: Gold Rush Prices
- 3.2 Prices Are Signals: Wheat, the Telegraph and the Chicago Board of Trade
- 3.3 Competition versus Monopoly: The Steamboat Fight on the Hudson
- 3.4 The Erie Canal Opens New Markets

UNIT 2 • WEEKS 5–8

The Story of Money: Gold, Silver and Paper

Mansa Musa and the gold-and-salt caravans of the Sahara; the Spanish piece of eight; the Continental dollar that was “not worth a Continental”; and the gold standard and its end in 1971.

- 2.1 Gold for Salt: Mansa Musa and the Saharan Caravans
- 2.2 Pieces of Eight: The Spanish Dollar That Went Around the World
- 2.3 “Not Worth a Continental”: When Paper Money Loses Its Value
- 2.4 The Gold Standard: A Dollar You Could Trade for Gold

UNIT 4 • WEEKS 13–16

Great Businesses and Their Stakeholders

The six stakeholders and the stakeholder scorecard, tested on the Hudson's Bay Company, Josiah Wedgwood and his canal, the Kraft brothers' cheese, and Singer sewing machines sold on installments.

- 4.1 The Hudson's Bay Company: The Six Stakeholders and the Oldest Business in North America
- 4.2 Josiah Wedgwood and the Canal: Builders and the Community
- 4.3 The Kraft Brothers and Cheese That Would Keep
- 4.4 Singer Sewing Machines and Buying on Installments

UNIT 5 • WEEKS 17–20

Fair Rules: Property, Promises, Inventions and Honest Goods

Fair rules that work like a referee: property and contracts, patents and Lincoln’s “fire of genius,” Standard Oil and the Sherman Act, and the Pure Food and Drug Act.

- 5.1 Property and Contracts: The Pilgrims’ Cornfields and Keeping Your Word
- 5.2 Patents and Lincoln’s “Fire of Genius”
- 5.3 Standard Oil and the Sherman Act: When One Company Grows Too Strong
- 5.4 Honest Labels: Harvey Wiley and the Pure Food and Drug Act

UNIT 7 • WEEKS 25–28

Bookkeeping: Ledgers, Inventory, Cost and Profit

A ledger with columns, like George Washington’s account books; inventory and Lincoln’s country store; cost and price at Woolworth’s; and profit margin at the A&P.

- 7.1 A Ledger with Columns: George Washington’s Account Books
- 7.2 Inventory: Lincoln’s Country Store and Knowing What You Have
- 7.3 Cost and Price: Woolworth’s Five-and-Ten
- 7.4 Profit Margin: The A&P and a Few Cents on Every Dollar

UNIT 6 • WEEKS 21–24

Entrepreneurship and Sales

Edison’s invention factory as a business; Wanamaker’s price tags and money-back guarantee; truthful advertising; and customer service, with L.L. Bean’s leaky boots.

- 6.1 Edison’s Invention Factory: Turning Ideas into a Business
- 6.2 One Fair Price: Wanamaker’s Price Tags and Money-Back Guarantee
- 6.3 Truthful Advertising: The Sears Catalog and Honest Persuasion
- 6.4 Customer Service: L.L. Bean’s Leaky Boots

UNIT 8 • WEEKS 29–32

Saving, Investing and Giving

A budget and Franklin’s “small leak”; interest and the first savings banks; the Buttonwood Agreement and owning a share; and tithing, giving and the family market day.

- 8.1 A Budget: Franklin’s “Small Leak” and Planning Before You Spend
- 8.2 Interest: A Minister’s Savings Bank and Money That Grows
- 8.3 The Buttonwood Agreement: Owning a Share of a Business
- 8.4 Tithing, Giving and the Family Market Day

UNIT 9 • WEEKS 33–36

Bonus: Run a Real Service Business

Optional bonus unit: choose, plan, price and do a real service job for people you know, then close the books with a profit report and a gift.

9.1 Choose a Service and Plan It

9.2 Price Your Time and Your Costs

9.3 Do the Job Well: Faithful Service

9.4 Close the Books: Profit, Lessons and Giving

WEEKLY PACING CALENDAR

WEEK	PLAN
1	• Session 1: Lesson 1.1 Made to Work, Free to Choose: Opportunity Cost: warm-up, video, teaching and picture study • Session 2: Lesson 1.1 project and ledger notebook <i>Two sessions a week is the usual rhythm. Younger children can split a long session in two; older students can do both sessions in one sitting.</i>
2	• Session 1: Lesson 1.2 A Printer Buys His Bread: Specialization and Trade: warm-up, video, teaching and picture study • Session 2: Lesson 1.2 project and ledger notebook
3	• Session 1: Lesson 1.3 The Silk Road: Why Both Sides Gain from Trade: warm-up, video, teaching and picture study • Session 2: Lesson 1.3 project and ledger notebook
4	• Session 1: Lesson 1.4 The Hanseatic League: Merchant Towns That Kept Their Word: warm-up, video, teaching and picture study • Session 2: Lesson 1.4 project and ledger notebook • Session 3: Unit 1 review and portfolio project
5	• Session 1: Lesson 2.1 Gold for Salt: Mansa Musa and the Saharan Caravans: warm-up, video, teaching and picture study • Session 2: Lesson 2.1 project and ledger notebook

WEEK	PLAN
6	• Session 1: Lesson 2.2 Pieces of Eight: The Spanish Dollar That Went Around the World: warm-up, video, teaching and picture study • Session 2: Lesson 2.2 project and ledger notebook
7	• Session 1: Lesson 2.3 “Not Worth a Continental”: When Paper Money Loses Its Value: warm-up, video, teaching and picture study • Session 2: Lesson 2.3 project and ledger notebook
8	• Session 1: Lesson 2.4 The Gold Standard: A Dollar You Could Trade for Gold: warm-up, video, teaching and picture study • Session 2: Lesson 2.4 project and ledger notebook • Session 3: Unit 2 review and portfolio project
9	• Session 1: Lesson 3.1 Supply and Demand: Gold Rush Prices: warm-up, video, teaching and picture study • Session 2: Lesson 3.1 project and ledger notebook
10	• Session 1: Lesson 3.2 Prices Are Signals: Wheat, the Telegraph and the Chicago Board of Trade: warm-up, video, teaching and picture study • Session 2: Lesson 3.2 project and ledger notebook
11	• Session 1: Lesson 3.3 Competition versus Monopoly: The Steamboat Fight on the Hudson: warm-up, video, teaching and picture study • Session 2: Lesson 3.3 project and ledger notebook
12	• Session 1: Lesson 3.4 The Erie Canal Opens New Markets: warm-up, video, teaching and picture study • Session 2: Lesson 3.4 project and ledger notebook • Session 3: Unit 3 review and portfolio project
13	• Session 1: Lesson 4.1 The Hudson’s Bay Company: The Six Stakeholders and the Oldest Business in North America: warm-up, video, teaching and picture study • Session 2: Lesson 4.1 project and ledger notebook
14	• Session 1: Lesson 4.2 Josiah Wedgwood and the Canal: Builders and the Community: warm-up, video, teaching and picture study • Session 2: Lesson 4.2 project and ledger notebook

WEEK	PLAN
15	• Session 1: Lesson 4.3 The Kraft Brothers and Cheese That Would Keep: warm-up, video, teaching and picture study • Session 2: Lesson 4.3 project and ledger notebook
16	• Session 1: Lesson 4.4 Singer Sewing Machines and Buying on Installments: warm-up, video, teaching and picture study • Session 2: Lesson 4.4 project and ledger notebook • Session 3: Unit 4 review and portfolio project
17	• Session 1: Lesson 5.1 Property and Contracts: The Pilgrims' Cornfields and Keeping Your Word: warm-up, video, teaching and picture study • Session 2: Lesson 5.1 project and ledger notebook
18	• Session 1: Lesson 5.2 Patents and Lincoln's "Fire of Genius": warm-up, video, teaching and picture study • Session 2: Lesson 5.2 project and ledger notebook
19	• Session 1: Lesson 5.3 Standard Oil and the Sherman Act: When One Company Grows Too Strong: warm-up, video, teaching and picture study • Session 2: Lesson 5.3 project and ledger notebook
20	• Session 1: Lesson 5.4 Honest Labels: Harvey Wiley and the Pure Food and Drug Act: warm-up, video, teaching and picture study • Session 2: Lesson 5.4 project and ledger notebook • Session 3: Unit 5 review and portfolio project
21	• Session 1: Lesson 6.1 Edison's Invention Factory: Turning Ideas into a Business: warm-up, video, teaching and picture study • Session 2: Lesson 6.1 project and ledger notebook
22	• Session 1: Lesson 6.2 One Fair Price: Wanamaker's Price Tags and Money-Back Guarantee: warm-up, video, teaching and picture study • Session 2: Lesson 6.2 project and ledger notebook
23	• Session 1: Lesson 6.3 Truthful Advertising: The Sears Catalog and Honest Persuasion: warm-up, video, teaching and picture study • Session 2: Lesson 6.3 project and ledger notebook

WEEK	PLAN
24	• Session 1: Lesson 6.4 Customer Service: L.L. Bean’s Leaky Boots: warm-up, video, teaching and picture study • Session 2: Lesson 6.4 project and ledger notebook • Session 3: Unit 6 review and portfolio project
25	• Session 1: Lesson 7.1 A Ledger with Columns: George Washington’s Account Books: warm-up, video, teaching and picture study • Session 2: Lesson 7.1 project and ledger notebook
26	• Session 1: Lesson 7.2 Inventory: Lincoln’s Country Store and Knowing What You Have: warm-up, video, teaching and picture study • Session 2: Lesson 7.2 project and ledger notebook
27	• Session 1: Lesson 7.3 Cost and Price: Woolworth’s Five-and-Ten: warm-up, video, teaching and picture study • Session 2: Lesson 7.3 project and ledger notebook
28	• Session 1: Lesson 7.4 Profit Margin: The A&P and a Few Cents on Every Dollar: warm-up, video, teaching and picture study • Session 2: Lesson 7.4 project and ledger notebook • Session 3: Unit 7 review and portfolio project
29	• Session 1: Lesson 8.1 A Budget: Franklin’s “Small Leak” and Planning Before You Spend: warm-up, video, teaching and picture study • Session 2: Lesson 8.1 project and ledger notebook
30	• Session 1: Lesson 8.2 Interest: A Minister’s Savings Bank and Money That Grows: warm-up, video, teaching and picture study • Session 2: Lesson 8.2 project and ledger notebook
31	• Session 1: Lesson 8.3 The Buttonwood Agreement: Owning a Share of a Business: warm-up, video, teaching and picture study • Session 2: Lesson 8.3 project and ledger notebook
32	• Session 1: Lesson 8.4 Tithing, Giving and the Family Market Day: warm-up, video, teaching and picture study • Session 2: Lesson 8.4 project and ledger notebook • Session 3: Unit 8 review and portfolio project

WEEK	PLAN
	<i>Last week. Hold a family market day: the student sets up a table with the best project from each unit and its notebook pages, sells or shows something they made, and explains to guests how they priced it and what they earned.</i>
33	• Session 1: Lesson 9.1 Choose a Service and Plan It: warm-up, video, teaching and picture study • Session 2: Lesson 9.1 project and ledger notebook <i>Optional bonus unit: run a real small business. Do it after market day, over the summer, or alongside the year.</i>
34	• Session 1: Lesson 9.2 Price Your Time and Your Costs: warm-up, video, teaching and picture study • Session 2: Lesson 9.2 project and ledger notebook
35	• Session 1: Lesson 9.3 Do the Job Well: Faithful Service: warm-up, video, teaching and picture study • Session 2: Lesson 9.3 project and ledger notebook
36	• Session 1: Lesson 9.4 Close the Books: Profit, Lessons and Giving: warm-up, video, teaching and picture study • Session 2: Lesson 9.4 project and ledger notebook • Session 3: Unit 9 review and portfolio project

MATERIALS

Ledger notebook (a graph-paper composition book)

One for the whole year: trade logs, price tables, ledgers, inventory counts, budgets and stakeholder scorecards.

A jar of mixed coins and some play money (or slips of paper marked \$1, \$5, \$10 and \$20)

Used in nearly every unit for counting, trading and making change.

A calculator

A basic one is fine. A free spreadsheet (Google Sheets or LibreOffice Calc) is helpful but never required.

Index cards, sticky notes, markers and a roll of masking tape

For price tags, trading cards, signs, coupons and auction bids.

Store flyers, catalogs and receipts

Save them through the year for price surveys, advertisements and ledger practice.

A ruler, colored pencils, a world map or atlas, and a kitchen scale if you have one

For trade-route maps and for weighing goods in a few projects.

Three envelopes or jars labeled Give, Save and Spend

For the budgeting lessons in Unit 8 and the bonus business.

Household supplies for small projects

Paper, scissors, paper cups, dried beans or buttons for trade goods, crackers or cheese for a taste test, and simple tools for the bonus service business.

Optional: one of the books or games listed in a unit

Never required. See the list in each unit.

GRADING

Grades come mostly from the projects and the ledger notebook, because business and money are learned by doing and recording. A project whose numbers did not turn out well but are honestly recorded and explained earns full credit.

PART	%
Projects (effort, careful counting and the improve-it step)	40
Ledger notebook (dated pages, labeled columns, honest records)	20
Unit reviews	15
Portfolio projects	25

Scale: A 90–100, B 80–89, C 70–79, D 60–69. Below 60: redo the project or review with help.

- Grade the process, not just the result. Did the student predict, count carefully, record honestly, explain the numbers and suggest an improvement?
- A ledger page earns full marks when it has a date, a title, labeled columns, correct totals and one sentence about what the numbers mean.

- Unit reviews may be done orally for a student who writes slowly; the parent writes down the answers.
- Keep each unit's portfolio pages in one folder. They make a fine record of the year and the centerpiece of the family market day.

A NOTE TO PARENTS

You do not need to be an economist or an accountant to teach this course. Read the story aloud together, watch the video, and then be the student's customer, supplier or banker in the project. Ask "What would you give up?", "Who gains from this trade?" and "How do you know? Show me the numbers." Those three questions are most of what a good business teacher does.

The course tells history honestly. Great businesses are shown with their strengths and their failings, and the lessons on fair rules are taught as settled history: what problem a law or a custom fixed, how it worked and what it cost. Nothing in the course asks you or your child to take a side in present-day public debates.

Real money should always be handled with you nearby. When the student sells something or does a paid job, you are the partner who keeps the cash box, checks the change and makes sure no one is cheated. Above all, the course hopes to raise a young person who works heartily, deals honestly, saves wisely and gives cheerfully. *Fabricando fit faber*: by making, one becomes a maker.

UNIT 1

WORK AND TRADE

God made people to work. In the very first chapters of the Bible, Adam is put in the garden “to dress it and to keep it” (Genesis 2:15). Work is how we serve our neighbors and provide for our families, and because no one can make everything he needs, work leads straight to **trade**. In this unit you will learn why every choice has a hidden cost, why people do better when each one specializes and then trades, and how merchants long ago carried goods across deserts and seas.

You will meet Esau, who traded something precious for a bowl of stew, and young Benjamin Franklin, who paid too much for a whistle. You will follow Franklin to Philadelphia, where a printer bought his bread from a baker. Then you will travel the Silk Road with camel caravans and sail the cold northern seas with the merchants of the Hanseatic League. In every story you will ask the same question: **why did both sides gain from the trade?**

PREREQUISITES

- Can add and subtract money amounts to \$20
- Knows the difference between goods and services
- Can read a simple map with a compass rose

MASTERY CHECKLIST

- ☐ I can explain that work is good and that God made us to work.
- ☐ I can name the opportunity cost of a choice: the next-best thing I gave up.
- ☐ I can explain why people who specialize and trade can have more than people who make everything themselves.
- ☐ I can tell how goods moved along the Silk Road and how the Hanseatic towns worked together to trade safely.
- ☐ I can explain why both sides usually gain from a fair, free trade.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Autobiography of Benjamin Franklin (free at Project Gutenberg)**: Free. Read aloud the short passage where seventeen-year-old Franklin arrives in Philadelphia and buys “three great puffy rolls” (Lesson 1.2). The whole book is best for older readers, so a parent may choose the passages.
- **Econ Lowdown, from the Federal Reserve Bank of St. Louis**: Free. Short lessons and videos on scarcity, choice, specialization and trade, written for students. Parents can browse without an account.
- **Catan (family board game)**: Ages 10 and up with a parent. Players gather wood, brick, wool, grain and ore and must trade with each other to build. A lively way to feel why people trade and why a fair trade helps both sides.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

1.1 Made to Work, Free to Choose: Opportunity Cost	2 sessions of 45 minutes
1.2 A Printer Buys His Bread: Specialization and Trade	2 sessions of 45 minutes
1.3 The Silk Road: Why Both Sides Gain from Trade	2 sessions of 45 minutes
1.4 The Hanseatic League: Merchant Towns That Kept Their Word	2 sessions of 45 minutes

UNIT 1 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What is scarcity? Give one example of something scarce in your own life.

2. **5 pts**

You have \$8. You can buy a kite for \$8 or a book for \$6 and a snack for \$2. You choose the kite. What is your opportunity cost?

3. (5 pts)

What did Benjamin Franklin mean when he said, “Don’t give too much for the whistle”?

4. (5 pts)

Franklin was a printer. Why did he buy bread from a baker instead of baking it himself?

5. (5 pts)

In a contest, two children made 8 boats and 8 bookmarks when each did both jobs, and 14 boats and 12 bookmarks when each specialized. How many more products did they make by specializing?

6. (5 pts)

Name two goods that traveled west on the Silk Road and two that traveled east.

7. (5 pts)

Silk cost \$10 in China. Three merchants each added \$6 for their costs and \$2 for their work as they carried it west. What was its price at the end?

8. (5 pts)

Why do both sides gain in a fair, free trade?

9. (5 pts)

Name two ways the Hanseatic League made trade safer.

10. (5 pts)

What would happen if pirates attacked every ship and no merchant could trust another? Explain what would happen to trade and to people’s lives.

ANSWER KEY

1. Scarcity means not having enough time, money or things to do or have everything we want, so we must choose. Example: there is only one free afternoon, or only \$10 to spend.
2. The book and the snack (the next-best choice you gave up).
3. Do not pay more for something than it is really worth to you; think about what else you could have had with the money before you spend it.
4. He was skilled at printing and could earn more by printing and buying bread than by spending his time baking. The baker specialized in bread, so both gained by trading.
5. First round: $8 + 8 = 16$. Second round: $14 + 12 = 26$. They made $26 - 16 = 10$ more.
6. West: any two of silk, paper, tea, fine pottery, spices. East: any two of horses, glass, silver, wool, grapes.
7. Each merchant added \$8. $3 \times \$8 = \$24$. $\$10 + \$24 = \$34$.
8. Each person gives up something he values less to get something he values more, so both end up better off.
9. Any two: ships sailed in convoys; merchant's marks on goods; shared laws (Lübeck law); quality checks such as set barrel sizes; all towns could stop trading with a city that cheated; trading offices (Kontors) in foreign cities.
10. Trade would shrink or stop, goods from far away would become scarce and very expensive, and people would have to make do with what they could make nearby, so they would be poorer.

PORTFOLIO PIECE: MY MAP OF TRADE ROUTES

Make a large hand-drawn map that shows the Silk Road and the trade routes of the Hanseatic League. Mark at least eight cities, draw arrows for the goods that traveled each way, and add small drawings of a caravan and a cog. Beside the map, include your Silk Road relay ledger and your Hansa trade log, and write a paragraph explaining why both sides gain from fair trade and what made these long trade routes possible.

LOOK FOR	WHAT IT MEANS
Accuracy	Cities, routes and goods are placed correctly and labeled clearly.
Records	The relay ledger and trade log are complete, dated and correctly added.
Explanation	The paragraph explains specialization, why both sides gain, and the role of trust and safe travel.
Care	The map is neat, colorful and easy to read.

1.1 MADE TO WORK, FREE TO CHOOSE: OPPORTUNITY COST

OBJECTIVES

- Explain that work is a good gift from God and that people work to serve others and provide for their families.
- Define scarcity and opportunity cost and find the opportunity cost of a real choice.
- Tell the stories of Esau's stew and Benjamin Franklin's whistle and explain what each one teaches about choosing.

Warm-up. Imagine you have one free Saturday afternoon. Write down four things you would like to do with it. Now circle only one, because there is time for just one. Which one did you give up that you will miss the most?

WATCH

Financial Literacy—Needs and Wants | Learn about needs, wants, and opportunity costs

Learn Bright · 4:37

<https://www.youtube.com/watch?v=aRcXutXvfmM>

WHEN TO WATCH

After the warm-up, before the story of Esau and Franklin's whistle.

BACKUP VIDEO

Benjamin Franklin - The Whistle

Great Books of the Western Tradition · 4:06

<https://www.youtube.com/watch?v=CVzOFgZzG1w>

After the core ideas: a reading of Franklin's own letter about the whistle.

KEY TERMS

work

Effort that makes something useful or helps someone. God gave people work as a good gift (Genesis 2:15).

scarcity

Not having enough time, money or things to do everything we want, so we must choose.

choice

Picking one thing when you cannot have them all.

opportunity cost

The next-best thing you give up when you make a choice.

trade-off

Giving up some of one thing to get more of another.

CORE IDEAS

The story. Long ago, the Bible tells us, two brothers named Esau and Jacob grew up in the same tent. Esau was a hunter. One day he came in from the field tired and hungry, and Jacob was cooking a pot of red lentil stew. “Feed me,” said Esau. Jacob answered, “Sell me this day thy birthright.” The birthright was the oldest son’s special place in the family and a double share of what his father would leave. Esau said, “I am at the point to die: and what profit shall this birthright do to me?” He traded it for bread and a bowl of stew (Genesis 25:29-34). The Bible sums it up: “thus Esau despised his birthright.”

How they figured it out. A much happier story about the same lesson comes from Benjamin Franklin. When he was seven years old, on a holiday in Boston, his family filled his pockets with copper coins. On the way to a shop he met a boy blowing a whistle and loved the sound so much that he gave the boy *all* his coins for it. At home he whistled all over the house. Then his brothers and sisters told him he had paid four times what the whistle was worth and listed the good things he could have bought with the rest. He cried, he later wrote, and the whistle gave him less pleasure than the trouble it caused. Franklin remembered that lesson all his life. Whenever he was tempted to spend too much on something, he said to himself, “Don’t give too much for the whistle.”

The big idea. We all face **scarcity**: we have only so much time, money and strength, and we cannot have everything we want. So every day we make **choices**. Every choice has an **opportunity cost**: the next-best thing you gave up. Esau’s opportunity cost was his birthright. Franklin’s was all the other things his coins could have bought. The opportunity cost is not always money. If you spend an hour playing a game, the opportunity cost might be an hour of reading, or an hour of helping your father in the garden. A wise person asks before choosing, “What am I giving up?”

In business today. Families, farmers and business owners think about opportunity cost all the time. A farmer who plants corn in a field cannot also plant wheat there. A baker who spends the morning making cakes cannot also make bread that morning. A family that spends its money on a new couch cannot spend the same money on a trip. Good choices are not always the cheapest ones. They are the ones where what you gain is worth more than what you give up. And because God made us to work (Genesis 2:15; Colossians 3:23), work itself is never wasted time: it is one of the best ways to spend the hours He gives us.

PICTURE STUDY



Esau Selling His Birthright, Hendrick ter Brugghen, about 1627 · Oil on canvas · Thyssen-Bornemisza Museum, Madrid

Image: [Wikimedia Commons](#), public domain

Hendrick ter Brugghen was a Dutch painter from Utrecht who loved candlelight and strong shadows. Here he shows the moment from Genesis when hungry Esau agrees to give up his birthright for a bowl of stew. Ter Brugghen dressed the people in the clothes of his own time, as if the story were happening in a Dutch kitchen.

Look closely

- Find the bowl of stew. Who is holding it, and who is reaching for it?
- Look at Esau's face and hands. Does he look like a person thinking carefully about a big choice?
- Find the light in the picture. What does the painter want you to look at first?
- Look at the other people at the table. How do you think they feel about the trade?

Talk about it

1. What did Esau get in the trade? What did he give up? Which was worth more?
2. Why do people sometimes make poor choices when they are very hungry, tired or in a hurry?

3. Can you remember a time when you “gave too much for the whistle”?

PROJECT

My Choice Chart

You will spend a pretend \$10 and a real Saturday on paper, and for every choice you will write down what you gave up. By the end you will be able to find the opportunity cost of any choice.

You will need

- Ledger notebook and pencil
- Ten \$1 bills of play money (or ten slips of paper marked \$1)
- A store flyer or a list your parent makes of six things a child might buy, with prices from \$1 to \$8

Steps

1. With your parent, make a menu of six things you might buy with \$10, each with a price. For example: a book \$6, a kite \$8, a set of colored pencils \$4, a snack \$2, seeds for the garden \$3, a gift for a friend \$5.
2. In your ledger, rule a table with four columns: My choice, Price, Money left, What I gave up (opportunity cost).
3. Spend your \$10 of play money one item at a time. After each purchase, write the item, its price and the money left.
4. In the last column, write the thing you wanted next most but could no longer afford. That is the opportunity cost.
5. Now do the same with time. List five things you could do on Saturday afternoon and how long each takes. You have 4 hours. Choose, and write the opportunity cost of your plan.
6. Ask a parent to tell you about one real choice your family made, such as buying one car instead of another or spending a vacation at home. What did the family give up?
7. Write two sentences: Which of my choices was the best trade? Which would I change?

Tips

- The opportunity cost is only the *next-best* thing, not every single thing you gave up.
- Saving money is a choice too. If you save \$3, the opportunity cost is what you could have bought with it today, and the gain is what you can buy or give later.

Check your work

- ☐ I can explain what scarcity means.
- ☐ I can find the opportunity cost of a choice of money and a choice of time.
- ☐ I can explain what Esau and Franklin each gave up.

LEDGER NOTEBOOK

1. Draw Franklin's whistle and, around it, the three things he could have bought instead. Label it: "Don't give too much for the whistle."
2. Make a T-chart titled "Esau's Trade" with two columns: What he got and What he gave up.
3. Write a list of three jobs people in your family do. Next to each, write one way that work serves other people.

From history. Franklin told the whistle story in a short letter he wrote in 1779, when he was over seventy years old and living in France. He wrote that when he saw people spending their health, money or good name on things that could not make them happy, he would say, "He pays, indeed, too much for his whistle."

COMMON MISTAKES

- Thinking only things with a price tag have an opportunity cost. Time and effort are scarce too.
- Listing every possible thing you gave up. The opportunity cost is the single next-best choice.
- Thinking work is just something to get through. God made people to work, and good work is a way of serving others.

Make it a game • Trade-Off Showdown. Your parent names a choice, such as park or library, or dessert or extra story time. You have ten seconds to say what you would give up, which is the opportunity cost, and why it matters. Name the best thing you gave up, not just any thing, to score a point. Finish by telling how one chore serves someone else. Play to ten points.

Scripture. “Then Jacob gave Esau bread and pottage of lentiles; and he did eat and drink, and rose up, and went his way: thus Esau despised his birthright.” (Genesis 25:34, KJV)

Esau traded something lasting for a meal that was gone in a few minutes. Every choice has a cost, so it is wise to ask what you are giving up before you trade.

1.2 A PRINTER BUYS HIS BREAD: SPECIALIZATION AND TRADE

OBJECTIVES

- Explain specialization and why people who specialize and then trade can make and have more.
- Tell the story of young Benjamin Franklin arriving in Philadelphia and buying bread from a baker.
- Measure, in a make-and-trade contest, how much more a team makes when each person specializes.

Warm-up. Look at the breakfast table or the kitchen. Choose three things: a loaf of bread, a cup, a spoon. For each one, try to name every kind of worker who helped make it and bring it to you. Who grew it? Who made it? Who carried it? Who sold it?

WATCH

Division of Labor: Burgers and Ships

Marginal Revolution University • 3:50

<https://www.youtube.com/watch?v=Meo0s54s1sw>

WHEN TO WATCH

After the story of Franklin's rolls, before the big idea.

KEY TERMS

specialize

To focus on one kind of work and become very good at it.

division of labor

Splitting a big job into smaller tasks so that each worker does one part.

trade

Giving something you have to get something you want more, either directly or by using money.

interdependence

Depending on one another: because each person specializes, everyone needs the work of others.

productivity

How much a worker or team can make in a set amount of time.

CORE IDEAS

The story. In October 1723 a tired seventeen-year-old boy climbed off a boat at the Market Street wharf in Philadelphia. His name was Benjamin Franklin. He had run away from Boston, where he had been learning the printing trade from his older brother. His pockets held only one Dutch dollar and about a shilling in copper coins, and he was hungry. He found a bakery and asked for biscuit, the kind he knew from Boston, but the baker did not make it. He asked for a threepenny loaf; they had none. So he asked for threepence worth of any bread, and the baker handed him three great puffy rolls. Franklin walked up Market Street with a roll under each arm, eating the third. A girl standing in a doorway laughed at the sight. Her name was Deborah Read, and years later she became his wife.

How they figured it out. Franklin could have tried to grow his own wheat, grind it and bake it. But he was a printer, and a good one. Within days he found work in a Philadelphia print shop, setting type letter by letter and pulling the heavy press. With the wages from printing, he could buy bread from the baker, shoes from the shoemaker and candles from the chandler. Years later he opened his own shop, printed newspapers, books and even paper money for Pennsylvania, and wrote *Poor Richard's Almanack*. He did not do everything. He did one thing very well and traded for the rest. The baker did the same: he baked all day, and bought his clothes and his newspaper from others.

The big idea. When each person **specializes**, he gets faster and more skillful, he can buy special tools, and he does not waste time switching from job to job. Then people **trade**, usually using money. The result is that everyone together has far more than if each family made everything for itself. A baker who bakes 300 rolls a day and a printer who prints 300 pages a day both end the day with more bread and more news than either could make alone. Specialization makes us **interdependent**: we need one another. That is part of God's design. As Paul wrote, the body has many members, and "the eye cannot say unto the hand, I have no need of thee" (1 Corinthians 12:21).

In business today. Almost every job today is a specialty: a nurse, a welder, a truck driver, a programmer, a farmer who raises only dairy cows. Even inside one business, work is divided. At a pizza shop one worker takes orders, one makes dough, one adds toppings and one delivers. Countries specialize too: some grow coffee or bananas, some build airplanes, and they trade. Specialization brings one

risk: if the workers you depend on stop, you can be stuck. That is why wise families and businesses keep a few useful skills of their own and treat the people they depend on with honesty and respect.

PICTURE STUDY



An Iron Forge, Joseph Wright of Derby, 1772 · Oil on canvas · Tate Britain, London

Image: [Wikimedia Commons](#), public domain

Joseph Wright lived in Derby, England, during the years when new mills and forges were changing how things were made. He loved painting scenes lit by a single bright light. Here the light comes from a bar of red-hot iron. The great hammer is lifted by a waterwheel outside, so the smith does not have to swing it himself. This forge made bars of iron that other craftsmen, such as nail makers, locksmiths and wheelwrights, would buy and turn into their own goods.

Look closely

- Find the glowing iron bar. Where is the light coming from?
- Find the big hammer. What do you think lifts it?
- Count the people in the picture. Which ones are working, and which ones are watching?
- Look at the smith's clothes, tools and posture. What tells you he is skilled at his trade?

Talk about it

1. This smith only makes iron bars. Who would buy them, and what would they make?
2. How does the water-powered hammer make the smith more productive?

3. What does the smith's family depend on him for? What does he depend on other workers for?

PROJECT

The Make-and-Trade Contest

You and a partner will make two simple products, paper boats and bookmarks, first by each doing everything alone, then by each specializing and trading. You will count and compare the results.

You will need

- A stack of scrap paper (about 30 sheets)
- Scissors, a ruler, crayons or markers
- A timer or clock
- A partner (a parent, brother or sister)
- Ledger notebook

Steps

1. Learn the two products. A paper boat is folded from one sheet. A bookmark is a strip of paper 2 inches by 6 inches, decorated with a pattern on both sides.
2. Round 1 (no specializing): set a timer for 6 minutes. Each person must spend 3 minutes making boats and 3 minutes making bookmarks. Count how many good boats and good bookmarks each person made. Record the totals.
3. Talk together: who is faster at boats? Who is faster at bookmarks?
4. Round 2 (specializing): set the timer for 6 minutes again. This time each person makes only the product he or she is faster at for the whole 6 minutes. Count and record the totals.
5. Trade: swap some boats for some bookmarks so each person ends up with some of both. Record what each person ended with.
6. In your ledger, make a table with rows Round 1 and Round 2 and columns Boats, Bookmarks and Total. Which round made more in the same time?
7. Write two sentences explaining why specializing made more, and one sentence about anything that went wrong (for example, someone got bored or the quality slipped).

Tips

- Count only good products. A boat that will not float or a bookmark with no pattern does not count.
- If one person is faster at both, specializing still usually helps: let each person do the job where he is *most* ahead or *least* behind.

Check your work

- ☐ I can explain what it means to specialize.
- ☐ My ledger shows the totals for both rounds with labels.
- ☐ I can explain why a printer like Franklin bought his bread instead of baking it.

LEDGER NOTEBOOK

1. Draw a “web of workers” with a loaf of bread in the center and lines to every worker who helped make it: farmer, miller, truck driver, baker, grocer.
2. Draw Franklin walking up Market Street with his three rolls. Add a label for the baker and a label for the printer’s shop he worked in.
3. Make a bar graph comparing Round 1 and Round 2 of your contest.

From history. Franklin later printed paper money for Pennsylvania and New Jersey. To stop counterfeiters, he pressed the print of real leaves onto the bills, because the tiny veins of a leaf are almost impossible to copy by hand.

COMMON MISTAKES

- Thinking specialization means a person can do only one thing all his life. It means focusing your work, not giving up every other skill.
- Forgetting the trade. Specializing helps only if people can trade what they make for what they need.
- Counting only speed and forgetting quality. A specialist must still make good things.

Make it a game • Line or Lone Worker. Set a one-minute timer. Round one: you alone draw a simple stick-figure sailor from start to finish, over and over, and count finished pictures. Round two: you and your parent split the steps, one drawing the head, one the body, then pass along. Compare counts, then explain why Franklin's baker made more bread by specializing.

1.3 THE SILK ROAD: WHY BOTH SIDES GAIN FROM TRADE

OBJECTIVES

- Locate the main routes of the Silk Road and name goods that traveled east and west.
- Explain relay trade and why prices rose as goods traveled farther.
- Explain why both sides gain from a fair, free trade.

Warm-up. Look at a world map or globe. Put one finger on China and one on Italy. Trace a path over land between them. What would a traveler have to cross? Make a list: mountains, deserts, rivers...

WATCH

The Silk Road: Connecting the ancient world through trade - Shannon Harris Castelo

TED-Ed • 5:20

<https://www.youtube.com/watch?v=vn3e37VWc0k>

WHEN TO WATCH

After the warm-up map tracing, before the story.

Note: An animated TED-Ed lesson; it tells the Silk Road story clearly in about five minutes.

KEY TERMS

Silk Road

A network of land routes, used for about 1,500 years, that linked China with Central Asia, Persia, India and the Mediterranean.

caravan

A group of traders and pack animals, such as camels, traveling together for safety.

oasis

A place in a desert with water, where travelers can rest and towns can grow.

relay trade

Trade in which goods pass from merchant to merchant along a route, each one carrying them part of the way.

middleman

A trader who buys from one person and sells to another, earning his pay by carrying goods and taking risks.

CORE IDEAS

The story. More than 2,000 years ago, the emperor of China's Han dynasty sent a man named Zhang Qian west to look for allies. Zhang Qian was gone for about thirteen years and was captured twice, but he came home with reports of rich lands and wonderful horses far to the west. Soon Chinese silk was moving west and goods from the West were moving east. The routes came to be called the **Silk Road**, though it was really many roads. Caravans of two-humped camels crossed the Taklamakan Desert, stopping at oasis towns like Kashgar and Samarkand, then climbed the mountain passes into Persia and on toward the Mediterranean. Silk, paper, tea and fine pottery went west. Horses, glass, silver, wool and grapes went east. Much later, in the 1270s, a young Venetian named Marco Polo traveled this way to China and wrote a famous book about it.

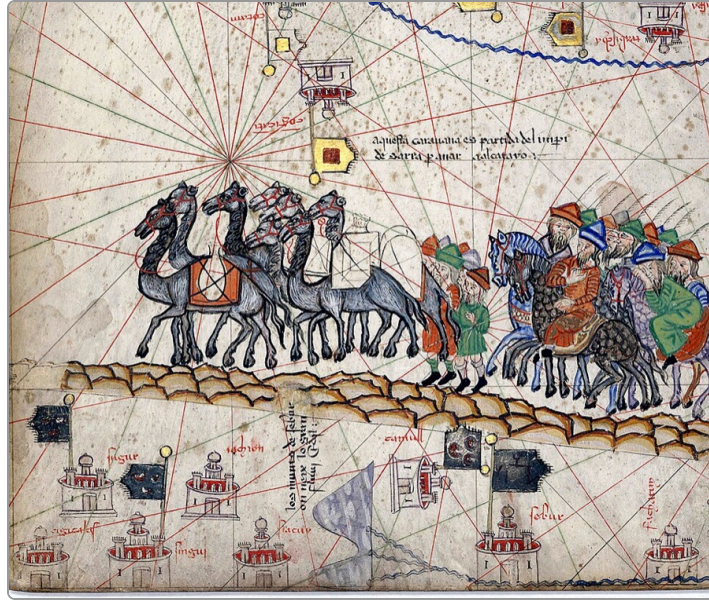
How they figured it out. Almost no trader walked the whole Silk Road. It was too long, too dangerous and too slow. Instead, merchants used **relay trade**. A Chinese merchant sold his silk in a western Chinese town. A Central Asian merchant carried it across the desert to Samarkand and sold it there. A Persian merchant carried it farther, and so on. Each trader knew his own stretch of road, its wells, its dangers and its languages. Travelers slept in walled inns called *caravanserais*, where camels and goods were safe overnight. At every stop the price went up, because each middleman had to pay for camels, food, guards and tolls and earn something for his risk. By the time silk reached Rome it was worth many times what it had cost in China.

The big idea. Why did people trade at all, when it was so hard? Because **in a fair, free trade, both sides gain**. The Chinese weaver valued silver more than one more bolt of silk; the Roman lady valued silk more than her silver. Each gave up something she valued less to get something she valued more, so both were better off. The middlemen gained too, by doing useful work: carrying goods across dangerous land. Trade also carried **ideas**. Paper making traveled west along these routes, and

Christian missionaries from the Church of the East reached China by the year 635 and built churches there.

In business today. Today most long-distance goods travel by giant container ships, trains, trucks and airplanes, but the lesson is the same. Every time something is carried a long way, someone must pay for the trip, and that cost is part of the price you pay. Buyers and sellers still trade because both expect to gain. And trade still depends on safe roads, fair rules and honest merchants, just as the caravans depended on safe wells and honest innkeepers.

PICTURE STUDY



A Caravan on the Silk Road, from the Catalan Atlas, Attributed to Abraham Cresques, 1375 · Ink, colors and gold on parchment · Bibliothèque nationale de France, Paris

Image: [Wikimedia Commons](#), public domain

The Catalan Atlas is a great map painted on parchment on the Mediterranean island of Majorca, probably by a Jewish mapmaker named Abraham Cresques. It shows the world as European sailors and merchants knew it in 1375, with notes about the kingdoms, goods and roads of each land. This small part shows a caravan traveling east toward China, the way Marco Polo had gone a century before.

Look closely

- Count the camels and the riders. Why did traders travel together in a group?
- Look at the packs on the camels. What goods might be inside if the caravan is going east? If it is coming back west?
- Find the writing around the picture. Why would merchants want notes on a map?
- Look for any guards. What dangers did caravans face?

Talk about it

1. How would a merchant in Venice use a map like this?
2. Why would silk cost so much more in Venice than in China?

3. Who gained from this caravan's trip? Try to name at least four people.

PROJECT

The Silk Road Relay

You will act out relay trade along the Silk Road and keep a ledger of how the price of one bolt of silk grows at each stop, so you can see why far-traveled goods cost more.

You will need

- A strip of cloth or a ribbon to be the “bolt of silk”
- Play money or coins
- Five index cards, one for each stop: Chang’an (China), Dunhuang, Kashgar, Samarkand, Persia
- Ledger notebook and a world map

Steps

1. Lay the five cards in a line across the floor, from China in the east to Persia in the west. Find each place on your map.
2. In your ledger, rule a table with columns: Stop, Price paid, Costs of the trip (camels, food, guards, tolls), Merchant’s pay for his work and risk, Selling price.
3. Start in Chang’an. A weaver sells the silk to the first merchant for \$10. Write it down.
4. Draw a “road card” for each stretch from this list, or let a parent choose: easy road, costs \$3; desert crossing, costs \$6; mountain pass, costs \$5; robbers seen, extra guards cost \$4.
5. At each stop, add the costs and a merchant’s pay of \$2 to the price paid. That total is the selling price to the next merchant. Carry the silk to the next card and record the next row.
6. When the silk reaches Persia, compare its final price with the \$10 the weaver received.
7. Answer in your ledger: How many times bigger was the final price? Which stretch of road added the most? Who gained from the trade, and how?

Tips

- Remember that each merchant took real risks. His pay is earned by honest work, not by cheating.
- Try the relay twice with different road cards and compare. How do dangers change prices?

Check your work

- ☐ I can explain relay trade.
- ☐ My ledger shows the price at every stop and the final price.
- ☐ I can explain why both the weaver and the buyer in Persia gained.

LEDGER NOTEBOOK

1. Draw a map of the Silk Road from China to the Mediterranean. Mark the Taklamakan Desert, the oasis towns, and arrows showing goods that went east and goods that went west.
2. Draw a caravanserai: a square wall with one big gate, rooms for travelers and an open yard for camels. Label it.
3. Make a line graph of the price of silk at each stop of your relay.

From history. For hundreds of years, the Chinese kept the secret of how silk is made from the cocoons of silkworms. Around the year 550, the Byzantine emperor Justinian had silkworm eggs brought secretly to Constantinople, and silk making began in Europe.

COMMON MISTAKES

- Thinking the Silk Road was one paved road. It was a web of trails, passes and desert tracks.
- Thinking one side must lose in every trade. In a fair, free trade both sides gain, because each values what he gets more than what he gives.
- Thinking middlemen do nothing. They carried goods, took risks and brought buyers and sellers together.

Make it a game • Relay Caravan. Set out four cups as stops along the Silk Road, with an oasis in the middle. Carry a sock, your silk, from cup to cup. At each stop, name one good traveling east or west and add a pretend coin to the price, because every middleman needs a share. At the end, say why silk cost so much more there.

1.4 THE HANSEATIC LEAGUE: MERCHANT TOWNS THAT KEPT THEIR WORD

OBJECTIVES

- Tell how the towns of the Hanseatic League worked together to trade across the North and Baltic Seas.
- Name goods the Hansa traded and explain why each region had something different to sell.
- Explain why trade needs trust, fair rules and safe travel, and one way the League also shut others out.

Warm-up. Pretend you have a barrel of salted fish and you want to sell it in a faraway town where you know no one. Write three worries you would have. How could you solve each one?

WATCH

The Hanseatic League: Explained (Short Animated History Documentary).

History Matters · 3:05

<https://www.youtube.com/watch?v=r1fZAArcOJw>

WHEN TO WATCH

After the story, before "How they figured it out"; pause when the map appears and find Lübeck.

KEY TERMS

Hanseatic League

A group of German merchant towns, led by Lübeck, that worked together to trade across northern Europe from about 1250 to 1600.

Hansa

An old German word for a group or company of merchants.

cog

A sturdy, round-bellied wooden sailing ship with a single square sail, used by Hanseatic merchants.

Kontor

A trading office and settlement the Hansa kept in a foreign city, such as London, Bruges, Bergen or Novgorod.

merchant's mark

A merchant's own symbol, marked on his barrels and bales to show whose goods they were.

convoy

A group of ships sailing together for protection.

CORE IDEAS

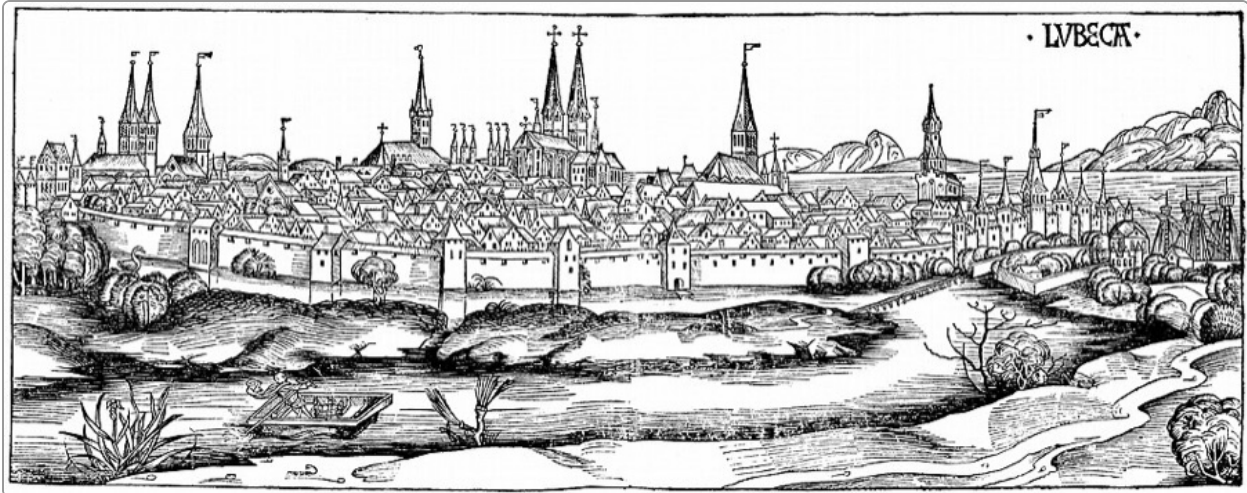
The story. In the 1100s a new town was built on a river near the Baltic Sea. It was called **Lübeck**, and it grew rich from trade. Lübeck was close to the salt mines of Lüneburg, and salt was needed everywhere to preserve fish and meat. Merchants from Lübeck and other German towns, such as Hamburg, Bremen and Danzig, began to sail together and help one another. Over time about two hundred towns joined in what came to be called the **Hanseatic League**. Their round-bellied ships, called **cogs**, carried herring from the Baltic, timber, grain, furs and wax from the east, cloth from Flanders and England, and dried cod from Norway. In big foreign cities the League kept trading offices called *Kontors*: the Steelyard in London, Bryggen in Bergen, and others in Bruges and Novgorod.

How they figured it out. Trading far from home was risky. Pirates attacked ships, storms sank them, and a merchant in a strange city might be cheated or thrown in prison. The Hanseatic towns solved these problems together. Ships sailed in **convoys** for protection. Merchants marked their barrels with their own **merchant's mark** so goods would not be lost or stolen. Many towns used the same laws, called Lübeck law, so a merchant knew the rules wherever he went. The League checked the quality of goods, such as herring packed in barrels of a set size. And if a city cheated Hanseatic merchants, all the towns could stop trading with it until it made things right. Above all, a Hanseatic merchant's word had to be good, because his whole trade depended on trust.

The big idea. Trade grows where there is **trust**, **fair rules** and **safe travel**. Each region had something others needed: Norway had cod but little grain; the lands to the east had grain, timber and furs; Flanders had fine cloth. When the Hansa made trade safer and cheaper, all of these places could specialize and trade, and people all around the northern seas ate and dressed better. But the League also had a weakness. Its merchants often tried to keep outsiders, such as Dutch and English traders, from competing with them. When Dutch ships later offered lower prices and faster service, the League's power faded. Its last general meeting was held in 1669.

In business today. Many towns in Germany still proudly call themselves “Hanseatic cities,” and the old merchant buildings of Bryggen in Bergen still stand by the water. Today, businesses depend on the same things the Hansa did: contracts, courts, honest weights and measures, safe shipping and a good name. Trade groups still set standards, for example the size of shipping containers, so that everyone can work together. And it is still true that a business that keeps its word attracts customers, while one that shuts out honest competitors may grow lazy and lose them.

PICTURE STUDY



The City of Lübeck, from the Nuremberg Chronicle, Michael Wolgemut and Wilhelm Pleydenwurff (workshop), 1493 · Hand-colored woodcut in a printed book · Printed in Nuremberg; many copies survive in libraries

Image: [Wikimedia Commons](#), public domain

The Nuremberg Chronicle was a huge illustrated history of the world, printed in 1493, just a few years after printing with movable type began in Germany. It included pictures of many great cities. This one shows Lübeck, the leading town of the Hanseatic League, with its walls, its harbor and its many tall church spires.

Look closely

- Find the ships. Where are they, and what might they be carrying?
- Look at the city walls and towers. Why would a rich trading town need strong walls?
- Count the church spires you can see. What does that tell you about the town?
- Find the river. Why would merchants want their town on a river near the sea?

Talk about it

1. Why was Lübeck a good place for a trading town?
2. How did the Hanseatic towns make trade safer than one merchant could alone?
3. What is one way the League helped trade, and one way it hurt fair competition?

PROJECT

The Hansa Trading Game

You will play three trading towns, each with something to sell and something it needs, and keep an honest trade log with merchant's marks. Then you will add a pirate and a convoy to see how rules and teamwork change trade.

You will need

- Dried beans, buttons, paper clips and cotton balls (to stand for herring, grain, timber and cloth)
- Three bowls or paper plates labeled Lübeck, Bergen and Novgorod
- Index cards and a pencil to make merchant's marks and trade receipts
- A die
- Ledger notebook

Steps

1. Set up the towns. Lübeck has 12 cloth (cotton balls) and salt but needs fish. Bergen has 12 herring and cod (beans) but needs grain. Novgorod has 12 grain and timber (buttons and paper clips) but needs cloth.
2. Each player designs a merchant's mark, a simple symbol of lines and crosses, and draws it on his index cards.
3. Trade Round 1: each town trades with the others until every town has some of what it needs. Every trade gets a receipt card: who traded, what for what, and both merchant's marks.
4. Record every trade in your ledger with columns: Round, From town, To town, Goods given, Goods received.
5. Round 2: add pirates. Before each trip, roll the die. On a 1 or 2, pirates take half the goods. Play several trips and count the losses.
6. Round 3: sail in a convoy. Two towns sail together and pirates attack only on a 1. Count the losses again.
7. Write in your ledger: How much was lost in Round 2 compared with Round 3? Why did convoys and receipts help trade grow?

Tips

- Keep your receipts honest, even in a game. Merchants who kept good records could prove what was theirs.
- Talk about whether every town should be allowed to join the convoy, or only League towns. What is fair?

Check your work

- ☐ I can name what each Hanseatic region had to trade.
- ☐ My trade log has a row and a receipt for every trade.
- ☐ I can explain how convoys, merchant's marks and shared rules made trade safer.

LEDGER NOTEBOOK

1. Draw a Hanseatic cog with its single square sail, high sides and castle at the back. Label the hold where barrels were stored.
2. Draw a map of the North and Baltic Seas. Mark Lübeck, Hamburg, Bergen, Bruges, London and Novgorod, and draw arrows with the goods each place sent out.
3. Design your own merchant's mark and write one sentence about what it promises a buyer.

From history. Hanseatic merchants who lived at the Kontor in Bergen had to stay unmarried while they worked there, and young apprentices learned the trade by working for years under older merchants. Several of their wooden buildings at Bryggen survive and can be visited today.

COMMON MISTAKES

- Thinking the Hanseatic League was a country with a king. It was a partnership of free trading towns.
- Thinking rules always slow trade down. Fair, shared rules made trade safer and helped it grow.
- Forgetting the League's weakness: shutting out competitors helped its own merchants for a while but made trade less free for everyone else.

Make it a game • Merchant's Mark Match. Make eight cards: four Hansa goods, such as furs, grain, timber and wax, and four matching regions where they came from. Shuffle and lay them face down. Flip two at a time; keep a pair only if you can say why that region had that good to sell. Finish by drawing your own merchant's mark on the back of a card.

Scripture. “She is like the merchants’ ships; she bringeth her food from afar.” (Proverbs 31:14, KJV)

The wise woman of Proverbs 31 is praised for providing for her household the way merchant ships brought food and goods from far away. Trade, done honestly, is one way God provides for people in many lands.

UNIT 1

WORK AND TRADE

God made people to work. In the very first chapters of the Bible, Adam is put in the garden “to dress it and to keep it” (Genesis 2:15). Work is how we serve our neighbors and provide for our families, and because no one can make everything he needs, work leads straight to **trade**. In this unit you will learn why every choice has a hidden cost, why people do better when each one specializes and then trades, and how merchants long ago carried goods across deserts and seas.

You will meet Esau, who traded something precious for a bowl of stew, and young Benjamin Franklin, who paid too much for a whistle. You will follow Franklin to Philadelphia, where a printer bought his bread from a baker. Then you will travel the Silk Road with camel caravans and sail the cold northern seas with the merchants of the Hanseatic League. In every story you will ask the same question: **why did both sides gain from the trade?**

PREREQUISITES

- Can add and subtract money amounts to \$20
- Knows the difference between goods and services
- Can read a simple map with a compass rose

MASTERY CHECKLIST

- ☐ I can explain that work is good and that God made us to work.
- ☐ I can name the opportunity cost of a choice: the next-best thing I gave up.
- ☐ I can explain why people who specialize and trade can have more than people who make everything themselves.
- ☐ I can tell how goods moved along the Silk Road and how the Hanseatic towns worked together to trade safely.
- ☐ I can explain why both sides usually gain from a fair, free trade.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Autobiography of Benjamin Franklin (free at Project Gutenberg)**: Free. Read aloud the short passage where seventeen-year-old Franklin arrives in Philadelphia and buys “three great puffy rolls” (Lesson 1.2). The whole book is best for older readers, so a parent may choose the passages.
- **Econ Lowdown, from the Federal Reserve Bank of St. Louis**: Free. Short lessons and videos on scarcity, choice, specialization and trade, written for students. Parents can browse without an account.
- **Catan (family board game)**: Ages 10 and up with a parent. Players gather wood, brick, wool, grain and ore and must trade with each other to build. A lively way to feel why people trade and why a fair trade helps both sides.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

1.1 Made to Work, Free to Choose: Opportunity Cost	2 sessions of 45 minutes
1.2 A Printer Buys His Bread: Specialization and Trade	2 sessions of 45 minutes
1.3 The Silk Road: Why Both Sides Gain from Trade	2 sessions of 45 minutes
1.4 The Hanseatic League: Merchant Towns That Kept Their Word	2 sessions of 45 minutes

UNIT 1 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What is scarcity? Give one example of something scarce in your own life.

2. **5 pts**

You have \$8. You can buy a kite for \$8 or a book for \$6 and a snack for \$2. You choose the kite. What is your opportunity cost?

3. (5 pts)

What did Benjamin Franklin mean when he said, “Don’t give too much for the whistle”?

4. (5 pts)

Franklin was a printer. Why did he buy bread from a baker instead of baking it himself?

5. (5 pts)

In a contest, two children made 8 boats and 8 bookmarks when each did both jobs, and 14 boats and 12 bookmarks when each specialized. How many more products did they make by specializing?

6. (5 pts)

Name two goods that traveled west on the Silk Road and two that traveled east.

7. (5 pts)

Silk cost \$10 in China. Three merchants each added \$6 for their costs and \$2 for their work as they carried it west. What was its price at the end?

8. (5 pts)

Why do both sides gain in a fair, free trade?

9. (5 pts)

Name two ways the Hanseatic League made trade safer.

10. (5 pts)

What would happen if pirates attacked every ship and no merchant could trust another? Explain what would happen to trade and to people’s lives.

ANSWER KEY

1. Scarcity means not having enough time, money or things to do or have everything we want, so we must choose. Example: there is only one free afternoon, or only \$10 to spend.
2. The book and the snack (the next-best choice you gave up).
3. Do not pay more for something than it is really worth to you; think about what else you could have had with the money before you spend it.
4. He was skilled at printing and could earn more by printing and buying bread than by spending his time baking. The baker specialized in bread, so both gained by trading.
5. First round: $8 + 8 = 16$. Second round: $14 + 12 = 26$. They made $26 - 16 = 10$ more.
6. West: any two of silk, paper, tea, fine pottery, spices. East: any two of horses, glass, silver, wool, grapes.
7. Each merchant added \$8. $3 \times \$8 = \$24$. $\$10 + \$24 = \$34$.
8. Each person gives up something he values less to get something he values more, so both end up better off.
9. Any two: ships sailed in convoys; merchant's marks on goods; shared laws (Lübeck law); quality checks such as set barrel sizes; all towns could stop trading with a city that cheated; trading offices (Kontors) in foreign cities.
10. Trade would shrink or stop, goods from far away would become scarce and very expensive, and people would have to make do with what they could make nearby, so they would be poorer.

PORTFOLIO PIECE: MY MAP OF TRADE ROUTES

Make a large hand-drawn map that shows the Silk Road and the trade routes of the Hanseatic League. Mark at least eight cities, draw arrows for the goods that traveled each way, and add small drawings of a caravan and a cog. Beside the map, include your Silk Road relay ledger and your Hansa trade log, and write a paragraph explaining why both sides gain from fair trade and what made these long trade routes possible.

LOOK FOR	WHAT IT MEANS
Accuracy	Cities, routes and goods are placed correctly and labeled clearly.
Records	The relay ledger and trade log are complete, dated and correctly added.
Explanation	The paragraph explains specialization, why both sides gain, and the role of trust and safe travel.
Care	The map is neat, colorful and easy to read.

UNIT 2

THE STORY OF MONEY: GOLD, SILVER AND PAPER

Money is anything people agree to accept in trade. For thousands of years, the most trusted money was **gold** and **silver**, because they are beautiful, they do not rust, they can be divided into small pieces, and no one can make more of them except by digging them out of the ground. In this unit you will follow gold and silver around the world, and then see what happens when paper money takes their place.

You will cross the Sahara with camel caravans trading salt for gold and watch Mansa Musa of Mali spend so much gold in Cairo that its value fell. You will hold a Spanish “piece of eight,” the silver coin that traveled around the world and became the model for the American dollar. You will learn why the Continental dollar became a joke, “not worth a Continental,” and how the gold standard tied the dollar to gold until August 15, 1971. In every lesson you will ask: **what makes money keep its value?**

PREREQUISITES

- Knows the values of U.S. coins and bills
- Can add, subtract and multiply money amounts
- Knows what barter is (Grades 1–3, or a short reminder from a parent)

MASTERY CHECKLIST

- ☐ I can explain why gold and silver made good money.
- ☐ I can tell how salt and gold were traded across the Sahara and what happened when Mansa Musa spent his gold in Cairo.
- ☐ I can explain what a piece of eight was and how it became the model for the dollar.
- ☐ I can explain why the Continental dollar lost its value.
- ☐ I can explain the gold standard and what kind of money we use today.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Federal Reserve History** (federalreservehistory.org): Free. Short, reliable articles and pictures about the history of American money and banking, including the gold standard and the events of 1971. Best read by a parent and explained aloud. Good for Lesson 2.4.
- **U.S. Mint for Kids**: Free. Games, coin facts and short history pages from the U.S. Mint, which has made America's coins since 1792. Good for Lessons 2.2 and 2.4.
- **Econ Lowdown, from the Federal Reserve Bank of St. Louis**: Free. Short lessons and videos on money, inflation and the functions of money, written for students. Parents can browse without an account.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

2.1 Gold for Salt: Mansa Musa and the Saharan Caravans 2 sessions of 45 minutes

2.2 Pieces of Eight: The Spanish Dollar That Went Around the World

2 sessions of 45 minutes

2.3 “Not Worth a Continental”: When Paper Money Loses Its Value

2 sessions of 45 minutes

2.4 The Gold Standard: A Dollar You Could Trade for Gold 2 sessions of 45 minutes

UNIT 2 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Give three reasons gold and silver made good money.

2. **5 pts**

Why did traders carry salt south across the Sahara and gold north?

3. (5 pts)

What happened to the value of gold in Cairo after Mansa Musa's visit in 1324, and why?

4. (5 pts)

Where did the silver for pieces of eight come from, and where did the coins travel?

5. (5 pts)

A piece of eight was cut into 8 bits. A shopkeeper sells an apple for 2 bits and bread for 3 bits. A customer pays with a whole piece of eight. How many bits of change does he get? How much is that in cents if 1 bit = $12\frac{1}{2}\text{¢}$?

6. (5 pts)

Why did the Continental dollar lose its value?

7. (5 pts)

In 1780 a Continental dollar was worth about one-fortieth of a silver dollar. How many Continental dollars would it take to equal 3 silver dollars?

8. (5 pts)

What was the gold standard? Name one good thing and one problem with it.

9. (5 pts)

What happened on August 15, 1971?

10. (5 pts)

What would happen to prices at the grocery store if every family suddenly had twice as much money, but the stores had the same amount of food? Explain.

ANSWER KEY

1. Any three: they are beautiful and wanted; they do not rust or spoil; they can be divided into small pieces; they are scarce, so no one can make more at will; they are easy to carry for their value.
2. The south had gold but little salt, which people needed to stay healthy and keep food; the north had salt mines and wanted gold for coins. Each traded what was plentiful for what was scarce.
3. It fell, because he spent and gave away so much gold that there was suddenly much more of it, so each piece bought less.
4. From mines at Potosí in South America and in Mexico. They traveled to Spain, across the Pacific to Manila and China, to Africa, India, Europe and the American colonies.
5. $2 + 3 = 5$ bits spent; $8 - 5 = 3$ bits change. $3 \times 12\frac{1}{2}\text{¢} = 37\frac{1}{2}\text{¢}$.
6. Congress printed far too many of them to pay for the war without taxes or gold to back them, and the British spread counterfeits, so prices rose and each dollar bought less until it was almost worthless.
7. $40 \times 3 = 120$ Continental dollars.
8. A system in which dollars could be traded for a fixed amount of gold (for example \$20.67 an ounce). Good: it kept the government from printing too much money and built trust. Problem: when gold was scarce, money was scarce, which could make hard times worse.
9. President Nixon ended the U.S. promise to trade gold for dollars held by other countries, so the dollar was no longer tied to gold.
10. Prices would rise, because people would bid more for the same amount of food. No one would really be richer; each dollar would just buy less.

PORTFOLIO PIECE: A TIMELINE OF MONEY: GOLD, SILVER AND PAPER

Make an illustrated timeline, at least one yard long, of the money stories in this unit: the Saharan gold and salt trade, Mansa Musa in 1324, the silver of Potosí in 1545 and the piece of eight, the Continental dollar of 1775–1780, the Constitution of 1787, the U.S. Mint of 1792, the gold rush of 1848–49, the Federal Reserve of 1913, Bretton Woods in 1944 and August 15, 1971. Draw a small picture for each, write one sentence about what it teaches about money, and finish with a short paragraph answering: what makes money keep its value?

LOOK FOR	WHAT IT MEANS
Accuracy	Dates, places and facts are correct and in the right order.
Understanding	Each sentence explains a real lesson about money: scarcity, trust, divisibility or printing too much.
Conclusion	The final paragraph clearly explains what makes money keep its value.
Care	Drawings and writing are neat, labeled and easy to follow.

2.1 GOLD FOR SALT: MANSA MUSA AND THE SAHARAN CARAVANS

OBJECTIVES

- Tell how camel caravans traded salt and gold across the Sahara and why each was so valuable.
- Tell the story of Mansa Musa's journey of 1324 and explain why his gifts made gold worth less in Cairo.
- Explain that the value of anything, even gold, depends on how scarce it is and how much people want it.

Warm-up. Taste a tiny pinch of salt. Now think: what foods in your kitchen would be hard to keep without salt or a refrigerator? Make a list of three. Then look at a gold ring or a gold-colored object. Why do people want gold?

WATCH

The History of the West African Salt Trade

World History Encyclopedia · 6:19

<https://www.youtube.com/watch?v=5h8P9OxcLoo>

WHEN TO WATCH

After the warm-up, before the story of Mansa Musa.

Note: The first half minute advertises the channel's magazine; skip ahead to the salt.

BACKUP VIDEO

Salt Mines of Mali | National Geographic

National Geographic · 3:03

<https://www.youtube.com/watch?v=mZ1eQ99Triw>

After the picture study: salt slabs are still cut and carried by camel today.

KEY TERMS

Sahara

The great desert of North Africa, about as large as the whole United States.

caravan

A long line of traders and pack animals, such as camels, traveling together.

Mali

A rich West African empire, strongest in the 1300s, that controlled much of the gold trade.

Mansa

The title of the emperor of Mali; it means “king of kings” or “ruler.”

value

How much something is worth to people, shown by what they will give up to get it.

scarce

Hard to find or limited in amount compared with how much people want it.

CORE IDEAS

The story. Long ago, in West Africa south of the Sahara, there were rich gold fields near the upper Senegal and Niger rivers. But the people who lived there had very little salt, and in a hot land people and animals need salt to stay healthy, and food needs salt to keep it from spoiling. Far to the north, in the middle of the desert, there were mines where salt was cut from the ground in great slabs. So for hundreds of years, from about the 800s to the 1500s, camel caravans made the long, dangerous trip across the Sahara. They carried slabs of salt, cloth, copper and horses south, and carried gold north toward the Mediterranean, where it was made into coins. Cities like Timbuktu and Gao grew up at the edge of the desert, full of markets, mosques and scholars.

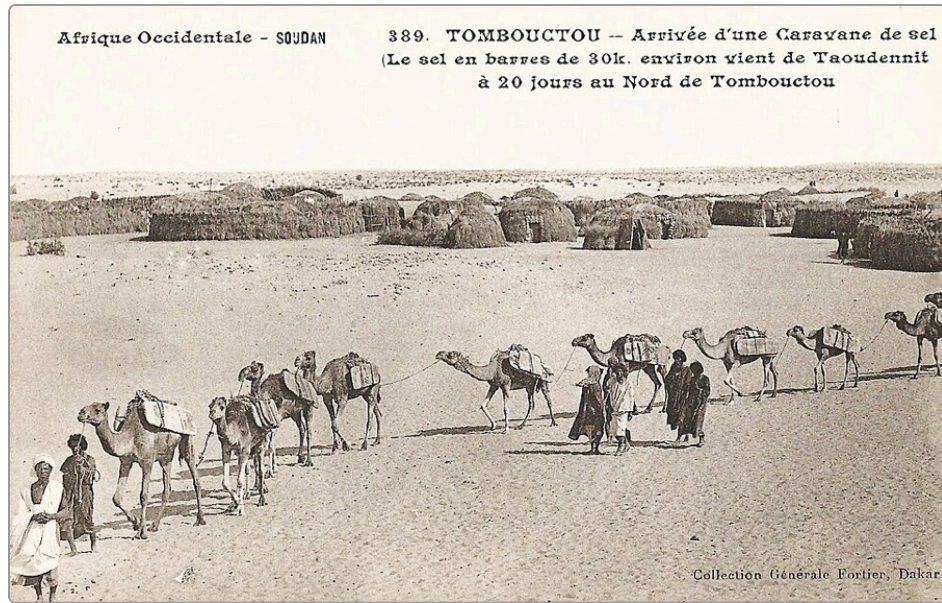
How they figured it out. The kings who controlled this trade grew very rich. The greatest was **Mansa Musa**, emperor of Mali. In 1324 he set out on a religious journey to Mecca in Arabia with an enormous caravan: thousands of followers and many camels loaded with gold. When he passed through Cairo, in Egypt, he gave away and spent gold so freely that everyone in the city seemed to have some. Then something surprising happened. With so much gold suddenly in Cairo, each piece of gold bought less than before. A writer who lived in Cairo about twelve years later said the

price of gold there still had not recovered. Mansa Musa had shown, without meaning to, that even gold loses value when there is suddenly much more of it.

The big idea. Why would people trade gold for salt? Because **value depends on scarcity**. Where salt was scarce and gold was plentiful, salt was precious. Where gold was scarce, gold was precious. Gold made excellent **money** because it is beautiful, does not rust, can be cut into small pieces and is scarce: no one can make more of it at will. But money is worth only what it can buy. When there is much more money but no more goods to buy, prices rise and each coin is worth less.

In business today. Gold is still mined and traded today, and its price goes up and down every day as people buy and sell it. Banks and governments still store gold, and families buy it as jewelry or as a way to save. Salt, on the other hand, is so cheap now that we hardly think about it, because modern mines and trucks make it plentiful everywhere. Something rare in one place and common in another is still a reason to trade. And Mansa Musa's lesson still holds: if any kind of money suddenly becomes much more plentiful, each piece of it buys less.

PICTURE STUDY



A Salt Caravan Arriving at Timbuktu, Edmond Fortier (photographer and postcard publisher, Dakar), early 1900s · Photograph printed as a postcard · Musée d'Orsay, Paris

Image: [Wikimedia Commons](#), public domain

Edmond Fortier was a photographer in Dakar, in West Africa, who made thousands of postcards in the early 1900s. This one shows a camel caravan arriving at Timbuktu. The printed caption at the top, in French, says the salt comes in bars of about 30 kilograms (about 66 pounds) from Taoudenni, a salt mine twenty days' journey north in the Sahara. Caravans like this had been making the same trip for hundreds of years, since long before Mansa Musa.

Look closely

- Count the camels. How many slabs of salt does each one seem to carry?
- Read the caption with a parent. Where did the salt come from, and how long was the trip?
- Find the camel drivers. How are they dressed for the desert?
- Look at the huts behind the caravan. What are they made of?

Talk about it

1. Why did traders cross the desert in large groups instead of alone?
2. What would a caravan need to carry just to survive the trip, before it carried any goods to sell?

3. Why would salt be worth so much in Timbuktu? What might the salt traders want in return?

PROJECT

Salt for Gold: How Scarcity Sets the Price

You will play a salt trader and a gold miner and find out how the price of gold changes when it is scarce and when it is plentiful, just as it did in Mansa Musa's Cairo.

You will need

- A small bowl of salt and a teaspoon
- 20 yellow buttons, beads or pieces of yellow paper (the "gold")
- A kitchen scale if you have one
- Ledger notebook and pencil
- A partner

Steps

1. One player is the salt trader with the bowl of salt. The other is the gold miner with only 4 pieces of "gold." Put the other 16 aside.
2. Round 1: the miner needs salt badly. Bargain: how many spoonfuls of salt will the trader give for one piece of gold? Agree on a price and make 3 trades. Record each in your ledger in columns: Round, Gold pieces in the market, Spoonfuls of salt for 1 gold.
3. Round 2: the miner discovers a new gold field and now has all 20 pieces. The trader has the same salt. Bargain again. Does one piece of gold still buy as much salt? Record the price.
4. Round 3 (Mansa Musa in Cairo): the miner gives away 10 pieces of gold to people in the "market" (family members). Now everyone has gold, and the salt trader can choose whom to sell to. Bargain one more time and record the price.
5. If you have a kitchen scale, weigh one spoonful of salt in grams and write the weight of salt one piece of gold bought in each round.
6. Draw a bar graph of the three prices.
7. Write two sentences: What happened to the value of gold when there was more of it? Why?

Tips

- Bargain honestly. Each side should agree freely, or there is no trade.
- There is no single right price. The point is to see which way the price moves.

Check your work

- ☐ I can explain why salt was precious in West Africa.
- ☐ My ledger shows the price of gold in all three rounds.
- ☐ I can explain why Mansa Musa's gifts made gold worth less in Cairo.

LEDGER NOTEBOOK

1. Draw a map of West and North Africa. Mark the Sahara, the salt mines in the desert, the gold fields in the south, Timbuktu, and Cairo. Draw arrows for salt going south and gold going north.
2. Draw a camel carrying two slabs of salt. Write three things a caravan needed to survive the desert.
3. Write a short diary entry by a merchant in Cairo in 1324 who sees Mansa Musa's caravan arrive.

From history. Mansa Musa's journey made Mali famous in Europe. On the Catalan Atlas, a great map made in 1375, he is shown seated on a throne, holding a golden orb, with a note saying he was the richest and noblest king in all the land.

COMMON MISTAKES

- Thinking gold always has the same value. Its value depends on how much of it there is and how much people want it.
- Thinking salt was cheap everywhere. Where it was scarce and needed, it was precious.
- Thinking more money always makes people richer. If there is more money but no more goods, prices simply go up.

Make it a game · Salt, Gold, Tall Tale. Tell three statements about Mansa Musa's journey of 1324 and the Saharan caravans: two true, one tall tale. Your parent guesses the tall tale and must explain how gold became worth less in Cairo. Then switch. Your parent tells three, and you catch the tall tale by remembering why salt and gold were each scarce. First to three catches wins.

Scripture. “The silver is mine, and the gold is mine, saith the LORD of hosts.” (Haggai 2:8, KJV)

All the gold in the world belongs to God, even the gold of the richest king. We are only stewards of what He lets us hold, and we should use it wisely and generously.

2.2 PIECES OF EIGHT: THE SPANISH DOLLAR THAT WENT AROUND THE WORLD

OBJECTIVES

- Explain what a piece of eight was and where its silver came from.
- Trace how Spanish silver traveled from the Americas to Spain, Asia and the American colonies.
- Explain how the piece of eight became the model for the U.S. dollar and why a quarter is called “two bits.”

Warm-up. Lay out a quarter, a dime, a nickel and a penny. Which one has a picture of a building, a bird or a person? Can you read the words on each? Now ask: why do you think people trust these coins enough to trade for them?

WATCH

A Short History Of The Spanish Dollar: How It Impacted The World | Digging History '76

Digging History '76 • 11:57

<https://www.youtube.com/watch?v=VKpkh0TMDGs>

WHEN TO WATCH

After the story; watch the first six or seven minutes, then stop and talk about the bits.

Note: A small history channel; the clearest full telling of the Spanish dollar we found for this age.

BACKUP VIDEO

Where Does the Dollar Sign Come From?

Today I Found Out • 2:38

<https://www.youtube.com/watch?v=HhH-noY55mQ>

After the picture study, to hear the theories about where the \$ sign came from.

KEY TERMS

piece of eight

A large Spanish silver coin worth eight reales; also called the Spanish dollar.

real

A Spanish silver coin; eight reales made one piece of eight (the plural is “reales”).

mint

A place where coins are made.

bit

One-eighth of a Spanish dollar, sometimes a real piece cut from the coin; “two bits” came to mean a quarter dollar.

legal tender

Money that the law says must be accepted to pay debts.

CORE IDEAS

The story. In 1545, high in the Andes Mountains of South America, Spanish explorers learned of a mountain that was full of silver. It was called Cerro Rico, the “Rich Hill,” near the town of Potosí, in what is now Bolivia. Soon after, huge silver mines opened in Mexico too. The Spanish built mints in Mexico City and Potosí and struck the silver into big coins worth eight *reales*. People called them **pieces of eight**, or Spanish dollars. Every year, fleets of Spanish ships carried silver across the Atlantic to Spain. Other ships, the Manila galleons, sailed west across the Pacific from Mexico to the Philippines, where the silver was traded for Chinese silk and porcelain. For the first time, one coin traveled all the way around the world.

How they figured it out. The piece of eight became the most trusted coin on earth, because its weight and its silver were kept honest for a very long time. Merchants in China, India, Europe and Africa accepted it. In the American colonies there were few coins at all, because England sent little money to them, so colonists used Spanish dollars more than any other coin. When a buyer needed small change, the big coin could even be cut into eight wedge-shaped “bits.” That is why Americans still call a quarter “two bits.” When the new United States made its own money, the Coinage Act of 1792 made the U.S. dollar about the same size as the Spanish dollar, so

people already knew what a dollar was worth. Spanish coins were legal money in the United States until 1857.

The big idea. Good money must be **trusted**, and trust comes from honesty kept over many years. The piece of eight was trusted because every coin had the right weight of silver, so a merchant in China did not have to weigh and test it each time. Good money also needs to be **divisible**, able to be split for small purchases; the pieces of eight could literally be cut into bits. But the silver of Potosí also taught a hard lesson. So much silver poured into Spain and Europe that prices there rose: when there is much more money but no more goods, each coin buys less, just as Mansa Musa's gold did in Cairo.

In business today. Our money still remembers the piece of eight: we count in *dollars*, the stock market priced shares in eighths of a dollar until the year 2001, and people still say “two bits.” Collectors and museums prize old pieces of eight, and divers still find them in sunken treasure ships. Today U.S. coins are not made of silver; they are worth their face value because people trust the government that makes them. But the lesson of the Spanish dollar remains: money that keeps its honest value for a long time becomes money the whole world wants to use.

PICTURE STUDY



A Spanish Silver Piece of Eight, Mexico City Mint, 1740 · Silver coin (photographed front and back)

Image: [Wikimedia Commons](#), public domain

This is a real Spanish piece of eight, struck in Mexico City in 1740 during the reign of King Philip V. Coins like it were made by machines with a raised edge pattern, so that no one could shave off silver without being noticed. The design with two pillars gave it the nickname “pillar dollar.” Some people believe the dollar sign, \$, began as a drawing of these pillars wrapped with a ribbon, though no one knows for sure.

Look closely

- Find the two pillars. What is wrapped around them?
- Find the two globes between the pillars. Why might a coin show the whole world?
- Look at the crown and shield on the other side. Whose coin does this say it is?
- Look at the edge of the coin. Why would a raised edge make cheating harder?

Talk about it

1. Why would a merchant in China trust a coin made in Mexico?
2. If you cut this coin into eight bits, how many bits would make a quarter of a dollar?

3. What would happen to trust in this coin if the mint secretly put less silver in it?

PROJECT

Bits and Pieces: Shopping with Spanish Dollars

You will make a paper piece of eight, cut it into bits, and run a colonial shop where prices are marked in bits. Then you will compare bits with U.S. coins and keep a ledger of every sale.

You will need

- Cardboard or heavy paper, a large cup to trace a circle, scissors and markers
- Real quarters, dimes and nickels
- Five small items to “sell” (a pencil, an apple, a button, a cookie, a ribbon)
- Ledger notebook

Steps

1. Trace and cut out four paper circles. Decorate each one like a piece of eight, with pillars on one side and a shield on the other.
2. Cut one of your coins into 8 equal wedges, like pizza slices. Each wedge is one bit, worth $12\frac{1}{2}\text{¢}$.
3. Set up a colonial shop. Mark prices in bits: for example, a ribbon 1 bit, an apple 2 bits, a pencil 3 bits, a cookie 4 bits, a button 1 bit.
4. Let a family member buy items with your paper dollars and bits. When a buyer pays with a whole dollar, make change in bits. Record each sale in your ledger: Item, Price in bits, Paid with, Change given.
5. Now change every price into U.S. money. Since 1 bit = $12\frac{1}{2}\text{¢}$, 2 bits = 25¢, 4 bits = 50¢ and 8 bits = \$1. Write the price of each item in cents.
6. Pay for the same items with real quarters. Which items are hard to pay for exactly with quarters? Why?
7. Write two sentences about why people liked a coin that could be cut into pieces, and one problem that cutting coins could cause.

Tips

- An odd number of bits does not make a whole number of cents. That is why prices of 1 bit or 3 bits are tricky in today’s money.

- Think about cheating: what if someone cut nine “eighths” from one coin? Honest cutting depended on trust.

Check your work

- ☐ I can explain what a piece of eight was and where its silver came from.
- ☐ My ledger shows every sale and the change given.
- ☐ I can explain why a quarter is called “two bits.”

LEDGER NOTEBOOK

1. Draw a world map and trace the journeys of Spanish silver: from Potosí and Mexico to Spain, from Mexico to Manila and China, and to the American colonies.
2. Draw a piece of eight cut into 8 bits. Label 1 bit, 2 bits (a quarter) and 4 bits (a half dollar).
3. Make a table comparing a piece of eight with a modern quarter: what it is made of, who made it, why people trust it.

From history. In the 1700s, Spanish dollars were so common in the American colonies that newspapers printed prices in dollars long before the United States existed. When Congress chose the word “dollar” for the new country’s money, it was a word everyone already used.

COMMON MISTAKES

- Thinking the piece of eight was worth eight dollars. It was one dollar, worth eight reales.
- Thinking more silver always made Spain richer. So much silver made prices rise in Spain and Europe.
- Mixing up bits and cents. One bit was one-eighth of a dollar, which is 12½¢.

Make it a game • Eight Bits to the Dollar. Draw a big silver coin on paper and cut it into eight pie pieces, one for each real, or bit. Your parent calls out prices in bits, such as three bits for a pencil, and you pay with exactly the right pieces. After ten sales, trace the silver's trip from the Americas to Spain, Asia and the colonies.

2.3 “NOT WORTH A CONTINENTAL”: WHEN PAPER MONEY LOSES ITS VALUE

OBJECTIVES

- Tell why the Continental Congress printed paper money during the War of Independence.
- Explain why printing too much money made each Continental dollar worth less.
- Explain how the U.S. Constitution tried to keep American money honest afterward.

Warm-up. Play money cannot buy real groceries. Why not? Make a list of three reasons people will not take play money at a store, even though it looks like money.

WATCH

Inflation - Economic Lowdown

Federal Reserve Bank of St. Louis • 4:55

<https://www.youtube.com/watch?v=TQILHAlgqU>

WHEN TO WATCH

After the story of the Continental, before the big idea.

BACKUP VIDEO

A Brief History of Continental Currency | My \$4 Bill

Stashing Stater • 4:05

<https://www.youtube.com/watch?v=bzytzGQOdX8>

After the picture study: a collector shows a real Continental note up close.

KEY TERMS

paper money

Printed notes used as money. They are worth something only if people trust that they can be used to buy things.

Continental dollar

Paper money printed by the Continental Congress from 1775 to 1779 to pay for the War of Independence.

inflation

When prices in general go up, so each dollar buys less.

counterfeit

Fake money made to look real.

tax

Money people pay to their government to pay for its work.

CORE IDEAS

The story. In 1775 the thirteen American colonies began their war for independence from Britain. The Continental Congress had to pay soldiers and buy food, boots, blankets and uniforms. But Congress had no power to collect taxes and very little gold or silver. So it did something easy: it printed paper money, called **Continental dollars**. Benjamin Franklin helped design some of the notes, with pictures of plants and short Latin mottos. At first people accepted them. But the war went on for years, and Congress kept printing more and more. By 1779 it had printed about \$240 million in Continentals, far more than all the gold and silver in the colonies.

How they figured it out. Prices began to rise, slowly at first and then very fast. A farmer who used to sell a bushel of wheat for one dollar wanted two, then ten, then far more. British forces made the problem worse by printing piles of **counterfeit** Continentals and spreading them around. Soldiers were paid in money that bought less every month, and shopkeepers began to refuse it. By 1780 Congress itself admitted that a Continental dollar was worth only about one-fortieth of a silver dollar, and soon it was worth almost nothing. Americans began to say that something useless was “not worth a Continental.”

The big idea. Paper money is worth only what it can buy. When a government prints much more money but there are no more goods to buy, people bid against each other with their extra money and **prices go up**. This is called **inflation**. Each dollar buys less, and the people who are hurt most are those who saved money or who are paid a fixed amount: soldiers, workers and widows. Printing money did not make the colonies richer. It only spread the cost of the war onto everyone who held a Continental.

In business today. The founders never forgot this lesson. When they wrote the U.S. Constitution in 1787, they gave Congress the power “To coin Money” and “regulate

the Value thereof,” and they forbade each state to print its own paper money. Today almost all money is paper or numbers in a bank’s computer, and its value still depends on trust and on how much of it is made. When prices rise quickly, families notice that their money buys less at the grocery store. Wise savers and businesses watch prices closely, and good governments know that printing money cannot take the place of real work and real goods.

PICTURE STUDY



A Thirty-Dollar Continental Note, Printed by Hall and Sellers, Philadelphia, 1776 • Printed paper currency • National Numismatic Collection, Smithsonian Institution

Image: [Wikimedia Commons](#), public domain

This small note was printed in Philadelphia by Hall and Sellers, the printing partnership that took over Benjamin Franklin's print shop. Each Continental note had a little picture with a Latin motto, a promise that it could be traded for Spanish silver dollars, and the handwritten signatures of men chosen by Congress to sign every note. Those signatures and the leaf prints on the back were meant to stop counterfeiters.

Look closely

- Find the number of dollars this note is worth. Where is it written?
- Look for the handwritten signatures. Why would every note be signed by hand?
- Find the round emblem in the middle. What do you see in it?
- Look at the size of the note. How does it compare with a modern dollar bill?

Talk about it

1. The note promised it was worth thirty Spanish dollars. Why did people stop believing that promise?
2. Who was hurt most when Continental dollars lost their value?

3. What could Congress have done instead of printing so much money?

PROJECT

The Family Inflation Auction

You will hold an auction for a few treats, first with a little money and then after “printing” lots more, and record what happens to prices.

You will need

- Five small treats or prizes (cookies, stickers or fruit)
- Play money: \$10 for each bidder in Round 1, plus \$40 more for each bidder in Round 2
- Two or more family members as bidders, and one auctioneer
- Ledger notebook

Steps

1. Give each bidder \$10 of play money. Explain that the money is useful only for this auction.
2. Round 1: auction two treats, one at a time. The highest bidder wins and pays. Record each winning price in your ledger in columns: Round, Money each bidder had, Item, Winning price.
3. Now pretend Congress needs to pay for a war. “Print” \$40 more for each bidder and hand it out. Nothing else changes: there are still only three treats left.
4. Round 2: auction the remaining treats. Record the winning prices.
5. Compare: how much did a treat cost in Round 1? In Round 2? Divide to find how many times higher the price was.
6. Talk together: Did anyone become richer in treats because of the new money? Who would be hurt if someone had saved Round 1 money and could only spend it in Round 2?
7. Write three sentences in your ledger explaining why printing more money made prices go up.

Tips

- Bidders should bid what the treat is really worth to them; the point is to see what happens naturally when everyone has more money.

- Try a third round where the auctioneer takes back half the money first. What happens to prices then?

Check your work

- ☐ I can explain why Congress printed Continental dollars.
- ☐ My ledger shows the prices before and after the new money.
- ☐ I can explain why printing more money does not make people richer.

LEDGER NOTEBOOK

1. Draw a timeline from 1775 to 1787: the first Continentals, more and more printing, the 40-to-1 value in 1780, “not worth a Continental,” and the Constitution.
2. Draw a staircase going up, labeled with the rising price of a bushel of wheat. Next to it draw a staircase going down for what one Continental dollar could buy.
3. Design your own paper money with three ways to stop counterfeiters, and label each one.

From history. To make Continental notes hard to copy, Franklin pressed real leaves into the printing plates so the fine veins of the leaves appeared on the back of the notes. This trick, called nature printing, was one of the earliest anti-counterfeiting methods in America.

COMMON MISTAKES

- Thinking printing money creates wealth. Wealth is real goods and services; printing money only changes the price of them.
- Blaming only the counterfeiters. Fake notes made things worse, but the main problem was that Congress printed too many real ones.
- Thinking inflation means things are better. Rising prices mean each dollar buys less.

Make it a game • Print More, Bid More. Round one: give each player five paper slips as money and auction a cookie or button; write down the winning bid. Round two: your parent hands out thirty slips each, as Congress printing more, and you auction the same prize again. Compare bids, then explain why a Continental dollar became worth less.

2.4 THE GOLD STANDARD: A DOLLAR YOU COULD TRADE FOR GOLD

OBJECTIVES

- Explain the gold standard: a dollar that could be traded for a fixed amount of gold.
- Tell the main dates in the story of the dollar and gold, from the gold rush of 1849 to August 15, 1971.
- Explain what gives today's dollar its value and why the amount of money matters.

Warm-up. Look at a dollar bill. Find every word on the front and back. Does it say anything about gold or silver? What does it promise? Write down the words that tell you it is real money.

WATCH

Gold Standard vs. Fiat Money - Key Differences

Federal Reserve Bank of St. Louis • 2:20

<https://www.youtube.com/watch?v=yTJYvj3Fj0c>

WHEN TO WATCH

After the story, before the big idea. Pause at the bank-run picture and predict what happens.

KEY TERMS

gold standard

A money system in which each dollar can be traded for a fixed amount of gold.

Federal Reserve

The central bank of the United States, created in 1913, which manages the nation's money and banks.

gold certificate

A paper note that could be traded for gold coins at a bank or the Treasury.

fiat money

Money that is not backed by gold or silver but is accepted because the law makes it legal tender and people trust it.

ounce

A unit of weight; gold is weighed in troy ounces, each a little over 31 grams.

CORE IDEAS

The story. In January 1848, a carpenter named James Marshall was building a sawmill on a river in California when he saw something shining in the water. It was gold. Within a year, tens of thousands of “forty-niners” rushed to California, and over the next few years they dug out a great deal of gold. Much of that gold was struck into coins at the U.S. Mint. For many years, the United States used a **gold standard**: the government promised that \$20.67 in paper money could be traded for one ounce of gold. Some paper bills, called **gold certificates**, even said that they could be paid in gold coin “to the bearer on demand.”

How they figured it out. The gold standard kept the government from printing too much money, because every dollar was tied to gold that it had to keep. That gave people trust. But it had problems too. When gold was scarce, money was scarce, and in hard times banks and businesses could not get enough money to keep working. In 1913 Congress created the **Federal Reserve** to manage the nation’s money. In 1933, during the Great Depression, Americans were ordered to turn in most of their gold coins, and in 1934 the price of gold was raised to \$35 an ounce. After World War II, at a meeting in Bretton Woods, New Hampshire, in 1944, many countries agreed to tie their money to the dollar, and the United States promised to trade gold to other countries at \$35 an ounce. Then, on **August 15, 1971**, President Nixon ended that promise. The dollar was no longer tied to gold at all.

The big idea. Today the dollar is **fiat money**. It is not backed by gold. It has value because the law says it must be accepted to pay debts and taxes, and because people trust that others will accept it in trade. Its value also depends on **how much of it is made**. If the amount of money grows much faster than the goods people make, prices rise, as they did with the Continental. The Federal Reserve tries to manage the amount of money carefully so that prices stay fairly steady.

In business today. Gold is now simply a valuable metal that people buy and sell; its price goes up and down every day. Dollars, meanwhile, are used all over the world, mostly as numbers in bank accounts rather than paper. Whether money is gold, silver, paper or numbers on a screen, the same rule holds: money works only when

people trust it, and it keeps its value only when it is made with honest restraint. A family keeps its savings safe by saving steadily, spending carefully, and remembering that real wealth is good work, good goods and good character.

PICTURE STUDY



A Ten-Dollar Gold Certificate, Bureau of Engraving and Printing, 1922 · Engraved and printed paper currency · National Numismatic Collection, Smithsonian Institution

Image: [Wikimedia Commons](#), public domain

This gold certificate was printed by the U.S. Bureau of Engraving and Printing in 1922. The portrait is of Michael Hillegas, the first Treasurer of the United States in 1775. The back of these notes was printed in bright orange-gold ink, which is why people called them “yellowbacks.” A person holding this note could take it to the Treasury and receive ten dollars in gold coins.

Look closely

- Find the words that tell what this note could be traded for.
- Look at the seal and the serial numbers. What color are they, and why might the color matter?
- Find the portrait. What kind of clothes is the man wearing? What does that tell you about when he lived?
- Look at the fine lines around the edges. Why would money be printed with such tiny, careful patterns?

Talk about it

1. Why would people trust this note more than a Continental dollar?
2. What would happen if the Treasury printed many more gold certificates than it had gold?

3. Today's dollar has no promise of gold. What makes people accept it?

PROJECT

The Family Gold Bank

You will run a small bank that keeps “gold” in a vault and issues paper certificates for it. You will see why certificates are convenient, what happens when the bank issues too many, and how today’s money is different.

You will need

- A jar for the vault and 20 yellow buttons or beads (the “gold”)
- Index cards cut in half to make 30 certificates
- Markers and a pencil
- Ledger notebook
- Two or more family members

Steps

1. Put 20 pieces of gold in the vault. Make 20 certificates that each say “Good for 1 gold piece on demand,” with your bank’s name and your signature.
2. Give each family member some certificates. Let them use the certificates to buy small things from each other for a few minutes. Notice how much easier it is to carry paper than gold.
3. Start a ledger page with columns: Time, Certificates out, Gold in vault, Is every certificate covered?
4. Now the bank prints 10 extra certificates without adding gold and spends them. Record the new numbers. Are all certificates still covered?
5. Ask everyone to come and trade their certificates for gold at the same time. What happens when the gold runs out? Record it.
6. Talk about today’s money: no one can trade a dollar for gold. Why do people still accept it? Write the two reasons from the lesson.
7. Write a short rule for your bank that would keep its certificates honest.

Tips

- A real bank or government that breaks its promise loses trust, and trust is very hard to win back.

- Keep careful count in your ledger. A bank's records must always match what is in the vault.

Check your work

- ☐ I can explain how the gold standard worked.
- ☐ My ledger shows what happened when the bank issued too many certificates.
- ☐ I can explain what gives today's fiat dollar its value.

LEDGER NOTEBOOK

1. Draw a timeline of the dollar and gold: 1792 the U.S. Mint; 1848–49 the gold rush; 1913 the Federal Reserve; 1933–34 gold coins turned in and gold set at \$35; 1944 Bretton Woods; August 15, 1971 the gold window closed.
2. Draw two scales. On one, balance a gold certificate against a stack of gold coins. On the other, balance a modern dollar against the word "Trust."
3. Make a T-chart: Good things about the gold standard and Problems with the gold standard.

From history. At Fort Knox, Kentucky, the U.S. Treasury keeps one of the largest stores of gold in the world in a vault built in 1936. Its walls are made of granite and steel, and no single person knows the whole combination to open its door.

COMMON MISTAKES

- Thinking today's dollar can be traded for gold. That ended for Americans in 1933 and for other countries in 1971.
- Thinking money without gold is worth nothing. It is worth what it can buy, as long as people trust it and it is not made too fast.
- Thinking the gold standard had no problems. When gold was scarce, money was scarce too, which could make hard times harder.

Make it a game • Leap Through the Dates. Write 1849 on one sheet of paper and August 15, 1971 on another, and lay them across the floor with a gap between. Your parent calls out clues: gold rush, gold certificate, fiat money, the Federal Reserve. Jump to the sheet it belongs near and explain what a dollar could be traded for on the way. Score a point for each right jump.

Scripture. “Divers weights, and divers measures, both of them are alike abomination to the LORD.” (Proverbs 20:10, KJV)

Money is a measure of value, like a weight or a yardstick. God hates measures that change secretly to cheat people, so honest money, kept steady and not made too fast, is a matter of justice.

UNIT 2

THE STORY OF MONEY: GOLD, SILVER AND PAPER

Money is anything people agree to accept in trade. For thousands of years, the most trusted money was **gold** and **silver**, because they are beautiful, they do not rust, they can be divided into small pieces, and no one can make more of them except by digging them out of the ground. In this unit you will follow gold and silver around the world, and then see what happens when paper money takes their place.

You will cross the Sahara with camel caravans trading salt for gold and watch Mansa Musa of Mali spend so much gold in Cairo that its value fell. You will hold a Spanish “piece of eight,” the silver coin that traveled around the world and became the model for the American dollar. You will learn why the Continental dollar became a joke, “not worth a Continental,” and how the gold standard tied the dollar to gold until August 15, 1971. In every lesson you will ask: **what makes money keep its value?**

PREREQUISITES

- Knows the values of U.S. coins and bills
- Can add, subtract and multiply money amounts
- Knows what barter is (Grades 1–3, or a short reminder from a parent)

MASTERY CHECKLIST

- ☐ I can explain why gold and silver made good money.
- ☐ I can tell how salt and gold were traded across the Sahara and what happened when Mansa Musa spent his gold in Cairo.
- ☐ I can explain what a piece of eight was and how it became the model for the dollar.
- ☐ I can explain why the Continental dollar lost its value.
- ☐ I can explain the gold standard and what kind of money we use today.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Federal Reserve History** (federalreservehistory.org): Free. Short, reliable articles and pictures about the history of American money and banking, including the gold standard and the events of 1971. Best read by a parent and explained aloud. Good for Lesson 2.4.
- **U.S. Mint for Kids**: Free. Games, coin facts and short history pages from the U.S. Mint, which has made America's coins since 1792. Good for Lessons 2.2 and 2.4.
- **Econ Lowdown, from the Federal Reserve Bank of St. Louis**: Free. Short lessons and videos on money, inflation and the functions of money, written for students. Parents can browse without an account.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

2.1 Gold for Salt: Mansa Musa and the Saharan Caravans 2 sessions of 45 minutes

2.2 Pieces of Eight: The Spanish Dollar That Went Around the World

2 sessions of 45 minutes

2.3 “Not Worth a Continental”: When Paper Money Loses Its Value

2 sessions of 45 minutes

2.4 The Gold Standard: A Dollar You Could Trade for Gold 2 sessions of 45 minutes

UNIT 2 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Give three reasons gold and silver made good money.

2. **5 pts**

Why did traders carry salt south across the Sahara and gold north?

3. (5 pts)

What happened to the value of gold in Cairo after Mansa Musa's visit in 1324, and why?

4. (5 pts)

Where did the silver for pieces of eight come from, and where did the coins travel?

5. (5 pts)

A piece of eight was cut into 8 bits. A shopkeeper sells an apple for 2 bits and bread for 3 bits. A customer pays with a whole piece of eight. How many bits of change does he get? How much is that in cents if 1 bit = 12½¢?

6. (5 pts)

Why did the Continental dollar lose its value?

7. (5 pts)

In 1780 a Continental dollar was worth about one-fortieth of a silver dollar. How many Continental dollars would it take to equal 3 silver dollars?

8. (5 pts)

What was the gold standard? Name one good thing and one problem with it.

9. (5 pts)

What happened on August 15, 1971?

10. (5 pts)

What would happen to prices at the grocery store if every family suddenly had twice as much money, but the stores had the same amount of food? Explain.

ANSWER KEY

1. Any three: they are beautiful and wanted; they do not rust or spoil; they can be divided into small pieces; they are scarce, so no one can make more at will; they are easy to carry for their value.
2. The south had gold but little salt, which people needed to stay healthy and keep food; the north had salt mines and wanted gold for coins. Each traded what was plentiful for what was scarce.
3. It fell, because he spent and gave away so much gold that there was suddenly much more of it, so each piece bought less.
4. From mines at Potosí in South America and in Mexico. They traveled to Spain, across the Pacific to Manila and China, to Africa, India, Europe and the American colonies.
5. $2 + 3 = 5$ bits spent; $8 - 5 = 3$ bits change. $3 \times 12\frac{1}{2}\text{¢} = 37\frac{1}{2}\text{¢}$.
6. Congress printed far too many of them to pay for the war without taxes or gold to back them, and the British spread counterfeits, so prices rose and each dollar bought less until it was almost worthless.
7. $40 \times 3 = 120$ Continental dollars.
8. A system in which dollars could be traded for a fixed amount of gold (for example \$20.67 an ounce). Good: it kept the government from printing too much money and built trust. Problem: when gold was scarce, money was scarce, which could make hard times worse.
9. President Nixon ended the U.S. promise to trade gold for dollars held by other countries, so the dollar was no longer tied to gold.
10. Prices would rise, because people would bid more for the same amount of food. No one would really be richer; each dollar would just buy less.

PORTFOLIO PIECE: A TIMELINE OF MONEY: GOLD, SILVER AND PAPER

Make an illustrated timeline, at least one yard long, of the money stories in this unit: the Saharan gold and salt trade, Mansa Musa in 1324, the silver of Potosí in 1545 and the piece of eight, the Continental dollar of 1775–1780, the Constitution of 1787, the U.S. Mint of 1792, the gold rush of 1848–49, the Federal Reserve of 1913, Bretton Woods in 1944 and August 15, 1971. Draw a small picture for each, write one sentence about what it teaches about money, and finish with a short paragraph answering: what makes money keep its value?

LOOK FOR	WHAT IT MEANS
Accuracy	Dates, places and facts are correct and in the right order.
Understanding	Each sentence explains a real lesson about money: scarcity, trust, divisibility or printing too much.
Conclusion	The final paragraph clearly explains what makes money keep its value.
Care	Drawings and writing are neat, labeled and easy to follow.

MARKETS

A **market** is any place where buyers and sellers meet to trade: a farm stand, a grocery store, a busy exchange hall, or a website. In a market, nobody is in charge of setting most prices. Instead, prices rise and fall as buyers and sellers make their choices. In this unit you will learn how **supply and demand** set prices, how prices act like **signals** that tell people what to make and what to save, and why **competition** usually serves customers better than a **monopoly**.

You will visit San Francisco in the gold rush, when a shovel could cost a small fortune; the Chicago Board of Trade, where the price of wheat traveled by telegraph to farmers far away; the Hudson River, where a young captain named Cornelius Vanderbilt helped break a steamboat monopoly; and the Erie Canal, which turned a long, costly journey into a cheap one and opened new markets for farmers and towns. In every lesson you will ask: **what is the price telling us?**

PREREQUISITES

- Knows opportunity cost and why people trade (Unit 1)
- Knows what money is and why prices rise when there is too much of it (Unit 2)
- Can read a simple bar graph and table

MASTERY CHECKLIST

- ☐ I can explain supply and demand and show how each one changes a price.
- ☐ I can explain how a price works like a signal to buyers and sellers.
- ☐ I can explain why competition usually brings lower prices and better service, and what can go wrong with a monopoly.
- ☐ I can explain how the Erie Canal lowered costs and opened new markets.
- ☐ I can read and make a simple price table and graph.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Econ Lowdown, from the Federal Reserve Bank of St. Louis**: Free. Short videos and activities on supply, demand, prices and competition, written for students. Good with Lessons 3.1 and 3.2.
- ***Ticket to Ride* (family board game, Days of Wonder)**: Ages 8 and up. Players build railroad routes across a map of North America. A fun way to talk about why routes like the Erie Canal and the railroads mattered so much to trade (Lesson 3.4).
- **Erie Canal Museum, Syracuse, New York**: The museum's website has pictures and short histories of the canal, its boats and its locks. Good for Lesson 3.4 and the portfolio.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

3.1 Supply and Demand: Gold Rush Prices

2 sessions of 45 minutes

3.2 Prices Are Signals: Wheat, the Telegraph and the Chicago Board of Trade

2 sessions of 45 minutes

3.3 Competition versus Monopoly: The Steamboat Fight on the Hudson

2 sessions of 45 minutes

3.4 The Erie Canal Opens New Markets

2 sessions of 45 minutes

UNIT 3 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Define supply and demand.

2. **5 pts**

Why were shovels and flour so expensive in San Francisco in 1849?

3. 5 pts

What happened to prices when many ships full of goods arrived in San Francisco? Why?

4. 5 pts

The price of wheat in Chicago rises sharply. What does this price signal tell farmers and what does it tell buyers?

5. 5 pts

How did the telegraph and standard grades of wheat help farmers?

6. 5 pts

What is a monopoly? What usually happens to prices and service under a monopoly?

7. 5 pts

What happened after the Supreme Court's decision in Gibbons v. Ogden in 1824?

8. 5 pts

Why do many towns have only one water company? What should the town do about it?

9. 5 pts

Shipping 1 ton of flour by wagon costs \$100. By canal it costs \$10 plus a \$2 toll. How much does a farmer save on 5 tons by using the canal?

10. 5 pts

What would happen to the price of bread in a city if a new canal made it much cheaper to ship flour there? Explain.

ANSWER KEY

1. Supply is how much of something sellers are willing to sell at different prices. Demand is how much buyers are willing to buy at different prices.
2. Demand was huge, with thousands of miners who needed them and had gold to spend, while supply was small, so buyers bid the prices up.
3. Prices fell, because supply grew; sometimes there was a surplus and merchants had to sell cheaply.
4. It tells farmers to plant and sell more wheat, and it tells buyers to use less or look for other grains.
5. The telegraph sent prices quickly so farmers knew what wheat was worth and were harder to cheat; standard grades let buyers trust the quality without inspecting every sack, so wheat could be sold faster and farther away.
6. A monopoly is when one seller controls the whole supply, so customers have no other choice. Prices tend to be higher and service and improvements tend to be poorer.
7. The New York steamboat monopoly was broken, new steamboat lines started, fares fell, and boats became faster and better as owners competed.
8. Building several sets of water pipes down every street would be wasteful, so one provider makes sense. The town should set fair rules, check its prices and make sure it serves everyone safely.
9. Wagon: $5 \times \$100 = \$500$. Canal: $5 \times (\$10 + \$2) = \$60$. Savings: $\$500 - \$60 = \$440$.
10. The price of bread would probably fall, because flour would cost less to bring to the city and more flour would arrive, increasing supply.

PORTFOLIO PIECE: A PRICE SURVEY OF THREE STORES

With a parent, choose five everyday items, such as a gallon of milk, a loaf of bread, a dozen eggs, a box of cereal and a pound of apples. Find each item's price at three different stores, or in three store flyers. Record the prices in a table, find the lowest and highest price for each item, and figure out how much a family would save by buying each item where it is cheapest. Then write one page explaining what your survey shows about competition, why prices differ (location, quality, service, supply and demand), and which store you would recommend and why.

LOOK FOR	WHAT IT MEANS
Data	Five items at three stores, all prices recorded clearly with the date and source.
Math	Lowest prices, differences and total savings are calculated correctly.
Explanation	Uses the ideas of competition, supply and demand and price signals to explain the differences.
Judgment	The recommendation is sensible and considers more than price alone, such as quality and service.

3.1 SUPPLY AND DEMAND: GOLD RUSH PRICES

OBJECTIVES

- Define supply and demand and explain how each one pushes a price up or down.
- Tell how prices in gold-rush San Francisco rose and then fell as goods arrived.
- Run a classroom market and record how the price changes when supply or demand changes.

Warm-up. Think of something that costs more at some times than at others: strawberries in winter, a hotel room at Christmas, a snow shovel before a storm. Write down two examples and a guess about why the price changes.

WATCH

Supply - Economic Lowdown

Federal Reserve Bank of St. Louis · 3:57

https://www.youtube.com/watch?v=6Q_XxwqtwxY

WHEN TO WATCH

After the story of the gold rush, before the big idea.

BACKUP VIDEO

The California Gold Rush cartoon 1849 (The Wild West)

Simple History · 2:16

<https://www.youtube.com/watch?v=iydRkC0gMZI>

Before the story: a quick cartoon of the gold rush, including the shops that sold to miners.

KEY TERMS

market

Any place, real or online, where buyers and sellers meet to trade.

supply

How much of something sellers are willing to sell at different prices.

demand

How much of something buyers are willing to buy at different prices.

shortage

When buyers want more of something than sellers have at the current price.

surplus

When sellers have more of something than buyers want at the current price.

price

The amount of money a buyer pays a seller for a good or service.

CORE IDEAS

The story. In 1848, gold was found in California. A year later, tens of thousands of people from all over the world rushed to the gold fields. San Francisco grew from a small town of a few hundred people into a crowded city almost overnight. Ships sailed into the bay so fast that their crews ran off to dig for gold, leaving hundreds of empty ships rocking in the harbor. Everyone in California needed shovels, pans, boots, tents, flour and coffee, and there were not nearly enough of them. Prices shot up. A shopkeeper named Sam Brannan had filled his store with mining pans and shovels before he spread the news of gold, and he sold them at very high prices. A young merchant named Levi Strauss later came to San Francisco to sell cloth and dry goods to the miners, and his sturdy work pants became famous.

How they figured it out. Why were prices so high? Because **demand** was huge and **supply** was small. There were thousands of miners, each with gold to spend, and only a few shovels and sacks of flour. When buyers want much more of something than sellers have, there is a **shortage**, and buyers bid the price up. But high prices sent a message around the world: “Send goods to California!” Merchants in New York, Chile, China and Hawaii loaded ships with flour, tools and clothing and sent them to San Francisco. When the ships arrived, supply grew, and sometimes there was suddenly more of a good than people wanted: a **surplus**. Then prices fell, sometimes so low that merchants lost money. Over a few years, prices in California came closer to prices in the rest of the country.

The big idea. In a free market, **prices are set by supply and demand**. When demand goes up and supply stays the same, the price goes up. When supply goes up and demand stays the same, the price goes down. The price where the amount buyers want equals the amount sellers have is called the market price. No one person decides it. It comes from the choices of all the buyers and all the sellers together.

In business today. You can see supply and demand everywhere. When a hurricane is coming, demand for bottled water and plywood jumps. When a big crop of apples comes in, supply rises and apple prices fall. Wise sellers watch prices closely: high prices invite them to bring more goods, and low prices warn them to make less. Wise

buyers notice too: they buy apples in the fall when they are plentiful and cheap. The Bible praises the seller who does not hoard grain to drive up prices in a famine: “blessing shall be upon the head of him that selleth it” (Proverbs 11:26).

PICTURE STUDY



San Francisco Harbor, 1851, Unknown daguerreotypist, 1851 · Daguerreotype (an early photograph on a silver-coated plate) · Library of Congress, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

This is one of the earliest photographs of San Francisco, taken during the gold rush. It was made as a daguerreotype, an early kind of photograph on a polished metal plate. The bay is so full of ships that it looks like a forest of masts. Many of these ships carried goods to sell to the miners, and many were left empty because their sailors ran off to the gold fields.

Look closely

- Try to count the ships. Are there more than you can count?
- Look at the buildings on the shore. Do they look old and solid, or new and quickly built?
- Find the tall masts with no sails. Why might a ship sit in the harbor with no crew?
- Look for any signs of shops, warehouses or wharves. Where would goods be unloaded?

Talk about it

1. What were all these ships bringing to San Francisco, and why?
2. What happened to the price of shovels and flour when so many ships arrived?

3. Who gained when prices were high? Who gained when prices fell?

PROJECT

The Gold Rush Market

You will run a small market for “shovels” (spoons or pencils) with family members as miners and merchants. You will change supply and demand and record what happens to the price each time.

You will need

- 10 spoons or pencils to be “shovels”
- Play money: \$20 for each miner
- At least three people (one or two merchants and two or more miners)
- Ledger notebook and graph paper

Steps

1. In your ledger, rule a table with columns: Round, Shovels for sale, Miners buying, Price agreed.
2. Round 1 (a shortage): the merchant has only 2 shovels. Every miner wants one and has \$20. Miners call out offers; the merchant sells to the highest bidders. Record the price.
3. Round 2 (a ship arrives): the merchant now has 10 shovels to sell, and the same miners. Each miner needs only one. Let the merchant start high and lower the price until all the shovels that can be sold are sold. Record the price.
4. Round 3 (more miners): add two more miners (or let each miner want two shovels). Keep 10 shovels. Record the price.
5. Round 4 (a surplus): the merchant has 10 shovels, but only one miner still needs a shovel. Record the price.
6. Make a bar graph of the four prices.
7. Write a sentence for each round explaining whether supply or demand changed and why the price went up or down.

Tips

- Let the prices come from real bargaining; do not decide them ahead of time.

- A good merchant in Round 4 might decide to save his shovels for next week instead of selling them very cheaply. That is a choice too.

Check your work

- ☐ I can explain supply and demand in my own words.
- ☐ My ledger and graph show the price in all four rounds.
- ☐ I can explain why gold-rush prices rose and then fell.

LEDGER NOTEBOOK

1. Draw a seesaw with “Supply” on one side and “Demand” on the other. Draw what happens to the price when demand goes up, and when supply goes up.
2. Draw a gold-rush general store with price tags on a shovel, a pan, boots and a sack of flour. Add a sign showing a new ship arriving.
3. Make a two-column chart: Things that raise a price, Things that lower a price.

From history. Many ships left in San Francisco Bay during the gold rush were never sailed again. Some were dragged onto the mud and used as warehouses, stores, a hotel and even a jail. As the city grew, its streets were built right over some of them, and workers digging foundations still sometimes find their old wooden hulls.

COMMON MISTAKES

- Thinking stores just pick any price they like. In a market with many buyers and sellers, supply and demand push prices toward the market price.
- Mixing up supply and demand. Supply is what sellers have to sell; demand is what buyers want to buy.
- Thinking high prices are always bad. High prices also call new sellers to bring more goods, which ends the shortage.

Make it a game • Price Up, Price Down. Your parent plays a gold-rush shopkeeper and calls out news: only three eggs in town, or ten ships of eggs just arrived. Stand tall if the price rises and crouch low if it falls, then use the word supply, demand, shortage or surplus to say why. Miss a reason and the shopkeeper raises the price on you. Play ten rounds.

Scripture. “He that withholdeth corn, the people shall curse him: but blessing shall be upon the head of him that selleth it.” (Proverbs 11:26, KJV)

A merchant who hoards food in a famine to make prices climb is cursed, but one who brings his goods to market is a blessing. Supplying what people need is good and honest work.

3.2 PRICES ARE SIGNALS: WHEAT, THE TELEGRAPH AND THE CHICAGO BOARD OF TRADE

OBJECTIVES

- Explain how a price acts as a signal that tells buyers to use less and sellers to make more, or the opposite.
- Tell how the Chicago Board of Trade, the telegraph and standard grades of wheat helped farmers and buyers trade across great distances.
- Play a price-signal game and record how farmers and buyers respond to price changes.

Warm-up. A traffic light tells drivers what to do without saying a word. Name two other signals that tell people what to do: a doorbell, a whistle, a red flag at the beach. What does each one tell people?

WATCH

A Price Is a Signal Wrapped Up in an Incentive

Marginal Revolution University • 4:47

<https://www.youtube.com/watch?v=aBYzvPbIFNw>

WHEN TO WATCH

After the big idea, before the project.

Note: Uses oil and roses as examples; a short costumed skit plays an 'oil czar.'

KEY TERMS

signal

Something that gives information and tells people what to do, like a traffic light.

exchange

A building or organization where traders meet to buy and sell large amounts of goods, such as grain or stocks.

price signal

A change in price that tells sellers to make more or less and buyers to buy more or less.

telegraph

An invention of the 1840s that sent messages over wires using electric pulses in a code of dots and dashes.

grade

A standard level of quality, so that buyers know what they are getting without inspecting every sack.

incentive

A reward or cost that encourages people to act a certain way.

CORE IDEAS

The story. In the 1840s, Chicago was a muddy young town on Lake Michigan, but farmers all over the Midwest were growing more wheat and corn than they could eat. In 1848 a group of Chicago merchants started the **Chicago Board of Trade**, a place where buyers and sellers of grain could meet every day. That same year the first telegraph line reached Chicago, and the first railroad began running from the city. Soon wheat poured in by rail and wagon, and the price at which it sold in the trading room was sent out by telegraph to towns and farms hundreds of miles away. In 1856 the Board began sorting wheat into standard **grades**, such as “No. 1 spring wheat,” so a buyer in New York could buy a whole shipload without ever seeing it.

How they figured it out. Before the telegraph, a farmer far from the city might not know if wheat was selling for a high price or a low one, and could easily be cheated. Now the price traveled fast. When bad weather in Europe ruined crops, buyers there wanted more American wheat, and the price in Chicago rose. Farmers saw the higher price and planted more wheat the next spring. When a huge harvest came in and the price fell, farmers planted less wheat and more of something else, such as corn or oats, or fed their extra grain to hogs. The price in the trading room was carrying news from millions of people, near and far, to every farmer who could read it.

The big idea. A price is a **signal** wrapped up with an **incentive**. A rising price signals that something is scarce and tells buyers, “Use less, look for something else,” while it tells sellers, “Make more; you will earn more.” A falling price signals that something is plentiful and tells sellers, “Make less,” and buyers, “Buy more.” No one has to give orders. When millions of buyers and sellers each respond to prices, goods tend to flow to where they are most needed. That is why it matters that prices be honest: a false price, like a broken traffic light, sends everyone the wrong way.

In business today. The Chicago Board of Trade still exists today as part of a larger exchange, though most trading now happens on computers. Farmers check grain prices on their phones before deciding what to plant. Gasoline prices change at the

corner station, and drivers drive less or buy smaller cars when the price is high. Store managers watch which items sell fast and which sit on the shelf, and they order more of the first and less of the second. Every time you see a price change, ask: what is this signal telling people to do?

PICTURE STUDY



A Flash Picture of the Chicago Board of Trade in Session, Unknown photographer, about 1900 ·

Photograph · Library of Congress, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

This photograph was made with a bright flash of light, which was still new and exciting at the time, so that a crowded indoor room could be pictured clearly. It shows the trading floor of the Chicago Board of Trade, where traders met in groups called “pits” to buy and sell wheat, corn and oats. Every price they agreed on was written down and sent out by telegraph.

Look closely

- Find the wide steps in the middle of the floor. Traders stood on steps like these, called a “pit,” so they could see and shout to each other. Why would that help?
- Look at the floor. What is scattered all over it?
- Find the desks around the edges. Who might sit there, and what might they be writing?
- Look at the tall windows and the size of the hall. What does the building tell you about how important this trading was?

Talk about it

1. How would a farmer in Iowa find out what happened in this room?
2. Why did standard grades of wheat make trading here faster?

3. If the price of wheat rose here today, what might farmers do next spring?

PROJECT

The Wheat Market Signal Game

You will play farmers and buyers over several “years.” Each year the price is posted, and the farmers decide how much wheat to plant. You will record how the price signal changes what everyone does.

You will need

- A bag of dried beans (the “wheat”) and paper cups
- Index cards for weather and news cards: Good harvest, Drought, Crop failure in Europe, Big harvest everywhere
- Play money
- Ledger notebook and graph paper
- Two or more players

Steps

1. Rule a ledger table with columns: Year, News card, Price posted, Fields of wheat planted, Wheat harvested, Price next year.
2. Year 1: the price of wheat is \$5 a cup. Each farmer decides how many fields (0–5) to plant. Each field grows 2 cups of wheat in a normal year.
3. Draw a news card. Good harvest: each field grows 3 cups. Drought: each field grows 1 cup. Crop failure in Europe: the buyer wants twice as much. Big harvest everywhere: the buyer wants only half as much.
4. The buyer (a parent) needs about 10 cups in a normal year. If there is less wheat than he wants, he raises the price by \$2. If there is more than he wants, he lowers it by \$2. Post the new price.
5. Play at least five years. Each year, farmers look at the posted price before deciding how many fields to plant. Record every year.
6. Graph the price and the number of fields planted on the same graph, using two colors.
7. Write three sentences: What did farmers do when the price rose? When it fell? How did the price act like a signal?

Tips

- Farmers can plant something else instead of wheat. Planting 0 fields of wheat is a real choice.
- Notice the delay: farmers plant this spring based on last year's price, so they sometimes plant too much or too little. Real farmers face this problem too.

Check your work

- ☐ I can explain how a price works like a signal.
- ☐ My ledger and graph show at least five years of prices and planting.
- ☐ I can explain how the telegraph and standard grades helped farmers and buyers.

LEDGER NOTEBOOK

1. Draw a traffic light and label it like a price signal: green for “price rising: make more,” red for “price falling: make less.”
2. Draw the path of a bushel of wheat from an Iowa farm to a train, to a Chicago grain elevator, to a ship, to a bakery in New York.
3. Find a price that changed recently in your family's shopping. Write what you think the price signal was telling people.

From history. Chicago's grain merchants built huge storage towers called grain elevators, where steam-powered belts lifted wheat from rail cars and poured it into bins by grade. Because wheat of the same grade could be mixed together, a farmer received a receipt for so many bushels of “No. 2 wheat” instead of getting back his own sacks.

COMMON MISTAKES

- Thinking a price is just a number on a tag. It carries information about scarcity and tells people what to do.
- Thinking someone in charge sets grain prices. Prices at an exchange come from the bids and offers of many buyers and sellers.
- Forgetting the incentive. People respond to price signals because rising prices reward sellers and push buyers to save.

Make it a game • Ten-Word Telegram. Telegrams cost by the word, so each message may use only ten words. Your parent, the Chicago grain buyer, writes a price message about wheat. You, the farmer, read it, decide whether to plant more or less, and answer in ten words about the incentive. Swap roles and see who can say the clearest thing in the fewest words.

3.3 COMPETITION VERSUS MONOPOLY: THE STEAMBOAT FIGHT ON THE HUDSON

OBJECTIVES

- Define competition and monopoly and explain why customers usually do better when sellers compete.
- Tell the story of the New York steamboat monopoly, Cornelius Vanderbilt and the Supreme Court case of 1824.
- Explain why some services, such as water pipes, are run as single providers under fair rules.

Warm-up. Imagine there is only one ice-cream stand in your whole town, and no one else is allowed to sell ice cream. Write down three things that might happen to its prices, its flavors and its service. Then imagine three stands on the same street. What would change?

WATCH

Gibbons v. Ogden | BRI's Homework Help Series

Bill of Rights Institute • 3:15

<https://www.youtube.com/watch?v=XvyqfJ1nhNM>

WHEN TO WATCH

After the story, before the big idea.

BACKUP VIDEO

Gibbons vs Ogden Explained in 5 Minutes (1824): US History Review

Hip Hughes (HipHughes) • 5:29

<https://www.youtube.com/watch?v=kKUpRFAi4vA>

For a fuller retelling of the court case after the lesson.

KEY TERMS

competition

When several sellers try to win the same customers by offering better prices, quality or service.

monopoly

When only one seller controls the whole supply of a good or service, so customers have no other choice.

license

Written permission from the government to do something, such as run a boat or a business.

Supreme Court

The highest court in the United States, which decides what the Constitution means in cases brought to it.

fare

The price a passenger pays to ride a boat, train or bus.

CORE IDEAS

The story. In August 1807, Robert Fulton's steamboat, later called the *Clermont*, chugged up the Hudson River from New York City to Albany in about a day and a half, a trip that took sailing boats several days. It was a wonder. Fulton's partner, Robert Livingston, was a powerful man, and the New York legislature gave the two of them a **monopoly**: no one else was allowed to run steamboats on New York's waters unless they paid the partners for permission. Fares were high, and other boat owners who tried to compete could have their boats seized.

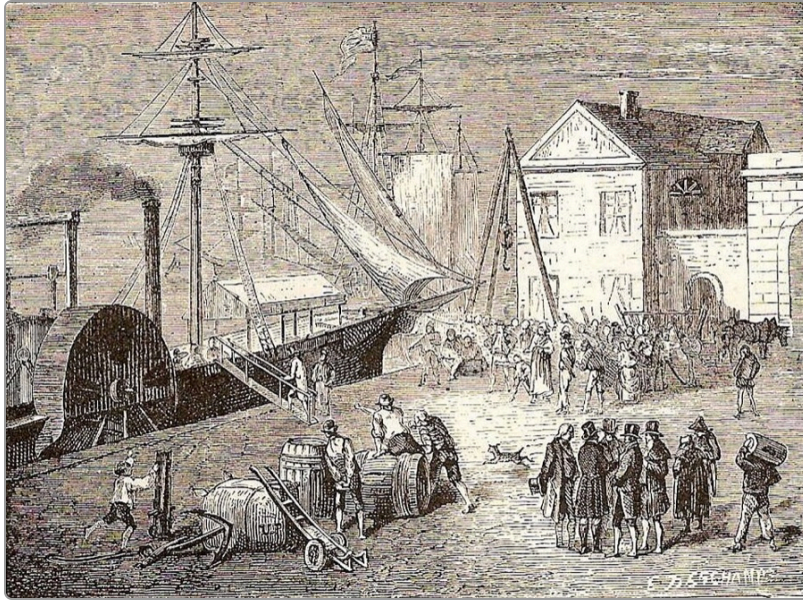
How they figured it out. A New Jersey businessman named Thomas Gibbons decided to fight the monopoly. He held a federal license from the United States government to run boats along the coast, and he hired a young, tough steamboat captain named Cornelius Vanderbilt. Vanderbilt ran Gibbons's steamboat between New Jersey and New York at low fares and dodged the officers who tried to arrest him. Gibbons's rival, Aaron Ogden, who ran boats under the monopoly, took him to court. The case, *Gibbons v. Ogden*, went all the way to the **Supreme Court**. In 1824 Chief Justice John Marshall ruled that a state could not block boats that carried trade between states under a license from Congress. The monopoly was broken. New steamboat lines started up, fares fell, and boats became faster and more comfortable as owners competed for passengers. Vanderbilt himself started his own lines and became famous for cutting fares.

The big idea. When sellers **compete**, each one tries to win customers by lowering prices, improving quality or giving better service. Customers get more choice. A **monopoly**, with only one seller, has less reason to lower prices or improve, because customers have nowhere else to go. But markets have limits too. Some services, like water pipes, sewer lines and power lines, would be wasteful to build twice down

every street. These are often run by one provider, but under fair rules: the government sets or checks their prices and makes sure they serve everyone. Good rules work like a referee, keeping the game fair without playing it for the teams.

In business today. You see competition every time two gas stations sit across the street from each other with prices on big signs, or when several stores sell the same cereal. Businesses compete with sales, coupons, faster delivery, longer warranties and friendlier service. Competition also pushes inventors to make better products, like the faster, safer steamboats that followed 1824. When one company grows so strong that it could crush every competitor unfairly, the law can step in, as you will see in Unit 5. And for a business owner, competition is a good teacher: “What can I do better than the shop down the street?”

PICTURE STUDY



Robert Fulton Boards His Steamboat, the Clermont, Unknown engraver, 1800s · Engraving · Wikimedia Commons (from a nineteenth-century book)

Image: [Wikimedia Commons](#), public domain

This engraving was made years after 1807 to show the excitement in New York when Robert Fulton's steamboat began its trips up the Hudson. Many people had laughed at "Fulton's Folly," sure it would never work. When it did, it changed river travel in America, and it also started a fight over who should be allowed to run steamboats.

Look closely

- Find the steamboat's paddlewheel and smokestack. How is it different from the sailing ship beside it?
- Find the gangway, the ramp from the dock to the boat. Who is going aboard?
- Look at the barrels, crates and workers on the dock. What business is going on?
- Find the group of gentlemen in top hats. What might they be talking about?

Talk about it

1. Why would Fulton and Livingston want a monopoly on steamboats?
2. Who lost out because of the monopoly? Who gained when it ended?
3. Why do you think steamboats got faster and better after 1824?

PROJECT

The Ferry Contest: Monopoly or Competition?

You will run a pretend ferry business across a “river” in your living room, first as the only ferry allowed, then with a competitor. You will record fares, passengers and service in both rounds.

You will need

- Two shoeboxes or toy boats (the ferries)
- Paper and markers for fare signs
- Play money and 10 small toys or buttons as passengers
- Ledger notebook
- A partner (and a parent as the customers)

Steps

1. Mark a “river” on the floor with string or tape. Every passenger needs to cross.
2. Round 1 (monopoly): only you may run a ferry. Choose any fare you like and post it. The parent, acting for the passengers, must ride your ferry or not cross at all. Record your fare, how many passengers rode, and your total money.
3. Round 2 (competition): your partner starts a second ferry. Each ferry posts a fare and may offer one extra service (a snack, a faster trip, a comfy seat). Passengers choose the ferry they like better. Play three trips. Record each ferry’s fare, service and passengers.
4. In your ledger, compare the rounds in a table: Fare, Service, Passengers who crossed, Money earned by ferries, How passengers felt.
5. Talk about it: in which round did passengers pay less? Get better service? Did more passengers cross?
6. Now pretend the river is a town’s water pipe. Would it make sense to build two pipes down every street? Write what rules you would set for a single water company.

7. Write a short paragraph: why do customers usually do better with competition?

Tips

- Compete honestly. Better fares and better service are fair; tipping over the other ferry is not.
- Notice that the monopoly ferry may earn more money but serve fewer people. That is a cost to the town.

Check your work

- ☐ I can explain competition and monopoly in my own words.
- ☐ My ledger compares fares, service and passengers in both rounds.
- ☐ I can tell how Gibbons, Vanderbilt and the Supreme Court broke the steamboat monopoly.

LEDGER NOTEBOOK

1. Draw the Hudson River from New York City to Albany. Draw the *Clermont* and label the paddlewheel, smokestack and boiler.
2. Make a T-chart: Life under the steamboat monopoly and Life after competition began.
3. Draw two competing shops on the same street with signs that show how each tries to win customers.

From history. Cornelius Vanderbilt started out as a teenager ferrying passengers and freight across New York Harbor in a small sailboat he bought with money borrowed from his mother. He later built steamships and railroads and became one of the richest men in America.

COMMON MISTAKES

- Thinking every big company is a monopoly. A monopoly means customers have no real choice of seller.
- Thinking competition means cheating or being mean. Fair competition means serving customers better than others do.
- Thinking all single providers are bad. Some services, like water pipes, work best with one provider under fair rules.

Make it a game • Ferry Fare Face-Off. Your parent is a passenger who needs a ride across the room, paid in pretend coins. Round one: you hold the only license and set the fare. Round two: a second ferry owner, a stuffed animal, may undercut you. Say aloud what happened to the fare, and why Vanderbilt and the 1824 court case helped customers.

3.4 THE ERIE CANAL OPENS NEW MARKETS

OBJECTIVES

- Tell the story of the Erie Canal: why it was built, how it was built and what it changed.
- Explain how lower shipping costs open new markets and change prices for both farmers and city people.
- Calculate the cost of shipping goods before and after the canal.

Warm-up. Imagine you grow apples on a farm 300 miles from the nearest big city, and the only way to get there is a bumpy dirt road by wagon. Write down what would happen to your apples on the way, and how much you would have to charge in the city to make the trip worth it.

WATCH

Erie Canal History_(1825)|_The Waterway That Built America | DAILY BELLRINGER

The Daily Bellringer • 5:29

https://www.youtube.com/watch?v=KDBY6sXt3_4

WHEN TO WATCH

After the warm-up, before the story.

BACKUP VIDEO

The Erie Canal

NBC News Learn • 2:51

<https://www.youtube.com/watch?v=8BCYGLBYlz4>

After the core ideas, as a short review.

KEY TERMS

canal

A waterway dug by people so boats can carry goods and passengers where there is no natural river.

lock

A walled section of a canal with gates at each end, where water is raised or lowered to lift boats up or down a hill.

towpath

A path beside a canal where mules or horses walked, pulling boats along with a rope.

transportation cost

What it costs to move goods from where they are made to where they are sold.

toll

A fee paid to use a road, bridge or canal.

CORE IDEAS

The story. In the early 1800s, the farms of western New York and the lands around the Great Lakes were growing fast, but they were cut off from the cities of the East by hills and forests. Hauling a ton of flour from Buffalo to New York City by wagon was so slow and costly that it often was not worth doing. Governor DeWitt Clinton of New York had a bold plan: dig a canal 363 miles long from Albany, on the Hudson River, to Buffalo, on Lake Erie. Many people laughed and called it “Clinton’s Ditch.” Digging began on July 4, 1817. Thousands of workers, many of them newcomers from Ireland, cleared trees, dug through swamps and blasted through rock with picks, shovels, horses and blasting powder. In October 1825 the canal opened, and Clinton rode a boat all the way to New York City, where he poured a keg of Lake Erie water into the Atlantic Ocean.

How they figured it out. The land between Albany and Buffalo rises more than 500 feet, and boats cannot float uphill. So the builders made a series of **locks**, 83 of them, each one a stone chamber where gates closed behind a boat and water flowed in or out to lift or lower it. At Lockport, they built a staircase of five double locks to climb a steep cliff. Long, flat canal boats were pulled by mules and horses walking on the **towpath**. Boat owners paid **tolls** to use the canal. It was a huge success. The cost of shipping goods between Buffalo and New York City fell by about nine-tenths, and the trip took days instead of weeks. Tolls soon paid back what the canal had cost to build.

The big idea. When **transportation costs** fall, new **markets** open. Farmers in Ohio and western New York could now sell wheat and flour in New York City and even in Europe at prices people would pay, so they planted more and earned more. City families paid less for flour, meat and butter. Factories in the East could ship tools,

cloth and furniture west at lower cost. Towns along the canal, such as Rochester, Syracuse and Buffalo, grew into cities, and New York City became the busiest port in the country. A lower cost of moving goods made everyone along the route richer, because more people could trade.

In business today. The Erie Canal is still open, though today it carries mostly pleasure boats and is enjoyed by bikers and hikers on the old towpath. Its lesson is everywhere. Railroads, highways, container ships and airplanes keep lowering the cost of moving goods, which is why you can buy bananas from Central America and shoes from Asia. A business owner always asks, “How will I get my product to customers, and what will it cost?” Sometimes the best way to grow a business is not to make a better product, but to find a cheaper, faster way to deliver it.

PICTURE STUDY



Lockport, Erie Canal, After William Henry Bartlett, about 1839 · Hand-colored engraving · Published in *American Scenery* by N. P. Willis

Image: [Wikimedia Commons](#), public domain

William Henry Bartlett was an English artist who traveled through America in the 1830s drawing its scenery for a popular book. Here he drew the Erie Canal at Lockport, New York, where builders blasted a deep channel through solid rock and built a flight of locks to lift boats up a steep cliff. A whole town grew up around them.

Look closely

- Find the lock gates. How do the workers open and close them?
- Find the boat with town names painted on it. Which two places does it name?
- Look at the rock walls on each side of the canal. How do you think the builders cut through them?
- Look at the buildings and bridge above. What businesses might grow up beside a busy canal?

Talk about it

1. Why did the canal need locks here?
2. Why would a town grow up around the locks at Lockport?

3. What could a farmer near Lake Erie sell after the canal opened that he could not sell before?

PROJECT

Wagon or Canal Boat? A Shipping-Cost Ledger

You will compare the cost of shipping flour by wagon and by canal boat, using simple numbers, and then build a working model lock with a milk carton or plastic containers if you wish.

You will need

- Ledger notebook and a calculator
- Optional for the model lock: two plastic food containers or a cut milk carton, modeling clay, a small toy boat or bottle cap, and water (outdoors or in a sink)

Steps

1. Use these classroom numbers (rounded to make the math easy): by wagon, shipping 1 ton of flour from Buffalo to New York City costs \$100 and takes 20 days; by canal boat it costs \$10 and takes 8 days.
2. A farmer has 6 tons of flour. In your ledger, rule a table with columns: Way of shipping, Cost per ton, Tons, Total cost, Days.
3. Fill in both rows. How much money does the farmer save by using the canal?
4. Suppose flour sells for \$120 a ton in New York City. Find the farmer's money left after shipping, per ton, by wagon and by canal. Which way makes selling in the city worth it?
5. Add tolls: the canal charges \$2 a ton in tolls. Add this to the canal cost and recalculate. Is the canal still cheaper?
6. Optional: build a model lock. Set two containers at different heights with a gate of cardboard or clay between them. Float a bottle cap in the low one, add water until it matches the high one, open the gate and slide the boat up.
7. Write two sentences about how the canal changed what farmers could sell and what city families paid.

Tips

- The numbers in this project are rounded classroom numbers to show the idea. Real costs varied with the goods, the season and the year.

- Do the model lock outdoors or over a sink, and wipe up spills.

Check your work

- ☐ I can explain how a canal lock lifts a boat.
- ☐ My ledger compares the cost of wagon and canal shipping correctly.
- ☐ I can explain how lower shipping costs opened new markets.

LEDGER NOTEBOOK

1. Draw a map of New York State showing the Hudson River, Albany, the Erie Canal, Rochester, Syracuse, Lockport, Buffalo and Lake Erie.
2. Draw a lock in three steps: boat enters, water rises, boat leaves at the higher level. Label the gates.
3. Draw a mule on the towpath pulling a canal boat full of barrels of flour.

From history. When the Erie Canal opened in 1825, the news was passed from Buffalo to New York City by cannons placed within hearing distance of each other along the route. Each cannon fired when it heard the one before it, and the boom traveled the whole length of the state in about an hour and a half.

COMMON MISTAKES

- Thinking the canal mainly helped New York City. It helped farmers, towns, factories and families all along the route and far to the west.
- Thinking a lock is a kind of bridge. A lock lifts or lowers boats with water.
- Forgetting that tolls and shipping costs become part of the price of goods.

Make it a game • Wagon or Canal Boat. Spread ten dried beans, your wheat, on a table. The wagon moves one bean per trip across the room, and each trip costs one pretend coin. The canal boat carries a whole tray for one coin. Race both, add up shipping costs, then guess the new price of flour in the city and for the farmer.

MARKETS

A **market** is any place where buyers and sellers meet to trade: a farm stand, a grocery store, a busy exchange hall, or a website. In a market, nobody is in charge of setting most prices. Instead, prices rise and fall as buyers and sellers make their choices. In this unit you will learn how **supply and demand** set prices, how prices act like **signals** that tell people what to make and what to save, and why **competition** usually serves customers better than a **monopoly**.

You will visit San Francisco in the gold rush, when a shovel could cost a small fortune; the Chicago Board of Trade, where the price of wheat traveled by telegraph to farmers far away; the Hudson River, where a young captain named Cornelius Vanderbilt helped break a steamboat monopoly; and the Erie Canal, which turned a long, costly journey into a cheap one and opened new markets for farmers and towns. In every lesson you will ask: **what is the price telling us?**

PREREQUISITES

- Knows opportunity cost and why people trade (Unit 1)
- Knows what money is and why prices rise when there is too much of it (Unit 2)
- Can read a simple bar graph and table

MASTERY CHECKLIST

- ☐ I can explain supply and demand and show how each one changes a price.
- ☐ I can explain how a price works like a signal to buyers and sellers.
- ☐ I can explain why competition usually brings lower prices and better service, and what can go wrong with a monopoly.
- ☐ I can explain how the Erie Canal lowered costs and opened new markets.
- ☐ I can read and make a simple price table and graph.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Econ Lowdown, from the Federal Reserve Bank of St. Louis**: Free. Short videos and activities on supply, demand, prices and competition, written for students. Good with Lessons 3.1 and 3.2.
- ***Ticket to Ride* (family board game, Days of Wonder)**: Ages 8 and up. Players build railroad routes across a map of North America. A fun way to talk about why routes like the Erie Canal and the railroads mattered so much to trade (Lesson 3.4).
- **Erie Canal Museum, Syracuse, New York**: The museum's website has pictures and short histories of the canal, its boats and its locks. Good for Lesson 3.4 and the portfolio.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

3.1 Supply and Demand: Gold Rush Prices

2 sessions of 45 minutes

3.2 Prices Are Signals: Wheat, the Telegraph and the Chicago Board of Trade

2 sessions of 45 minutes

3.3 Competition versus Monopoly: The Steamboat Fight on the Hudson

2 sessions of 45 minutes

3.4 The Erie Canal Opens New Markets

2 sessions of 45 minutes

UNIT 3 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Define supply and demand.

2. **5 pts**

Why were shovels and flour so expensive in San Francisco in 1849?

3. 5 pts

What happened to prices when many ships full of goods arrived in San Francisco? Why?

4. 5 pts

The price of wheat in Chicago rises sharply. What does this price signal tell farmers and what does it tell buyers?

5. 5 pts

How did the telegraph and standard grades of wheat help farmers?

6. 5 pts

What is a monopoly? What usually happens to prices and service under a monopoly?

7. 5 pts

What happened after the Supreme Court's decision in Gibbons v. Ogden in 1824?

8. 5 pts

Why do many towns have only one water company? What should the town do about it?

9. 5 pts

Shipping 1 ton of flour by wagon costs \$100. By canal it costs \$10 plus a \$2 toll. How much does a farmer save on 5 tons by using the canal?

10. 5 pts

What would happen to the price of bread in a city if a new canal made it much cheaper to ship flour there? Explain.

ANSWER KEY

1. Supply is how much of something sellers are willing to sell at different prices. Demand is how much buyers are willing to buy at different prices.
2. Demand was huge, with thousands of miners who needed them and had gold to spend, while supply was small, so buyers bid the prices up.
3. Prices fell, because supply grew; sometimes there was a surplus and merchants had to sell cheaply.
4. It tells farmers to plant and sell more wheat, and it tells buyers to use less or look for other grains.
5. The telegraph sent prices quickly so farmers knew what wheat was worth and were harder to cheat; standard grades let buyers trust the quality without inspecting every sack, so wheat could be sold faster and farther away.
6. A monopoly is when one seller controls the whole supply, so customers have no other choice. Prices tend to be higher and service and improvements tend to be poorer.
7. The New York steamboat monopoly was broken, new steamboat lines started, fares fell, and boats became faster and better as owners competed.
8. Building several sets of water pipes down every street would be wasteful, so one provider makes sense. The town should set fair rules, check its prices and make sure it serves everyone safely.
9. Wagon: $5 \times \$100 = \$500$. Canal: $5 \times (\$10 + \$2) = \$60$. Savings: $\$500 - \$60 = \$440$.
10. The price of bread would probably fall, because flour would cost less to bring to the city and more flour would arrive, increasing supply.

PORTFOLIO PIECE: A PRICE SURVEY OF THREE STORES

With a parent, choose five everyday items, such as a gallon of milk, a loaf of bread, a dozen eggs, a box of cereal and a pound of apples. Find each item’s price at three different stores, or in three store flyers. Record the prices in a table, find the lowest and highest price for each item, and figure out how much a family would save by buying each item where it is cheapest. Then write one page explaining what your survey shows about competition, why prices differ (location, quality, service, supply and demand), and which store you would recommend and why.

LOOK FOR	WHAT IT MEANS
Data	Five items at three stores, all prices recorded clearly with the date and source.
Math	Lowest prices, differences and total savings are calculated correctly.
Explanation	Uses the ideas of competition, supply and demand and price signals to explain the differences.
Judgment	The recommendation is sensible and considers more than price alone, such as quality and service.

GREAT BUSINESSES AND THEIR STAKEHOLDERS

What makes a business great? Not just being big or making a lot of money. In this unit you will learn to weigh a business by what it meant for **six stakeholders**: the **financiers** who lent or invested the money, the **risk-takers** who started it and put their savings and good name on the line, the **builders** who designed and made its products, the **workers** who earned wages there, the **customers** who bought from it, and the **community** around it. A business is great when it creates real value and serves all six over a long time.

You will test this idea on four businesses: the Hudson's Bay Company, which traded furs across Canada for more than three hundred years; Josiah Wedgwood's pottery and the canal he helped build; James L. Kraft and his brothers, who found a way to make cheese that would keep; and the Singer sewing machine company, which let families pay a little at a time. Each did real good, and each fell short somewhere. You will learn to give an honest **stakeholder scorecard**, with a rating from 1 to 5 and a reason for each of the six.

PREREQUISITES

- Knows specialization and trade (Unit 1)
- Knows supply, demand and competition (Unit 3)
- Can add a list of numbers and find a simple average

MASTERY CHECKLIST

- ☐ I can name the six stakeholders of a business and say what each one puts in and hopes to get out.
- ☐ I can tell the story of the Hudson's Bay Company, Wedgwood's canal, Kraft cheese and Singer sewing machines.
- ☐ I can make a stakeholder scorecard with a 1–5 rating and a reason for each of the six.
- ☐ I can explain why a business can be big without being great.
- ☐ I can explain what buying on installments means, and its benefit and its risk.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Hudson's Bay Company Archives (Archives of Manitoba)**: Free. The official home of the Hudson's Bay Company's old records, with pictures and short histories of its posts, ships and account books. A parent can help find pages about York Factory and the Made Beaver for Lesson 4.1.
- **The Wedgwood Collection at the Victoria and Albert Museum**: Free online pages about Josiah Wedgwood's pottery, his experiments and his factory at Etruria beside the Trent and Mersey Canal. Good for Lesson 4.2.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

4.1 The Hudson's Bay Company: The Six Stakeholders and the Oldest Business in North America

2 sessions of 45 minutes

4.2 Josiah Wedgwood and the Canal: Builders and the Community

2 sessions of 45 minutes

4.3 The Kraft Brothers and Cheese That Would Keep

2 sessions of 45 minutes

4.4 Singer Sewing Machines and Buying on Installments

2 sessions of 45 minutes

UNIT 4 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Name the six stakeholders of a business. For one of them, say what it puts in and what it hopes to get out.

2. **5 pts**

What is the difference between a big business and a great business?

3. **5 pts**

What was the Made Beaver, and why did the Hudson's Bay Company need it?

4. **5 pts**

At a trading post, a kettle costs 5 Made Beaver and a blanket costs 7. A trapper brings 20 pelts and buys one kettle and two blankets. How many pelts does he have left?

5. **5 pts**

How did the Trent and Mersey Canal help Wedgwood and the community?

6. **5 pts**

What problem did James L. Kraft solve, and how?

7. **5 pts**

A grocer buys 10 pounds of cheese for \$2 a pound and sells it for \$3 a pound. If 2 pounds spoil, what is his profit?

8. **5 pts**

A sewing machine costs \$50 in cash, or \$10 down and \$4 a month for 12 months. What is the total installment price, and how much more is it than cash?

9. **5 pts**

Give one benefit and one risk of buying on installments.

10. **5 pts**

What might happen to a business that pays its owners well but treats its workers and customers badly? Explain.

ANSWER KEY

1. Financiers, risk-takers, builders, workers, customers, community. Example: workers put in time and skill and hope for fair pay, safety and respect.
2. A big business sells or earns a lot. A great business creates real value and serves all six stakeholders well over a long time; a big business can still cheat customers, harm workers or hurt its town.
3. The value of one prime beaver pelt, used to price every trade good. There were no coins at the trading posts, so the Company needed a common measure of value.
4. $5 + 7 + 7 = 19$. $20 - 19 = 1$ pelt left.
5. Barges carried pottery smoothly so less broke, and clay, coal and flint cost less to bring in. Miners, farmers, merchants and other potters along the route also shipped goods more cheaply, and the district grew.
6. Cut cheese spoiled quickly, which wasted money for grocers and raised prices. He heated and stirred cheese and sealed it in tins (process cheese), so it stayed fresh for months; he patented the process in 1916.
7. Cost: $10 \times \$2 = \$20$. Sold: $8 \times \$3 = \$24$. Profit: $\$24 - \$20 = \$4$.
8. $\$10 + (12 \times \$4) = \$10 + \$48 = \$58$. $\$58 - \$50 = \$8$ more.
9. Benefit: you can use something now, especially something that helps you earn, while you pay. Risk: it usually costs more in total, you are in debt, and if you miss payments you can lose the item and the money already paid.
10. Good workers would leave, customers would go to competitors, its good name would be lost, and in the end the owners would lose too. It might be big for a while but would not stay great.

PORTFOLIO PIECE: A STAKEHOLDER REPORT

Choose one business: your family's business, a local store or farm, or a historical business you have read about. Gather facts by interviewing the owner (with a parent present), visiting, or reading. Write a two-page report that tells the business's story, the problem it solves for customers, and how it serves each of the six stakeholders. Include a stakeholder scorecard with a 1–5 rating and a reason for each, the average score, and your advice: one thing the business does very well and one thing it could do better.

LOOK FOR	WHAT IT MEANS
Research	Real facts from an interview, visit or reliable sources, with the sources named.
Story	The business's beginning, the problem it solves and how it grew are clearly told.
Scorecard	All six stakeholders are rated with honest, specific reasons; the average is correct.
Fairness	The report shows both strengths and weaknesses and avoids unfair guesses.
Advice	Kind, sensible and specific advice that would help the business serve its stakeholders better.

4.1 THE HUDSON'S BAY COMPANY: THE SIX STAKEHOLDERS AND THE OLDEST BUSINESS IN NORTH AMERICA

OBJECTIVES

- Name the six stakeholders of a business and explain what each puts in and hopes to get out.
- Tell the story of the Hudson's Bay Company, its trading posts and the Made Beaver.
- Make an honest stakeholder scorecard for the Hudson's Bay Company.

Warm-up. Think of a store or restaurant your family uses. List every kind of person who would be affected if it closed tomorrow: Who would lose money? Who would lose a job? Who would miss it? Keep your list for the project.

WATCH

Beaver Pelt Trade

Curriculum Services Canada • 3:47

<https://www.youtube.com/watch?v=JGoVlgcT6tM>

WHEN TO WATCH

After the story, before the stakeholder scorecard.

KEY TERMS

stakeholder

Anyone who has something to gain or lose from what a business does.

risk-taker

A founder or owner who puts his savings, time and good name on the line to start or run a business.

financier

A person or bank that lends or invests money in a business, such as a banker, partner or shareholder.

builder

An inventor, engineer, manager or craftsman who designs and makes the product or the system that makes it.

charter

An official paper from a king or government that creates a company and gives it rights.

Made Beaver

The Hudson's Bay Company's unit of value: the worth of one prime beaver pelt, used to price every trade good.

CORE IDEAS

The story. In the 1660s two French fur traders, Pierre-Esprit Radisson and Médard des Groseilliers, had a daring idea. The best beaver furs came from the cold forests far to the north of the St. Lawrence River, and they believed ships could reach them by sailing right into Hudson Bay. French officials would not listen, so the two men went to England. A group of English investors sent a small ship, the *Nonsuch*, which returned in 1669 loaded with furs. On May 2, 1670, King Charles II signed a **charter** creating “the Governor and Company of Adventurers of England trading into Hudson's Bay.” The **Hudson's Bay Company** built trading posts, like York Factory, where Cree and other First Nations trappers brought beaver pelts. In Europe, the soft fur under a beaver's coat was pressed into felt for fine hats.

How they figured it out. There were no coins at the trading posts, so the Company invented its own unit of value, the **Made Beaver**: the worth of one prime beaver pelt. Every trade good had a price in Made Beaver. A list kept at York Factory in 1715 set prices for kettles, knives, blankets, beads and cloth, and other furs were counted as fractions or multiples of a beaver. Later the Company made wool “point blankets,” marked with short black lines that showed their size, so traders could see the value at a glance. The trappers were sharp bargainers. If prices were poor, they took their furs to rival French traders. The Company had to keep its goods good and its prices fair to keep their trade.

The big idea. A business is a web of people, called **stakeholders**. **Financiers** lend or invest money and hope to be repaid with interest or profit. **Risk-takers** put their savings and good name on the line. **Builders** design and make the product or the system. **Workers** give their time and skill for wages and hope for fair pay, safety and respect. **Customers** pay money and hope for good value and honesty. And the **community** hopes for jobs, good neighbors and no harm. A business is **great** when it creates real value and serves all six over a long time. It can be very big and still not be great.

Stakeholder scorecard: the Hudson's Bay Company, about 1750. *Financiers: 4.*

London shareholders were often paid well, though there were lean years with no profit. *Risk-takers: 4.* Radisson, Groseilliers and the first investors risked ships and money in a frozen, unknown land, and it paid off. *Builders: 4.* The posts, the Made Beaver system and the boats that carried furs worked well for generations. *Workers: 3.* Many workers came from the Orkney Islands of Scotland on long contracts; the pay was steady, but the work was cold, lonely and hard. *Customers: 4.* Hat makers in Europe got fine fur, and the trappers, who were both suppliers and customers, got useful metal kettles, tools, cloth and blankets. *Community: 3.* Trade brought goods and friendships between peoples, but it also brought sickness, and in some places beavers were trapped almost to disappearing. Overall: a long-lasting and useful business with real costs.

In business today. The Hudson's Bay Company lasted for more than 350 years. It later became a chain of department stores across Canada, known as "The Bay." In 2025, after years of losing customers to newer kinds of stores, the old company closed its stores for good. Even a great business must keep serving its customers in new ways, or it will fade. Wise owners today think about all six stakeholders, because a business that ignores any one of them will not stay great for long.

PICTURE STUDY

[illegible]

The Hudson's Bay Company's Standard of Trade, York Factory, 1715, Written by order of Governor James Knight, 1715 · Ink on paper (a handwritten account book page) · Hudson's Bay Company Archives, Archives of Manitoba, Winnipeg
Image: Wikimedia Commons, public domain

This is a real page from the records of York Factory, the Hudson's Bay Company's great trading post on Hudson Bay. Governor James Knight had his clerk list all the furs traded in one year and write down the "Standard of Trade": how many Made Beaver each trade good would cost. It is both a price list and a ledger, and it shows how carefully the Company kept its books more than three hundred years ago.

Look closely

- Read the headings at the top of each page with a parent. What place and year do they name?
- Find the columns of numbers. On the left page, what is being counted? On the right page, what is being priced?
- Find the word “Beaver” at the top of a column. Why would beaver be used as the measure for everything?
- Look at the bottom of the left page for a total. Why would the governor want a total for the whole year?

Talk about it

1. Why did the Company need a price list in Made Beaver instead of dollars or pounds?
2. Who would use this page: the governor, the London shareholders, the trappers, or all of them?
3. What would happen to trust if a clerk wrote down false numbers?

PROJECT

The Trading Post and My First Stakeholder Scorecard

You will run a Hudson's Bay trading post with prices in Made Beaver, record each trade, and then write your first stakeholder scorecard for a business you know.

You will need

- 20 brown paper squares or brown felt scraps as “beaver pelts”
- Trade goods: a cup (kettle), a small blanket or towel, a spoon, a ribbon, a bag of buttons (beads)
- Index cards, ledger notebook and pencil
- A partner (and a parent to help with the scorecard)

Steps

1. Make a Standard of Trade card: kettle 5 MB, blanket 7 MB, spoon 1 MB, ribbon 1 MB, 10 beads 1 MB. (These are classroom prices.)
2. One player is the trader at the post; the other is a trapper with 20 pelts. Trade for whatever the trapper wants most. Record each trade in your ledger: Good, Price in MB, Pelts paid, Pelts left.
3. Round 2: a rival French trader offers blankets for 5 MB. The trapper may take his pelts to the rival. What must the Hudson's Bay trader do to keep the trade? Record what happens.
4. Write each of the six stakeholders on its own index card. On the back, write who that stakeholder was at the Hudson's Bay Company.
5. Now choose a business you know: a family business, a store, a farm, a restaurant or your church's bake sale.
6. In your ledger, rule a scorecard with columns: Stakeholder, What they put in, What they hope to get, Rating (1–5), Reason. Fill in all six rows, asking a parent or the owner (with a parent) for facts you do not know.
7. Add the six ratings and divide by 6 to find the average. Write two sentences: Which stakeholder does this business serve best? Which could it serve better?

Tips

- Give a reason for every number. If you do not know something, write “not sure” instead of guessing.
- One person can be several stakeholders: a shop owner is usually a risk-taker, a builder and a worker all at once.

Check your work

- ☐ I can name the six stakeholders and give an example of each.
- ☐ My trading-post ledger shows every trade and the pelts left.
- ☐ My scorecard has a rating and a reason for each of the six.

LEDGER NOTEBOOK

1. Draw a wheel with a business in the center and six spokes, one for each stakeholder. On each spoke write what that stakeholder puts in and hopes to get out.
2. Draw a Hudson’s Bay point blanket and explain how its black lines showed its size and value.
3. Copy the Hudson’s Bay Company scorecard as a bar graph with six bars.

From history. The Hudson’s Bay Company’s charter gave it trading rights over all the lands whose rivers drained into Hudson Bay, an area called Rupert’s Land after Prince Rupert, the Company’s first governor. It covered more than a third of what is now Canada. In 1870 the Company handed this land over to the new country of Canada.

COMMON MISTAKES

- Thinking only the owners matter. A business that ignores its workers, customers or town will not stay great.
- Thinking a high score in one place makes up for a very low score in another. Cheating customers is never balanced out by high profits.
- Giving ratings without reasons. A scorecard is only as good as the facts behind it.

Make it a game · Six Seats at the Post. Set out six cups as the six stakeholders of a trading post. Pick up each cup, name who it is, and say what that person puts in and hopes to get out. Set a timer for two minutes and count how many you complete. Play again to beat your score, adding a Made Beaver drawn on a card as the post's money.

4.2 JOSIAH WEDGWOOD AND THE CANAL: BUILDERS AND THE COMMUNITY

OBJECTIVES

- Tell how Josiah Wedgwood and the engineer James Brindley helped build the Trent and Mersey Canal.
- Explain how the canal helped Wedgwood's business and the whole community.
- Make a stakeholder scorecard for Wedgwood's pottery and the canal.

Warm-up. Wrap a cracker in a paper towel and put it in a lunch bag. Shake the bag hard for ten seconds, as if it were bumping along a rough road. Open it. What happened? Now imagine you were shipping plates and teacups that way.

WATCH

Trent and Mersey Canal

Institution of Civil Engineers • 5:12

<https://www.youtube.com/watch?v=YjsFGakHhV0>

WHEN TO WATCH

After the story, before "How they figured it out."

KEY TERMS

pottery

Plates, cups, bowls and other things made from clay and hardened by baking in a kiln.

investor

A person who puts money into a project, hoping to share in its profits later.

brand

A name or mark that customers trust to stand for a certain quality.

engineer

A person who designs and builds machines, roads, bridges, canals and other useful works.

share

One part of the ownership of a company or project.

CORE IDEAS

The story. Josiah Wedgwood was born in 1730 in Burslem, a village of small potteries in Staffordshire, England. A childhood illness left his leg weak, so instead of working at the potter's wheel all day he became a careful experimenter, testing thousands of clays and glazes. His smooth cream-colored pottery pleased Queen Charlotte, who ordered a tea set, and he named it "Queen's Ware." Soon people across Europe wanted Wedgwood plates. But there was a big problem. The roads around the potteries were rough, muddy tracks. Clay had to be brought in from far away, and finished pottery was carried out by packhorse to the rivers, and much of it broke on the way.

How they figured it out. Wedgwood had seen how the Duke of Bridgewater's new canal near Manchester carried coal cheaply by barge. So he and other businessmen pushed for a much longer canal, the Grand Trunk, now called the Trent and Mersey Canal, to link the potteries to two great rivers and the ports beyond. They hired the brilliant engineer **James Brindley**, a self-taught millwright who could barely write but could plan a canal in his head. The project was paid for by selling **shares** to investors; Wedgwood himself bought shares and worked hard to win support. In 1766 Wedgwood cut the first piece of turf to begin the work. Brindley died in 1772, before it was done, but his team finished it in 1777, including a tunnel more than a mile and a half long under Harecastle Hill. Wedgwood built his new factory, called Etruria, right on its banks.

The big idea. Some of the most important work in business is done by **builders**: inventors, engineers and craftsmen who design better products and better systems. A good system can help a whole **community**. The canal carried Wedgwood's pottery smoothly, so far less broke, and it lowered the cost of bringing in clay, coal and flint. But it helped many others too: coal miners, farmers, merchants and other potters all along its route. The canal's investors earned money from the tolls, and the whole district grew richer. When a business helps build something that serves many people, everyone can gain.

Stakeholder scorecard: Wedgwood's pottery and the canal, about 1790. *Financiers:* 4. Canal shareholders waited years, but tolls paid them back well. *Risk-takers:* 5. Wedgwood risked his money and reputation on new wares, a new factory and a canal, and succeeded. *Builders:* 5. Wedgwood's experiments and Brindley's

engineering were admired across Europe. *Workers*: 3. Steady wages and some houses built for workers, but long hours, strict rules and fines, and the lead in glazes of that time made some potters ill. *Customers*: 5. Handsome, matching, well-made pottery at prices many families could afford. *Community*: 5. The canal and new roads helped the whole district, and the potteries gave thousands of jobs. A great business, with its weakest score for its workers.

In business today. The Trent and Mersey Canal is still open, now used mostly by narrowboats on holiday, and Wedgwood pottery is still made in Staffordshire. Businesses today still team up to build things none could build alone: shared roads, rail lines, ports and power lines. And Wedgwood's good name, or **brand**, shows how trust is built slowly by serving customers well year after year. "Seest thou a man diligent in his business? he shall stand before kings" (Proverbs 22:29): Wedgwood's diligence led him to serve a queen.

PICTURE STUDY



A Plan of the Grand Canal from the Trent to the Mersey, Engraved for *The Gentleman's Magazine*, 1771 ·
 Engraving (a printed map) · Wedgwood Museum, Barlaston, Staffordshire
 Image: [Wikimedia Commons](#), public domain

This map was printed in a popular English magazine in 1771, while the canal was still being dug. Readers all over Britain were curious about this great project. The map shows the route planned by James Brindley across Staffordshire and Cheshire, linking the River Trent and the River Mersey. A copy is kept today in the Wedgwood Museum, because the canal was so important to Wedgwood's business.

Look closely

- Trace the canal line from one end to the other with your finger. Is it straight or winding? Why?
- Find the names of towns along the route. Which ones might have potteries?
- Look for hills on the map. Where might the builders have needed a tunnel or locks?
- Find the rivers at each end. Where could boats go after they left the canal?

Talk about it

1. Who would want to read this map in 1771: investors, merchants, farmers, or all of them? Why?
2. How would this canal change the price of a Wedgwood plate in London?

3. Which of the six stakeholders do you think gained the most from the canal?

PROJECT

Packhorse or Canal Barge? A Breakage and Cost Test

You will test how much “pottery” survives a rough ride compared with a smooth one, then use the results to figure out how much money the canal saved Wedgwood. You will finish with a stakeholder scorecard.

You will need

- 20 saltine crackers or thin cookies (the “plates”)
- Two small boxes or plastic containers with lids
- A tray, a towel and a gentle hand
- Ledger notebook and calculator

Steps

1. Put 10 crackers loosely in each box.
2. Packhorse ride: shake one box hard, up and down and side to side, for 20 seconds, like a horse on a rough road.
3. Canal barge ride: set the other box on a tray on a towel and slide it slowly and smoothly across a table and back three times.
4. Open both boxes and count the crackers that are still whole. Record your results in a ledger table: Way of travel, Plates sent, Plates whole, Plates broken.
5. Pretend each plate cost Wedgwood 6 pence to make and sells for 12 pence. Find how much money was lost to breakage on each ride.
6. Now pretend Wedgwood sends 1,000 plates. Use your results to estimate how many would break each way, and how much the canal would save him.
7. Fill in a stakeholder scorecard for Wedgwood and the canal with your own ratings and reasons. Did you agree with the lesson’s scorecard? Write one sentence about where you differ.

Tips

- To estimate for 1,000 plates: if 4 out of 10 broke, then about 400 out of 1,000 would break.
- Eat the broken crackers only after you have counted them.

Check your work

- ☐ I can explain how the canal helped Wedgwood's business.
- ☐ My ledger shows breakage and cost for both ways of travel.
- ☐ I can explain how the canal helped the whole community, not just Wedgwood.

LEDGER NOTEBOOK

1. Draw a narrow canal barge pulled by a horse on the towpath, loaded with crates of pottery packed in straw. Label each part.
2. Draw a Wedgwood Queen's Ware teapot or plate and label what made customers trust the Wedgwood brand.
3. Make a list of everyone who used the canal besides Wedgwood: miners, farmers, merchants, travelers. Next to each, write what they carried.

From history. In the Harecastle Tunnel there was no towpath, so the horses were led over the hill while men called "leggers" lay on their backs on the barge and walked it through the dark tunnel by pushing with their feet against the walls.

COMMON MISTAKES

- Thinking Wedgwood built the canal by himself. It was a shared project of many investors, with Brindley as its engineer.
- Thinking only the pottery gained. The canal lowered costs for many businesses and families along its route.
- Forgetting the workers' side of the scorecard. A business can serve customers wonderfully and still have room to treat workers better.

Make it a game • Bumpy Road Test. Stack six paper cups on a tray as Wedgwood's pottery. Your parent shakes and bumps the tray for ten seconds like a packhorse trail, and you count the cups that fall. Then slide the tray slowly like a canal barge and count again. Say what James Brindley's canal saved for the whole community.

Scripture. "Seest thou a man diligent in his business? he shall stand before kings; he shall not stand before mean men." (Proverbs 22:29, KJV)

Wedgwood's careful, patient work made pottery fit for a queen and helped build a canal that served a whole district. Diligent work often opens doors we could never open by wishing.

4.3 THE KRAFT BROTHERS AND CHEESE THAT WOULD KEEP

OBJECTIVES

- Tell how James L. Kraft started a cheese business with a horse and wagon and grew it with his brothers.
- Explain the problem of spoiling cheese and how Kraft solved it with a new process and a patent.
- Make a stakeholder scorecard for the Kraft cheese company, including farmers and grocers.

Warm-up. Look in your refrigerator. Find three foods that would spoil if left out on the counter for a few days and three foods that would keep. What makes the difference?

WATCH

Kraft - Bigger Than You Know

Company Man · 13:23

<https://www.youtube.com/watch?v=Hp0uhC15RtI>

WHEN TO WATCH

After the story; watch the first five minutes, which tell how James L. Kraft and his brothers began.

Note: Stop at about the five-minute mark. The later part covers modern company mergers and other businesses Kraft once owned, including a tobacco company, which is not part of this lesson.

KEY TERMS

wholesale

Selling goods in large amounts to stores, which then sell them to customers.

retail

Selling goods to the people who will use them, usually in a store.

spoilage

Goods that go bad before they can be sold or used.

process

A series of steps that changes something, such as heating and stirring cheese so it keeps longer.

supplier

A person or business that sells raw materials or goods to another business, like a dairy farmer selling milk.

CORE IDEAS

The story. James Lewis Kraft grew up on a farm in Ontario, Canada. In 1903, as a young man with very little money, he arrived in Chicago and started a business with a rented horse and wagon. Each morning he bought big wheels of cheese at the city's wholesale market and drove them around to grocery stores, selling them in smaller amounts. Grocers liked that he saved them a trip to the market. The first year was very hard and he lost money, but he kept at it. Soon his brothers Charles, Fred, Norman and John joined him, and in 1909 they formed J. L. Kraft & Bros. Company.

How they figured it out. Kraft saw a costly problem. Big wheels of cheese spoiled quickly once they were cut, especially in summer, and grocers had to throw away the dried-out or moldy pieces. That **spoilage** raised the price of cheese for everyone. Kraft began experimenting in a copper kettle, heating and stirring cheddar cheese until it was smooth, then sealing it in tins. After many tries, the cheese stayed fresh for months. He received a patent for his **process** in 1916. During World War I, the U.S. Army bought large amounts of Kraft's tinned cheese, because it could travel far without spoiling. Later the company made cheese in neat loaves and boxes, advertised it in color in magazines and on the radio, and became one of the best-known food companies in America. James L. Kraft was also a devoted Christian who taught Sunday school and gave generously to his church.

The big idea. A business can create great value by **solving a problem** that costs everyone money. Kraft did not invent cheese. He made it keep longer, which cut waste for grocers, gave families cheese at a steady price, and opened new markets for dairy farmers, who could sell more milk. A business also depends on its **suppliers**: Kraft needed thousands of farmers and cheese makers to supply milk and cheese, and they needed a dependable buyer like Kraft.

Stakeholder scorecard: Kraft, about 1930. *Financiers: 4.* The brothers started with their own small savings and later sold shares; investors did well as the company grew. *Risk-takers: 5.* James Kraft risked his little money, lost at first, and kept going until he succeeded. *Builders: 5.* The new process and the factories that used it were a real invention. *Workers: 4.* The company gave many steady jobs in its plants, though factory work was repetitive. *Customers: 4.* Cheese that kept, at a fair price, with clear brand names; some cooks felt it did not taste as rich as aged natural cheese. *Community: 4.* Dairy farmers in Wisconsin and elsewhere gained a steady buyer for their milk. A great business that solved a real problem.

In business today. Many of today's foods, from canned soup to boxed crackers, were made possible by the same goal: food that keeps without spoiling, so less is wasted and more people can buy it. Store owners still fight spoilage by ordering carefully, keeping coolers cold and selling older items first. Kraft cheese and Kraft Macaroni and Cheese are still sold in stores today. And Kraft's first idea, saving grocers a trip by bringing goods to them, is the same idea behind every delivery truck you see on the road.

PICTURE STUDY



"This Week Only": A Coupon Advertisement for Elkhorn Kraft Cheese, J. L. Kraft & Bros. Company, 1920 · Printed magazine advertisement · Published in American magazines

Image: [Wikimedia Commons](#), public domain

In about 1920 the Kraft company sold cheese in sealed tins under the Elkhorn name. To get families to try it, this advertisement included a coupon: cut it out, take it to your grocer, and get 10 cents off your first tin. The text tells shoppers that cheese in tins is clean, untouched by hands, and keeps "in any climate." Look closely: an advertisement is a business speaking to its customers.

Look closely

- Find the coupon. How much is it worth, and how long does the offer last?
- Find the tins. What words are printed on them?
- Read a few lines of the small print with a parent. What problems with old-fashioned cheese does it describe?
- Find the company's name and city at the bottom. Why put them there?

Talk about it

1. Why would Kraft give away 10 cents to get customers to try its cheese?
2. Which promises in the advertisement could a customer check for himself? Which could he not?

3. How does this advertisement show the problem of spoilage that Kraft was solving?

PROJECT

The Spoilage Test and the Grocer's Ledger

You will test how quickly cut cheese dries out when it is left open compared with when it is wrapped, then use a grocer's ledger to see how much money spoilage costs a store.

You will need

- A block of cheese, a knife (with a parent's help) and a cutting board
- Plastic wrap and a small plate
- A kitchen scale if you have one
- Ledger notebook and calculator

Steps

1. With a parent, cut two equal cubes of cheese. If you have a scale, weigh each one and record the weight.
2. Wrap one cube tightly in plastic wrap. Leave the other unwrapped on a plate in the refrigerator.
3. Each day for three days, look at both cubes (and weigh them if you can). Record what you see in a table: Day, Wrapped cube, Unwrapped cube.
4. After three days, compare. Which one would a customer still want to buy?
5. Now be a grocer. Use these classroom numbers: you buy 20 pounds of cheese for \$2 a pound and sell it for \$3 a pound. In Round 1, 5 pounds spoil. In Round 2, with better wrapping, only 1 pound spoils.
6. In your ledger, find for each round: money spent, pounds sold, money taken in, and profit.
7. Write three sentences about how cutting spoilage helps the grocer, the customer and the dairy farmer.

Tips

- Round 1 profit: 15 pounds sold $\times$ \$3 = \$45; \$45 - \$40 = \$5. Work out Round 2 the same way.
- Never eat cheese that has turned moldy. A parent decides what is safe to eat.

Check your work

- ☐ I can explain the problem Kraft solved.
- ☐ My ledger shows how much spoilage cost the grocer in both rounds.
- ☐ I can name Kraft's suppliers and explain how they gained.

LEDGER NOTEBOOK

1. Draw the path of cheese from a dairy cow to a cheese factory, to Kraft's plant, to a grocery store, to a family's table. Label each stakeholder.
2. Draw James Kraft's horse and wagon loaded with wheels of cheese. Write the name of each grocer he might visit on a little sign.
3. Make a bar graph of the grocer's profit in Round 1 and Round 2.

From history. Kraft was one of the first food companies to sponsor a radio show. Beginning in the 1930s, the "Kraft Music Hall" brought music and comedy into millions of homes each week, with short messages about Kraft cheese between the songs.

COMMON MISTAKES

- Thinking Kraft invented cheese. He invented a better way to keep it fresh and get it to customers.
- Forgetting suppliers. A business depends on the people who sell it what it needs.
- Thinking spoilage costs only the store. Waste raises prices for customers too.

Make it a game • Cheese on the Wagon. Play charades about James Kraft: act pulling a heavy horse wagon of cheese, sniffing it as it spoils in the heat, then shouting for a brilliant new process. Your parent guesses each scene. Then answer rapid-fire whether each seller is wholesale or retail. Get five right in a row to earn a patent stamp, drawn on paper.

4.4 SINGER SEWING MACHINES AND BUYING ON INSTALLMENTS

OBJECTIVES

- Tell how the Singer company made and sold sewing machines around the world.
- Explain buying on installments: its benefit to families and its risk.
- Calculate the total cost of a purchase paid in installments and make a stakeholder scorecard for Singer.

Warm-up. Find a shirt with buttons. Count the stitches along one seam for one inch. Now guess how many stitches are in the whole shirt. How long would it take to sew it by hand?

WATCH

The Forgotten History of Sewing Machines

The History Guy: History Deserves to Be Remembered • 13:16

<https://www.youtube.com/watch?v=3144SpUGbng>

WHEN TO WATCH

After the story; the Singer and installment-plan part is the heart of it.

Note: A longer history of the sewing machine from a well-regarded history channel; watch in two sittings if needed.

KEY TERMS

sewing machine

A machine that sews stitches much faster than a person can by hand.

down payment

The first payment made when you buy something on installments.

installment plan

A way of buying where you pay a small amount at first and the rest in regular payments over time.

debt

Money you owe to someone else.

interest

Extra money paid for the use of borrowed money.

CORE IDEAS

The story. In the 1840s, almost every shirt, dress and coat was still sewn by hand, stitch by stitch, often by mothers late into the night. Several inventors were working on sewing machines, including Elias Howe, who patented an important one in 1846. In 1850 a mechanic named Isaac Merritt Singer looked at a machine that kept breaking down and, in eleven days, designed a better one. It had a needle that went straight up and down, a foot that held the cloth flat, and a foot pedal, called a treadle, that left both hands free. Singer patented his machine in 1851 and formed a company with a lawyer named Edward Clark. Singer was a gifted mechanic, though not an admirable man in his family life. Clark was the steady businessman.

How they figured it out. Singer machines worked well, but they were expensive, far more than most families could pay at one time. Clark had an idea. In 1856 the company began letting customers take a machine home after paying a small part of the price, called a **down payment**, and then pay the rest in small monthly **installments**. A seamstress could earn money with the machine while she paid for it. Sales jumped. Singer also trained salesmen to show customers how to use the machines, opened shops in many countries, and built factories in America and Scotland. By 1908 the company was so successful that it built the Singer Building in New York, for a short time the tallest building in the world.

The big idea. An **installment plan** lets a buyer use something now and pay for it over time. That can be a real help when the thing bought helps you earn money, like a sewing machine for a seamstress or a tractor for a farmer. But it has a cost and a risk. The total of all the payments is usually **more** than the cash price, because the seller charges for waiting. And if the buyer cannot keep up with the payments, the seller can take the machine back, and the money already paid may be lost. Buying on installments means being in **debt**, and the Bible warns that “the borrower is servant to the lender” (Proverbs 22:7). Wise buyers count the whole cost first.

Stakeholder scorecard: Singer, about 1900. *Financiers:* 5. Investors who bought shares were rewarded for decades. *Risk-takers:* 4. Singer and Clark risked lawsuits, money and reputation and built a world-famous company. *Builders:* 5. A sturdy,

simple machine that lasted for generations, and factories that made them in huge numbers. *Workers:* 3. Many factory jobs, but long hours, and workers in some factories sometimes struggled for fair pay. *Customers:* 4. Families saved countless hours, and many women earned money by sewing; but some buyers took on more debt than they could handle. *Community:* 4. Clothing became cheaper for everyone, and the factory towns grew. A great business, with a warning about debt.

In business today. Today people buy many things in installments: cars, furniture, phones and houses. Stores offer “buy now, pay later” plans, and credit cards let people pay over time with interest. Used wisely, for things that last or that help you earn, these plans can help. Used carelessly, for things that are quickly used up, they can trap a family in debt. A wise person adds up every payment first and compares it with the cash price, and often chooses to save up and pay cash instead.

PICTURE STUDY



The Singer Tower, New York City, Detroit Publishing Company, about 1908 · Photograph · Library of Congress, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

The Singer Building was designed by the architect Ernest Flagg and finished in 1908. Its slender tower rose 47 stories above lower Manhattan, and for about a year it was the tallest building in the world. The company built it as its headquarters, and also as a giant advertisement: everyone who saw it would think of Singer sewing machines.

Look closely

- Find the very top of the tower. What shape is it?
- Compare the tower with the buildings around it. How many times taller does it look?
- Look at the streets below. What kinds of traffic can you see?
- Look for windows. How many people might work in a building like this?

Talk about it

1. Why would a sewing-machine company want to build the tallest building in the world?
2. Where did the money to build this tower come from? Think about the customers and their installment payments.

3. Is a tall headquarters a sign of a great business, a big business, or both? Why?

PROJECT

Cash or Installments? A Payment Ledger

You will compare paying cash for a sewing machine with paying in installments, using classroom numbers, and keep a ledger of every payment. Then you will decide when installments make sense.

You will need

- Play money (\$100 or more)
- Ledger notebook and calculator
- A calendar

Steps

1. Use these classroom numbers: a sewing machine costs \$60 in cash. On the installment plan, you pay \$10 down and then \$5 a month for 12 months.
2. In your ledger, rule a table with columns: Month, Payment, Total paid so far, Amount still owed.
3. Fill in the table, starting with the \$10 down payment in Month 0 and then 12 monthly payments of \$5.
4. Add up the total. How much more does the installment plan cost than paying cash?
5. Now imagine you are a seamstress who earns \$8 a month sewing with the machine. In a second column, add up what you earn each month. In which month have you earned enough to cover all the payments?
6. Then imagine you miss the payment in Month 6 and the company takes back the machine. How much money did you pay, and what do you have to show for it?
7. Write a short paragraph: When might an installment plan be a wise choice? When would it be better to save up and pay cash?

Tips

- Count carefully: $\$10 + (12 \times \$5) = ?$
- Ask a parent whether your family has ever bought something on installments or paid cash after saving, and why.

Check your work

- ☐ I can explain what an installment plan is.
- ☐ My ledger shows every payment and the total paid.
- ☐ I can name one benefit and one risk of buying on installments.

LEDGER NOTEBOOK

1. Draw a treadle sewing machine. Label the needle, the presser foot, the wheel and the treadle.
2. Make a stakeholder wheel for Singer with a rating and a reason on each spoke.
3. Draw two paths from a store: one for “Pay cash after saving” and one for “Pay on installments.” Write the total cost and one risk at the end of each path.

From history. For years the sewing-machine makers sued one another over patents, a fight called the “Sewing Machine War.” In 1856 Singer and three other companies agreed to share their patents and pay each other fees, so they could get back to making machines. You will learn more about patents in Lesson 5.2.

COMMON MISTAKES

- Thinking installments cost the same as cash. The total of the payments is usually more.
- Thinking installments are always bad. They can help when the purchase helps you earn, as long as you can surely make the payments.
- Thinking Singer invented the sewing machine alone. Many inventors worked on it; Singer made a better, practical machine and sold it well.

Make it a game • Cash or Weekly Pay. A pretend sewing machine costs thirty dollars cash, or five dollars a week for seven weeks. Your parent plays the Singer salesman. Work out the total on paper, name what extra you pay, and decide. Then say aloud one benefit and one risk of an installment plan, and swap sides so your parent argues the other choice.

GREAT BUSINESSES AND THEIR STAKEHOLDERS

What makes a business great? Not just being big or making a lot of money. In this unit you will learn to weigh a business by what it meant for **six stakeholders**: the **financiers** who lent or invested the money, the **risk-takers** who started it and put their savings and good name on the line, the **builders** who designed and made its products, the **workers** who earned wages there, the **customers** who bought from it, and the **community** around it. A business is great when it creates real value and serves all six over a long time.

You will test this idea on four businesses: the Hudson's Bay Company, which traded furs across Canada for more than three hundred years; Josiah Wedgwood's pottery and the canal he helped build; James L. Kraft and his brothers, who found a way to make cheese that would keep; and the Singer sewing machine company, which let families pay a little at a time. Each did real good, and each fell short somewhere. You will learn to give an honest **stakeholder scorecard**, with a rating from 1 to 5 and a reason for each of the six.

PREREQUISITES

- Knows specialization and trade (Unit 1)
- Knows supply, demand and competition (Unit 3)
- Can add a list of numbers and find a simple average

MASTERY CHECKLIST

- ☐ I can name the six stakeholders of a business and say what each one puts in and hopes to get out.
- ☐ I can tell the story of the Hudson's Bay Company, Wedgwood's canal, Kraft cheese and Singer sewing machines.
- ☐ I can make a stakeholder scorecard with a 1–5 rating and a reason for each of the six.
- ☐ I can explain why a business can be big without being great.
- ☐ I can explain what buying on installments means, and its benefit and its risk.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Hudson's Bay Company Archives (Archives of Manitoba)**: Free. The official home of the Hudson's Bay Company's old records, with pictures and short histories of its posts, ships and account books. A parent can help find pages about York Factory and the Made Beaver for Lesson 4.1.
- **The Wedgwood Collection at the Victoria and Albert Museum**: Free online pages about Josiah Wedgwood's pottery, his experiments and his factory at Etruria beside the Trent and Mersey Canal. Good for Lesson 4.2.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

4.1 The Hudson's Bay Company: The Six Stakeholders and the Oldest Business in North America

2 sessions of 45 minutes

4.2 Josiah Wedgwood and the Canal: Builders and the Community

2 sessions of 45 minutes

4.3 The Kraft Brothers and Cheese That Would Keep

2 sessions of 45 minutes

4.4 Singer Sewing Machines and Buying on Installments

2 sessions of 45 minutes

UNIT 4 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Name the six stakeholders of a business. For one of them, say what it puts in and what it hopes to get out.

2. **5 pts**

What is the difference between a big business and a great business?

3. 5 pts

What was the Made Beaver, and why did the Hudson's Bay Company need it?

4. 5 pts

At a trading post, a kettle costs 5 Made Beaver and a blanket costs 7. A trapper brings 20 pelts and buys one kettle and two blankets. How many pelts does he have left?

5. 5 pts

How did the Trent and Mersey Canal help Wedgwood and the community?

6. 5 pts

What problem did James L. Kraft solve, and how?

7. 5 pts

A grocer buys 10 pounds of cheese for \$2 a pound and sells it for \$3 a pound. If 2 pounds spoil, what is his profit?

8. 5 pts

A sewing machine costs \$50 in cash, or \$10 down and \$4 a month for 12 months. What is the total installment price, and how much more is it than cash?

9. 5 pts

Give one benefit and one risk of buying on installments.

10. 5 pts

What might happen to a business that pays its owners well but treats its workers and customers badly? Explain.

ANSWER KEY

1. Financiers, risk-takers, builders, workers, customers, community. Example: workers put in time and skill and hope for fair pay, safety and respect.
2. A big business sells or earns a lot. A great business creates real value and serves all six stakeholders well over a long time; a big business can still cheat customers, harm workers or hurt its town.
3. The value of one prime beaver pelt, used to price every trade good. There were no coins at the trading posts, so the Company needed a common measure of value.
4. $5 + 7 + 7 = 19$. $20 - 19 = 1$ pelt left.
5. Barges carried pottery smoothly so less broke, and clay, coal and flint cost less to bring in. Miners, farmers, merchants and other potters along the route also shipped goods more cheaply, and the district grew.
6. Cut cheese spoiled quickly, which wasted money for grocers and raised prices. He heated and stirred cheese and sealed it in tins (process cheese), so it stayed fresh for months; he patented the process in 1916.
7. Cost: $10 \times \$2 = \$20$. Sold: $8 \times \$3 = \$24$. Profit: $\$24 - \$20 = \$4$.
8. $\$10 + (12 \times \$4) = \$10 + \$48 = \$58$. $\$58 - \$50 = \$8$ more.
9. Benefit: you can use something now, especially something that helps you earn, while you pay. Risk: it usually costs more in total, you are in debt, and if you miss payments you can lose the item and the money already paid.
10. Good workers would leave, customers would go to competitors, its good name would be lost, and in the end the owners would lose too. It might be big for a while but would not stay great.

PORTFOLIO PIECE: A STAKEHOLDER REPORT

Choose one business: your family's business, a local store or farm, or a historical business you have read about. Gather facts by interviewing the owner (with a parent present), visiting, or reading. Write a two-page report that tells the business's story, the problem it solves for customers, and how it serves each of the six stakeholders. Include a stakeholder scorecard with a 1–5 rating and a reason for each, the average score, and your advice: one thing the business does very well and one thing it could do better.

LOOK FOR	WHAT IT MEANS
Research	Real facts from an interview, visit or reliable sources, with the sources named.
Story	The business's beginning, the problem it solves and how it grew are clearly told.
Scorecard	All six stakeholders are rated with honest, specific reasons; the average is correct.
Fairness	The report shows both strengths and weaknesses and avoids unfair guesses.
Advice	Kind, sensible and specific advice that would help the business serve its stakeholders better.

UNIT 5

FAIR RULES: PROPERTY, PROMISES, INVENTIONS AND HONEST GOODS

A game is fun only when everyone plays by fair rules and a good referee keeps anyone from cheating. Business is the same. People work hardest when they may keep what they earn, trust one another when promises are kept, invent more when their inventions are protected, and shop with confidence when labels tell the truth. In this unit you will learn about **fair rules** that helped business grow and helped people live better.

You will see the Pilgrims of Plymouth plant much more corn once each family had its own field; read about Abraham Lincoln, the only American president to hold a patent, and his words about “the fire of genius”; learn how John D. Rockefeller’s Standard Oil grew so powerful that the law stepped in; and meet Dr. Harvey Wiley, who fought for honest food labels. In every lesson ask: **what problem did this rule fix, how did it work, and what did it cost?** Good rules act like a fair referee: they protect honest dealing and keep any one side from abusing its power, while leaving people free to work, trade, build and give.

PREREQUISITES

- Knows competition and monopoly (Unit 3)
- Knows the six stakeholders (Unit 4)
- Can read a simple food label with a parent’s help

MASTERY CHECKLIST

- ☐ I can explain why owning property and keeping contracts help people work hard and trade.
- ☐ I can explain what a patent is and why the Constitution protects inventors for a limited time.
- ☐ I can tell how Standard Oil grew, what it did well and badly, and why the Sherman Act was passed.
- ☐ I can explain how the Pure Food and Drug Act of 1906 made food and medicine safer and labels more honest.
- ☐ I can explain why good rules work like a fair referee.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **U.S. Patent and Trademark Office: Kids' pages**: Free. Activities, stories of young inventors and simple explanations of patents and trademarks from the U.S. government. Good for Lesson 5.2.
- **U.S. Food and Drug Administration: history**: Free. Short articles and photographs about Harvey Wiley, the Poison Squad and the Pure Food and Drug Act of 1906. Best read by a parent and explained aloud. Good for Lesson 5.4.
- **Bradford's History of "Plimoth Plantation,"** by William Bradford (free at [Project Gutenberg](#)): Free. Governor Bradford's own history of Plymouth Colony. A parent may read aloud his account of the spring of 1623, when each family received its own cornfield (Lesson 5.1). The old spelling is part of the fun.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

5.1 Property and Contracts: The Pilgrims' Cornfields and Keeping Your Word

2 sessions of 45 minutes

5.2 Patents and Lincoln's "Fire of Genius"

2 sessions of 45 minutes

5.3 Standard Oil and the Sherman Act: When One Company Grows Too Strong

2 sessions of 45 minutes

5.4 Honest Labels: Harvey Wiley and the Pure Food and Drug Act

2 sessions of 45 minutes

UNIT 5 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What are property rights, and why do they help people work hard?

2. (5 pts)

What changed at Plymouth Colony in 1623, and what was the result?

3. (5 pts)

What is a contract? Give an example from this unit.

4. (5 pts)

What is a patent, and why does it last only a limited time?

5. (5 pts)

What did Lincoln mean when he said the patent system “added the fuel of interest to the fire of genius”?

6. (5 pts)

An inventor earns a royalty of 30¢ for each of her inventions sold. If 400 are sold, how much does she earn?

7. (5 pts)

Name one good thing Standard Oil did and one unfair thing it did.

8. (5 pts)

What does the Sherman Antitrust Act forbid, and what happened to Standard Oil in 1911?

9. (5 pts)

What did the Pure Food and Drug Act of 1906 require, and how did it help honest businesses?

10. (5 pts)

What would happen if there were no rules at all against false labels? What would happen if there were so many rules that no one could start a small bakery? Explain why good rules are like a fair referee.

ANSWER KEY

1. The right to own, use, keep and sell what is yours. People work harder and take better care of things when they know they may keep what they earn.
2. Each family was given its own piece of land to plant corn for itself instead of working only in common fields. Much more corn was planted, people worked harder, and the colony had more food.
3. A promise or agreement between people that the law will enforce. Examples: the Pilgrims' agreement with the London investors and their 1626 buyout; the vineyard workers who agreed to work for a penny a day.
4. A right that lets an inventor alone make and sell his invention for some years so he can earn a reward. It is limited so that afterward everyone can use the idea and the whole country gains.
5. Patents give inventors a reason (the reward of profit, their interest) to use their creative gifts, so more good inventions are made.
6. $400 \times \$0.30 = \$120$.
7. Good: it made kerosene much cheaper by working efficiently, so millions could light their homes. Unfair: it got secret railroad rebates its rivals did not get and drove rivals out of business.
8. It forbids agreements and schemes that block trade and fair competition. In 1911 the Supreme Court ordered Standard Oil broken up into 34 separate companies.
9. It made it illegal to sell adulterated (impure or unsafe) or misbranded (falsely labeled) food and drugs. Honest businesses no longer had to compete with cheaters selling fake or harmful goods.
10. Without rules, cheaters could sell fake or harmful goods and customers could not trust anything. With too many rules, honest people could not start businesses and goods would become scarce and costly. A good referee enforces fair play and safety but lets the game be played.

PORTFOLIO PIECE: MY FAIR RULES BOOKLET

Make a small booklet with one page for each fair rule in this unit: property rights, contracts, patents, antitrust law and honest labels. On each page, write the problem the rule fixed, how it works, a real story from history, and one cost or limit of the rule. Add a drawing to each page. On the last page, paste or copy your signed family contract and your weekly record of keeping it, and write a paragraph explaining why good rules work like a fair referee.

LOOK FOR	WHAT IT MEANS
Accuracy	Each page tells the history and the rule correctly.
Understanding	Each page explains the problem, how the rule helps, and one cost or limit.
Contract	The family contract is clear and fair, and the weekly record is complete and honest.
Care	The booklet is neat, illustrated and easy to read.

5.1 PROPERTY AND CONTRACTS: THE PILGRIMS' CORNFIELDS AND KEEPING YOUR WORD

OBJECTIVES

- Explain property rights and why people work harder and take better care of things they own.
- Tell how Plymouth Colony grew more corn in 1623 after each family was given its own field, and how the Pilgrims kept their promise to repay their investors.
- Write a simple, fair contract with a parent and keep it.

Warm-up. Think about your own bike, book or toy, and something in your house that everybody shares, like the TV remote or a box of crayons. Which one gets taken care of better? Why do you think so?

WATCH

The Pilgrims and the Mayflower Compact

Pursuit of History • 5:57

<https://www.youtube.com/watch?v=P9kGbZ-BfLI>

WHEN TO WATCH

Before the story: the Pilgrims' voyage and the Mayflower Compact, their first written agreement.

KEY TERMS

property

Something that belongs to a person or group, such as land, a house, tools or money.

contract

A promise or agreement between two or more people that the law will enforce.

property rights

The right to own, use, keep and sell what is yours, protected by law.

court

A place where a judge settles disagreements fairly according to the law.

investor

A person who puts money into a project hoping to be paid back with a profit.

CORE IDEAS

The story. In 1620 the Pilgrims sailed to America on the *Mayflower* and founded Plymouth Colony. They did not have enough money for the trip, so a group of London merchants paid for it. In return, the Pilgrims signed an agreement: for seven years, everything they grew and made would go into one common store, and the profits would be shared with the investors. The first years were terribly hard. Many died in the first winter, and even after the first harvest food ran short. Governor William Bradford noticed a problem: people did not work very hard in the common fields. Young men complained about working for other men's families without reward, and some families felt it unfair that everyone received the same share no matter how hard they worked.

How they figured it out. In the spring of 1623, Bradford and the other leaders tried something new. They gave each family its own piece of land to plant corn for itself. Bradford later wrote that it “had very good success,” because it made everyone hard-working, and much more corn was planted than before. Whole families went into the fields willingly. The colony never again suffered such hunger. The Pilgrims also kept their word to their investors. In 1626 a group of Plymouth leaders agreed to buy out the London merchants for £1,800, paid in yearly amounts, and they took on the colony's debts. It took many years of trading furs and corn, but they paid what they had promised.

The big idea. When people have **property rights**, they may keep, use and sell what they earn, so they have a reason to work hard, save and take good care of things. And when people make **contracts** and keep them, they can trust each other enough to trade, lend and invest. If someone breaks a contract, a **court** can settle the matter fairly. Jesus told of a vineyard owner who hired workers for a penny a day; when some complained, he answered, “didst not thou agree with me for a penny?” (Matthew 20:13). A fair agreement freely made should be kept.

In business today. Property rights and contracts are at the heart of every business. A farmer plants trees because he knows the land and the fruit will be his. A bank lends

money to build a house because a contract says it will be paid back. A store orders shoes from a factory because the factory has promised to deliver them on time. Countries where property is safe and contracts are kept tend to grow richer, because people dare to build and invest. And a person who always keeps his word, even when it costs him, earns the most valuable property of all: a good name.

PICTURE STUDY



The Village Lawyer, Pieter Brueghel the Younger, about 1620 · Oil on panel · Several versions survive in European museums

Image: [Wikimedia Commons](#), public domain

Pieter Brueghel the Younger, son of the famous painter Pieter Bruegel the Elder, painted this busy scene many times because people loved buying copies of it. It shows a lawyer's office in a Flemish village. Farmers bring deeds, agreements and payments, some in coins and some in eggs and poultry. Every paper on the walls and shelves is a contract, a deed or a record of what someone owns or owes.

Look closely

- Look at all the papers on the walls, the shelves and the desk. What might they be?
- Find the people waiting. What are they holding? What do you think they want?
- Find the lawyer. What is he doing?
- Look for things people brought as payment besides coins.

Talk about it

1. Why would a farmer want his land written down in a deed?
2. What could happen if there were no written contracts and no one to settle disagreements?

3. Do these people seem to trust the lawyer? Why does trust matter here?

PROJECT

The Common Store and My Own Field

You will play two rounds of a work game, one where everything goes into a common jar and one where each person keeps what he earns. Then you will write and sign a real contract with a parent.

You will need

- A bag of dried beans or buttons (the “corn”)
- A large common jar and a small cup for each player
- A simple task: sorting a mixed pile of beans and pasta, or folding socks
- A timer, ledger notebook and pencil

Steps

1. Round 1 (the common store): set a timer for 4 minutes. Each player sorts or folds. For every 5 items done, the player puts 1 bean in the common jar. At the end, share the jar’s beans equally among all players. Record how many items each player did.
2. Round 2 (my own field): set the timer for 4 minutes again. This time, for every 5 items done, the player puts 1 bean in his *own* cup and keeps it. Record how many items each player did.
3. In your ledger, make a table: Player, Items in Round 1, Items in Round 2. Add each column.
4. Talk together: Did people work differently in the two rounds? Why? (It is fine if your results surprise you; write down what really happened.)
5. Write a simple contract with a parent for a real job, such as weeding a row of the garden or sweeping the porch each week. Include: what you will do, by when, what you will be paid or receive, and what happens if either side does not keep the promise.
6. Both of you sign and date the contract. Keep a ledger record each week: Date, Job done?, Payment received?
7. At the end of the month, write two sentences about how the contract helped you both.

Tips

- A good contract is clear, fair to both sides and freely agreed to. If either side feels forced, it is not a fair contract.
- In a family, people also help one another freely without pay. Contracts are for extra jobs, not for everyday kindness.

Check your work

- ☐ I can explain property rights in my own words.
- ☐ I can tell what happened at Plymouth in 1623.
- ☐ My contract is clear, signed and recorded in my ledger.

LEDGER NOTEBOOK

1. Draw a map of Plymouth Colony's fields in 1623, divided into family plots, with each family's name on its plot.
2. Copy your contract neatly into your ledger and draw a seal or signature line at the bottom.
3. Make a T-chart: Things I take care of because they are mine, and Things that are shared.

From history. Before landing, the men of the *Mayflower* signed the Mayflower Compact, promising to make and obey “just and equal laws” for the good of the colony. It was one of the first written agreements for self-government in America.

COMMON MISTAKES

- Thinking property rights mean being selfish. Owning things lets people work, save, build and also give freely to others.
- Thinking a contract is just a promise you can forget if it becomes hard. A fair contract should be kept, and the law can enforce it.
- Thinking the Pilgrims broke their deal with the investors. They bought out the investors and paid them back over many years.

Make it a game • Mine, Ours, Yours. Dump a bag of buttons or a box of toys. Round one: both of you tidy one shared pile for two minutes, as the Pilgrims did on common land. Round two: each tidies a separate section that is yours alone. Compare the results, shake hands on a promise to repay one button, and say why owning a field made Plymouth grow more corn.

Scripture. “But he answered one of them, and said, Friend, I do thee no wrong: didst not thou agree with me for a penny?” (Matthew 20:13, KJV)

The vineyard owner paid exactly what he had promised. Keeping a fair agreement, even when someone grumbles, is a mark of an honest worker and an honest employer.

5.2 PATENTS AND LINCOLN'S "FIRE OF GENIUS"

OBJECTIVES

- Explain what a patent is and why the U.S. Constitution gives inventors rights for a limited time.
- Tell the story of Abraham Lincoln's patent for lifting boats over sandbars.
- Design an invention and write a simple patent application with a labeled drawing.

Warm-up. Look around your kitchen for something that was clearly invented: a can opener, a zipper, a light switch. Pick one. Write down what problem it solves and what people did before it existed.

WATCH

What is a Patent? A Cartoon Introduction

World Intellectual Property Organization – WIPO • 6:00

<https://www.youtube.com/watch?v=Bb9EBtIGx7w>

WHEN TO WATCH

After the warm-up, before the story of Lincoln's patent.

KEY TERMS

invention

A new and useful machine, tool, product or way of doing something.

patent

A right from the government that lets an inventor alone make, use and sell his invention for a limited number of years.

copyright

A right that protects an author's or artist's writing, music or pictures for a limited time.

Constitution

The written plan of the United States government, adopted in 1788.

royalty

A payment made to an inventor or author each time someone else uses or sells his work.

CORE IDEAS

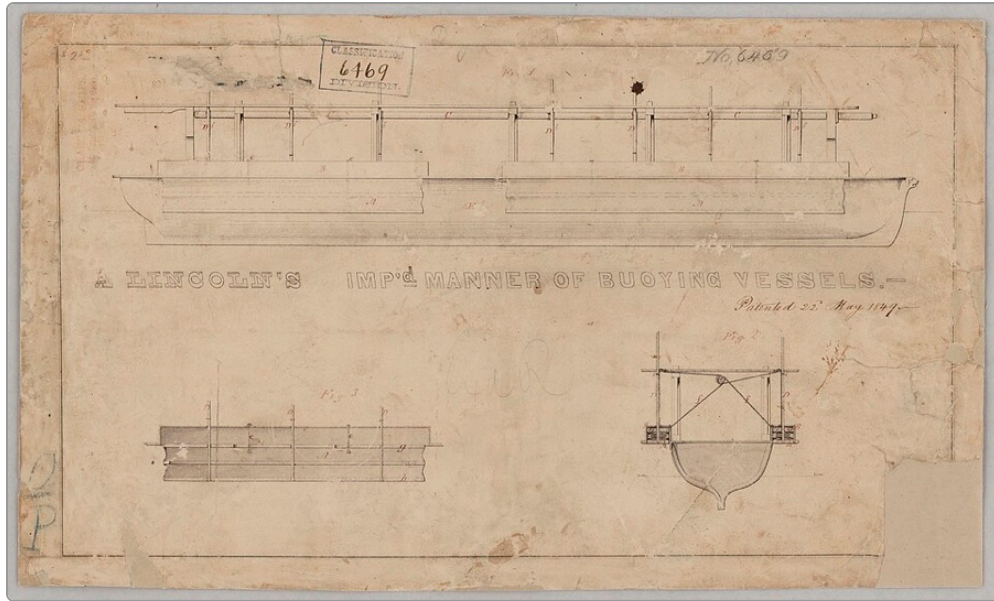
The story. As a young man, Abraham Lincoln twice helped steer flatboats loaded with goods down the Mississippi River to New Orleans, and once his boat got stuck on a mill dam near New Salem, Illinois. Years later, in 1848, he was traveling by boat on the Great Lakes when he saw a steamboat stuck on a sandbar, with the crew struggling to float it free. Lincoln began to think. What if a boat had waterproof air chambers folded along its sides, which could be filled with air to lift it over shallow water? He carved a wooden model in a shop in Springfield and sent it with drawings to the Patent Office in Washington. On May 22, 1849, he received U.S. Patent No. 6,469 for “A Device for Buoying Vessels over Shoals.” His invention was never built for real boats, but Lincoln is the only president of the United States ever to hold a patent.

How they figured it out. The men who wrote the Constitution knew that inventing takes time, money and many failures. Why would anyone spend years on a new machine if others could copy it the moment it worked? So in Article I, Section 8, they gave Congress the power “To promote the Progress of Science and useful Arts” by giving inventors and authors the right to their work “for limited Times.” In 1790 Congress passed the first patent law. A **patent** lets an inventor be the only one to make and sell his invention for a number of years, so he can earn a reward. In return, he must explain exactly how it works, and when the patent ends, everyone may use the idea. Lincoln, who loved inventions, said in a lecture in 1859 that the patent system “added the fuel of interest to the fire of genius.”

The big idea. A patent is a kind of **property** for ideas. It works like a fair referee. It rewards the inventor, so more people are willing to invent. But because it lasts only a limited time, the idea soon belongs to everyone, so the whole country gains. Without patents, inventors might keep their ideas secret. With patents that lasted forever, one person could block everyone else. The Constitution chose the middle way: a reward for a time, then freedom for all. Books, songs and pictures are protected the same way by **copyright**.

In business today. Today a U.S. patent usually lasts about 20 years from when the inventor applies. Companies spend large sums inventing new medicines, machines and phones, and patents let them earn back that cost. Many patents are licensed: the inventor lets a company make the product and receives a **royalty** for each one sold. Children can receive patents too; several young inventors have. God made people in His image, and He gives some of them the gift of making new and useful things, as He gave Bezalel “all manner of workmanship” (Exodus 31:3-5).

PICTURE STUDY



Abraham Lincoln's Patent Drawing: A Device for Buoying Vessels over Shoals, Abraham Lincoln (inventor); drawn for his patent application, 1849 · Ink drawing on paper · National Archives, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

Every patent application includes careful drawings that show exactly how the invention works. This is the drawing for Abraham Lincoln's invention, kept by the National Archives. Lincoln's wooden model of the same idea is in the Smithsonian Institution. Look at it as an inventor would: what are the parts, and how do they move?

Look closely

- Find the title written across the middle of the drawing. Read it with a parent. What date does it give?
- Find the long side view of the boat. Where are the chambers that would fill with air?
- Find the small end view on the right. How does it show the chambers lowered beside the hull?
- Find the patent number written at the top. Why would every patent get its own number?

Talk about it

1. What problem was Lincoln trying to solve?

2. Why does a patent application need such a careful drawing?
3. Why do you think his invention was never used on real boats? What would you change?

PROJECT

My Invention and Patent Application

You will invent something that solves a real problem at home, draw it carefully, write a simple patent application, and figure out what royalties it might earn.

You will need

- Ledger notebook, plain paper, ruler and colored pencils
- Household odds and ends for a model (optional): cardboard, tape, string, straws, rubber bands

Steps

1. List three small problems in your home: a door that slams, a cup that tips over, a leash that tangles. Choose one.
2. Think of at least two ways to solve it. Choose the best and, if you can, build a simple model.
3. Make a careful patent drawing on plain paper. Draw it from the side or top, label each part with a letter, and add a key explaining each letter.
4. Write your patent application with four parts: Title, The problem, How my invention works (use the letters from your drawing), and What is new about it.
5. Hold a family “Patent Office.” A parent asks: Is it new? Is it useful? Is it clearly explained? If yes, the parent signs and dates your application as “Patent granted.”
6. In your ledger, estimate royalties. If a company sells 500 of your inventions and pays you a royalty of 25¢ each, how much do you earn? What if it sells 2,000?
7. Write two sentences about why patents last only a limited time.

Tips

- Good inventors expect their first idea to fail. Record what did not work and what you changed.
- Simple is good. Many great inventions, like the paper clip or the safety pin, are very simple.

Check your work

- ☐ I can explain what a patent is and why it lasts a limited time.
- ☐ My patent drawing is labeled and my application has all four parts.
- ☐ I can tell the story of Lincoln's patent.

LEDGER NOTEBOOK

1. Copy the words from Article I, Section 8: "To promote the Progress of Science and useful Arts." Draw a small invention around them.
2. Draw a timeline of an imaginary patent: the year the inventor applies, the years only he may sell it, and the year everyone may make it.
3. Draw Lincoln's boat with its air chambers filled, floating over a sandbar.

From history. The very first U.S. patent was granted on July 31, 1790, to Samuel Hopkins for a better way to make potash, a cleaning and fertilizing product made from wood ashes. It was signed by President George Washington.

COMMON MISTAKES

- Thinking a patent lasts forever. It lasts a limited time; then anyone may use the idea.
- Thinking you can patent an idea without explaining it. A patent requires a clear explanation that others can use when it ends.
- Mixing up patents and copyrights. Patents protect inventions; copyrights protect writing, music and art.

Make it a game • Patent Office Challenge. Challenge: using only household items, invent a way to lift a toy paper boat over a book sandbar, like Lincoln. Give it a name and draw it on a card. Your parent is the patent clerk and asks three questions. Win a patent by answering all three, then explain why inventors keep rights only for a limited time.

Scripture. "And I have filled him with the spirit of God, in wisdom, and in understanding, and in knowledge, and in all manner of workmanship," (Exodus 31:3-5, KJV)

God gave Bezalel wisdom and skill to design and build the tabernacle. Inventing and making are gifts from God, and good laws that reward honest inventors honor that gift.

5.3 STANDARD OIL AND THE SHERMAN ACT: WHEN ONE COMPANY GROWS TOO STRONG

OBJECTIVES

- Tell how John D. Rockefeller built Standard Oil and how it lowered the price of kerosene.
- Explain the difference between competing fairly and using secret deals to crush rivals.
- Explain what the Sherman Antitrust Act of 1890 does and why Standard Oil was broken up in 1911.

Warm-up. In a running contest, which of these is fair: running faster, training harder, wearing better shoes, tripping the other runners, or making a secret deal with the judge? Sort them into Fair and Not fair.

WATCH

Rockefeller and the First Oil Rush

American Heroes Channel • 2:12

<https://www.youtube.com/watch?v=EutfzE2JDcM>

WHEN TO WATCH

After the story of Rockefeller's start, before "How they figured it out."

BACKUP VIDEO

Antitrust Laws (Competition Laws) Explained in One Minute: The Sherman Antitrust Act, FTC Act, etc.

One Minute Economics • 1:45

<https://www.youtube.com/watch?v=8tQa92BWjvM>

After the big idea: a one-minute cartoon of what antitrust laws forbid.

KEY TERMS

kerosene

A fuel made from crude oil, burned in lamps for light before electric lights were common.

refinery

A factory that turns crude oil into useful products such as kerosene and gasoline.

rebate

Money paid back after a purchase; Standard Oil received secret rebates from railroads that its rivals did not get.

trust

In business history, a group of companies controlled together by one board, often to avoid competition.

antitrust law

A law that forbids businesses from joining together or acting unfairly to block competition.

CORE IDEAS

The story. John D. Rockefeller got his first job at sixteen as a bookkeeper in Cleveland, Ohio, and he loved neat, exact accounts. In the 1860s, oil had just been discovered in Pennsylvania, and many small refineries were turning it into **kerosene** for lamps. Rockefeller started a refinery in 1863, and in 1870 he and his partners formed the **Standard Oil Company**. They were very good at it. They built huge refineries, made their own barrels, bought their own tank cars, and found uses for parts of the oil that others threw away. The price of kerosene fell to a fraction of what it had been, and millions of families could afford to light their homes at night.

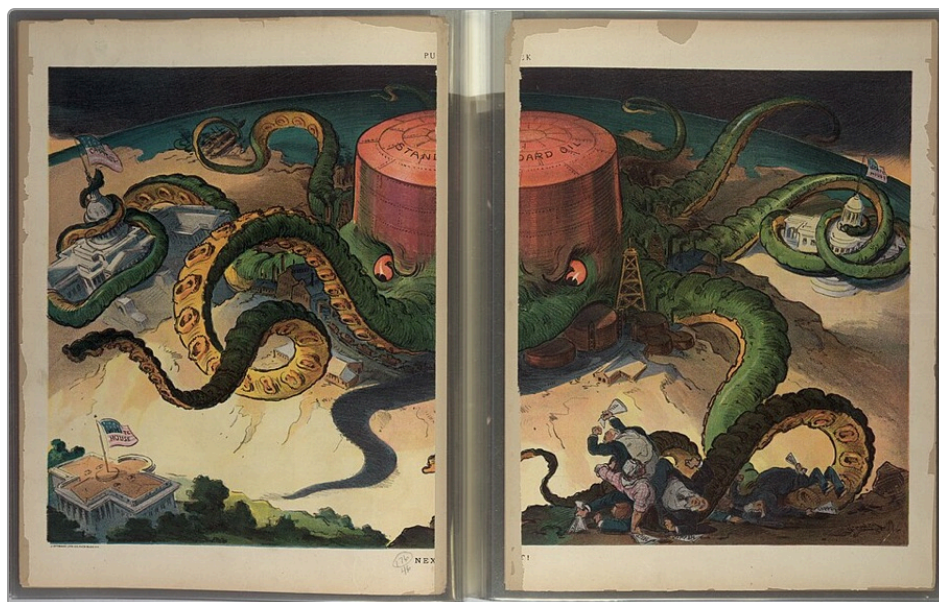
How they figured it out. But Standard Oil did not win only by being better. Because it shipped so much oil, it made **secret deals** with railroads to pay lower rates than its rivals, and sometimes the railroads even passed along part of what rivals paid. Then Standard Oil offered to buy rival refineries; owners who refused often found they could not compete and were driven out. By around 1880 Standard Oil controlled about nine-tenths of all oil refining in the United States. Its companies were joined in a “trust” run by one board. Many people feared that one company now had too much power over a product everyone needed. In 1890 Congress passed the **Sherman Antitrust Act**, named for Senator John Sherman of Ohio, which forbade agreements and schemes to block trade and competition. A writer named Ida Tarbell studied Standard Oil’s records for years and in 1904 published a careful history of how it had treated its rivals. The government took Standard Oil to court, and in 1911 the Supreme Court ordered it broken into 34 separate companies.

The big idea. Growing big by **serving customers better** is fair competition. Growing big by **secret deals and crushing rivals** is not, because it can leave customers with no

choice. Antitrust law acts like a referee. It does not punish a company for being successful; it forbids cheating that blocks fair competition. Rockefeller's story has two sides. His company brought cheap light to the world and he later gave away an enormous fortune to schools, medicine and churches. But some of his methods were unfair to competitors, and the law had to stop them.

In business today. The Sherman Act is still the law. Government lawyers and courts still watch for companies that make secret agreements to fix prices or that try to shut out competitors unfairly. Most businesses never come near such trouble; they simply try to serve customers well. The companies that came from Standard Oil grew into some of today's large oil companies, and they compete with one another. The lesson for every business owner is simple: win customers by being better, not by tripping your rivals.

PICTURE STUDY



“Next!”, Udo J. Keppler, 1904 · Color lithograph cartoon from *Puck* magazine · Library of Congress, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

This cartoon appeared in *Puck*, a popular humor magazine, in 1904, the same year Ida Tarbell’s history of Standard Oil was published. The cartoonist drew the company as a huge octopus whose long arms grab industries and government buildings. A cartoon like this is not a neutral picture: it is an opinion drawn to persuade readers. It shows how worried many Americans were about the power of one company.

Look closely

- Find the octopus’s body. What is it, and what words are written on it?
- Follow each tentacle. What is each one wrapped around?
- Find the little people caught at the bottom right. Who might they stand for?
- Find the tentacle that is still reaching. What is it reaching for, and what does the title “Next!” mean?

Talk about it

1. What is the cartoonist saying about Standard Oil?
2. Is a cartoon like this a fact or an opinion? How could you check whether its message was fair?

3. Why might people worry about one company being so powerful?

PROJECT

Fair Play or Foul Play? The Refinery Game

You will play two small refineries competing to sell kerosene, first with fair rules and then with a secret railroad deal. You will record the prices customers pay and what happens to each refinery.

You will need

- Two cups of water colored with a drop of food coloring (the “kerosene”) and small cups or spoons
- Play money
- Index cards for a secret deal card
- Ledger notebook and calculator
- Two refiners and a parent as the railroad and customer

Steps

1. Each refinery makes kerosene for \$4 a cup and must pay the railroad \$2 a cup to ship it. Each refiner chooses a price to sell to the customer.
2. Round 1 (fair play): play three sales. The customer buys from whichever refinery offers the better price. Record each refinery’s price, shipping cost, sales and profit in your ledger.
3. Round 2 (better methods): one refinery finds a better way to make kerosene for \$3 a cup. Play three sales. Record. Is this fair competition?
4. Round 3 (a secret deal): the railroad secretly agrees to charge the bigger refinery only \$1 for shipping, and to charge the other \$3. Play three sales. Record. What happens to the smaller refinery?
5. Round 4 (the referee): add a rule that every refinery pays the same shipping rate. Play three sales and record.
6. Compare the rounds: In which rounds did customers pay the least? In which round was a rival driven out unfairly?
7. Write a paragraph: What is the difference between Round 2 and Round 3? Why did people want a law like the Sherman Act?

Tips

- Profit per cup = selling price – cost to make – shipping cost.
- Notice that the customer may pay a low price for a while even in Round 3. Ask what might happen to prices once the rival is gone.

Check your work

- ☐ I can tell how Standard Oil lowered the price of kerosene.
- ☐ My ledger shows prices and profits for all four rounds.
- ☐ I can explain the difference between fair competition and unfair deals.

LEDGER NOTEBOOK

1. Draw an old kerosene lamp and write one sentence about what cheap kerosene meant for families at night.
2. Make a two-column chart about Standard Oil: Good things it did and Unfair things it did.
3. Draw a referee with a whistle and write the rule of the Sherman Act in your own words on his shirt.

From history. Rockefeller kept his first account book, which he called Ledger A, for the rest of his life. In it, as a teenager earning a small salary, he recorded every penny he earned, spent, saved and gave to his church and to the poor. You will see more of Ledger A in Lesson 8.4.

COMMON MISTAKES

- Thinking antitrust law punishes companies just for being big. It forbids unfair methods that block competition.
- Thinking Standard Oil did only bad things. It made light cheap for millions; the problem was some of its methods.
- Thinking a cartoon is the same as a fact. Cartoons give opinions; we check them against real records.

Make it a game • Fair Play, Foul Play. On eight cards, write four fair business moves, such as lowering the price of kerosene with a better refinery, and four foul moves, such as a secret rebate to crush a rival. Shuffle them. Your parent draws and reads each card, and you shout fair or foul and explain. Add a bonus for naming what the Sherman Act does.

5.4 HONEST LABELS: HARVEY WILEY AND THE PURE FOOD AND DRUG ACT

OBJECTIVES

- Explain the problems with food and medicine in America before 1906.
- Tell how Dr. Harvey Wiley and others worked for the Pure Food and Drug Act, and what the law required.
- Read and compare real food labels and write an honest label for a homemade product.

Warm-up. Pick up any food package in your kitchen. Find the ingredients list. What is the first ingredient? Why do you think the law says it must be listed first?

WATCH

Dr. Harvey Wiley: Father of Pure Food | The Poison Squad | American Experience | PBS

American Experience | PBS • 1:09

<https://www.youtube.com/watch?v=BB3csbKFb-k>

WHEN TO WATCH

After the story: a one-minute portrait of Dr. Wiley and the Poison Squad, from PBS American Experience.

KEY TERMS

label

The words printed on a package that tell what is inside.

ingredient

One of the things that a food or product is made of.

adulterated

Made impure or unsafe by adding something harmful or cheap that is not supposed to be there.

misbranded

Labeled falsely, so the label does not tell the truth about what is inside.

inspector

A person whose job is to check that goods or places follow safety rules.

CORE IDEAS

The story. In the late 1800s, more and more Americans lived in cities and bought their food in cans, jars and packages instead of growing it. That was convenient, but it opened the door to cheating. Some sellers watered down milk, sold “honey” that was mostly cheap syrup, colored old food to look fresh, or added harmful chemicals to keep it from spoiling. Bottles of “medicine” promised to cure almost anything and did not say what was inside, and some contained dangerous drugs. A customer had no way of knowing. **Dr. Harvey Wiley**, the chief chemist of the U.S. Department of Agriculture, spent years testing foods and telling the public what he found. In 1902 he even began a famous experiment with young volunteers, nicknamed the “Poison Squad,” who ate meals containing common preservatives so he could measure their effects.

How they figured it out. Wiley traveled and spoke across the country, and women’s clubs, doctors, farmers and honest food companies joined the cause. Some businessmen supported it because cheaters were undercutting them with fake goods. Henry J. Heinz, who made ketchup and pickles, was one of them: he sold his food in clear glass bottles so customers could see it was pure. In 1906 a novel about filthy meatpacking plants in Chicago shocked the public. That same year, on June 30, 1906, Congress passed the **Pure Food and Drug Act** and a law requiring meat inspection. The Pure Food and Drug Act made it illegal to sell food or drugs that were **adulterated** or **misbranded**, and required labels to tell the truth. Wiley was put in charge of enforcing it, and his office grew into today’s Food and Drug Administration.

The big idea. A market works only when buyers can trust what they are buying. When sellers can secretly cheat, honest sellers lose out and customers are harmed. A fair rule that says “tell the truth on your label” and “do not sell poison as food” works like a referee: it protects customers **and** honest businesses. It does not tell anyone what to cook or sell; it says what you sell must be what you say it is. This is the same principle as the Bible’s just weights: “Just balances, just weights... shall ye have” (Leviticus 19:36).

In business today. Every food package you see has an ingredients list, from the largest amount to the smallest, and a nutrition label. Medicines list their active ingredients and warnings. Inspectors check meat plants, restaurants and food factories. Bakers and cooks who sell at farmers' markets must follow food-safety rules too, and many states have cottage-food rules for home kitchens. Honest labels cost a business a little effort, but they build the trust that keeps customers coming back.

PICTURE STUDY



Dr. Harvey W. Wiley, Unknown photographer, early 1900s · Photograph · Library of Congress, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

Harvey Washington Wiley grew up on a farm in Indiana, studied medicine and chemistry, and became the chief chemist of the U.S. Department of Agriculture in 1883. He spent almost thirty years fighting for pure food and honest labels. This photograph shows him at his desk in Washington, D.C.

Look closely

- Look at Dr. Wiley's desk. What is piled on it?
- Look at the framed papers on the walls. What might they be?
- Look at how he sits. Does he look like a man resting or a man ready to get back to work?

Talk about it

1. Why would a scientist be the right person to fight for honest food labels?
2. Who were Dr. Wiley's allies? Who might have opposed him?
3. What would you want to ask Dr. Wiley if you could meet him?

Safety first. Handle food with clean hands and a clean workspace. If you plan to sell any food you make, a parent must first check your town's and state's cottage-food rules.

PROJECT

The Label Detective and My Honest Label

You will compare the labels of similar products to see what labels tell you, then write an honest label for something your family makes.

You will need

- Three pairs of similar products from your kitchen or a store (for example, 100% juice and a “juice drink,” two kinds of peanut butter, two kinds of bread)
- Ledger notebook and pencil
- An index card and markers

Steps

1. For each pair, read both labels with a parent. In your ledger, rule a table with columns: Product, First three ingredients, Number of ingredients, Size, Price.
2. Fill in the table for all six products.
3. For each pair, find the price per ounce or per serving: $\text{price} \div \text{ounces}$. Which is the better value?
4. Look for any words on the front of the package, like “natural” or “made with real fruit.” Check whether the ingredients list agrees with the front.
5. Choose a simple food or product your family makes, such as cookies, granola, or a jar of jam. On an index card, write an honest label: name, ingredients from most to least, weight, date made, and any allergy warnings (such as nuts, wheat, milk or eggs).
6. Show your label to a parent. Is anything missing or unclear?
7. Write two sentences about why honest labels help both customers and honest sellers.

Tips

- Ingredients are listed from the largest amount to the smallest, so the first ingredient is the main one.

- Allergy warnings matter a great deal. Always list nuts, wheat, milk and eggs if they are in your food.

Check your work

- ☐ I can explain what the Pure Food and Drug Act required.
- ☐ My ledger compares the labels and prices of three pairs of products.
- ☐ My honest label lists the ingredients in the right order and any allergy warnings.

LEDGER NOTEBOOK

1. Draw a store shelf in 1890 with jars and bottles that have no ingredients on their labels, and a store shelf today with honest labels. Write what changed.
2. Make a timeline: 1883 Wiley becomes chief chemist; 1902 the Poison Squad; June 30, 1906, the Pure Food and Drug Act; later, the Food and Drug Administration.
3. Copy the label you wrote and draw a picture of your product beside it.

From history. After he retired from government in 1912, Harvey Wiley worked for many years for *Good Housekeeping* magazine, testing products and telling readers which ones were honest. He kept fighting for pure food until he died in 1930, on the twenty-fourth anniversary of the law he had worked for.

COMMON MISTAKES

- Thinking the law tells people what they must eat. It requires honest labels and safe food, and leaves the choice to the buyer.
- Thinking only customers wanted the law. Many honest businesses, like Heinz, supported it.
- Ignoring the ingredients list and trusting only the words on the front of a package.

Make it a game • Label Detective Hunt. Beat the clock: you have three minutes to find three food labels in the kitchen. For each one, read the ingredient list aloud and say which ingredient comes first. Then write a short honest label for a pretend jar of homemade jam, listing what is inside. Your parent plays inspector and may not pass it until it is truthful.

Scripture. “Ye shall do no unrighteousness in judgment, in meteyard, in weight, or in measure. Just balances, just weights, a just ephah, and a just hin, shall ye have:” (Leviticus 19:35-36, KJV)

God commanded Israel to use honest measures in every sale. An honest label is a just weight for our time: it tells the buyer the truth about what he is getting.

UNIT 5

FAIR RULES: PROPERTY, PROMISES, INVENTIONS AND HONEST GOODS

A game is fun only when everyone plays by fair rules and a good referee keeps anyone from cheating. Business is the same. People work hardest when they may keep what they earn, trust one another when promises are kept, invent more when their inventions are protected, and shop with confidence when labels tell the truth. In this unit you will learn about **fair rules** that helped business grow and helped people live better.

You will see the Pilgrims of Plymouth plant much more corn once each family had its own field; read about Abraham Lincoln, the only American president to hold a patent, and his words about “the fire of genius”; learn how John D. Rockefeller’s Standard Oil grew so powerful that the law stepped in; and meet Dr. Harvey Wiley, who fought for honest food labels. In every lesson ask: **what problem did this rule fix, how did it work, and what did it cost?** Good rules act like a fair referee: they protect honest dealing and keep any one side from abusing its power, while leaving people free to work, trade, build and give.

PREREQUISITES

- Knows competition and monopoly (Unit 3)
- Knows the six stakeholders (Unit 4)
- Can read a simple food label with a parent’s help

MASTERY CHECKLIST

- ☐ I can explain why owning property and keeping contracts help people work hard and trade.
- ☐ I can explain what a patent is and why the Constitution protects inventors for a limited time.
- ☐ I can tell how Standard Oil grew, what it did well and badly, and why the Sherman Act was passed.
- ☐ I can explain how the Pure Food and Drug Act of 1906 made food and medicine safer and labels more honest.
- ☐ I can explain why good rules work like a fair referee.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **U.S. Patent and Trademark Office: Kids' pages**: Free. Activities, stories of young inventors and simple explanations of patents and trademarks from the U.S. government. Good for Lesson 5.2.
- **U.S. Food and Drug Administration: history**: Free. Short articles and photographs about Harvey Wiley, the Poison Squad and the Pure Food and Drug Act of 1906. Best read by a parent and explained aloud. Good for Lesson 5.4.
- **Bradford's History of "Plimoth Plantation," by William Bradford (free at Project Gutenberg)**: Free. Governor Bradford's own history of Plymouth Colony. A parent may read aloud his account of the spring of 1623, when each family received its own cornfield (Lesson 5.1). The old spelling is part of the fun.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

5.1 Property and Contracts: The Pilgrims' Cornfields and Keeping Your Word

2 sessions of 45 minutes

5.2 Patents and Lincoln's "Fire of Genius"

2 sessions of 45 minutes

5.3 Standard Oil and the Sherman Act: When One Company Grows Too Strong

2 sessions of 45 minutes

5.4 Honest Labels: Harvey Wiley and the Pure Food and Drug Act

2 sessions of 45 minutes

UNIT 5 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What are property rights, and why do they help people work hard?

2. (5 pts)

What changed at Plymouth Colony in 1623, and what was the result?

3. (5 pts)

What is a contract? Give an example from this unit.

4. (5 pts)

What is a patent, and why does it last only a limited time?

5. (5 pts)

What did Lincoln mean when he said the patent system “added the fuel of interest to the fire of genius”?

6. (5 pts)

An inventor earns a royalty of 30¢ for each of her inventions sold. If 400 are sold, how much does she earn?

7. (5 pts)

Name one good thing Standard Oil did and one unfair thing it did.

8. (5 pts)

What does the Sherman Antitrust Act forbid, and what happened to Standard Oil in 1911?

9. (5 pts)

What did the Pure Food and Drug Act of 1906 require, and how did it help honest businesses?

10. (5 pts)

What would happen if there were no rules at all against false labels? What would happen if there were so many rules that no one could start a small bakery? Explain why good rules are like a fair referee.

ANSWER KEY

1. The right to own, use, keep and sell what is yours. People work harder and take better care of things when they know they may keep what they earn.
2. Each family was given its own piece of land to plant corn for itself instead of working only in common fields. Much more corn was planted, people worked harder, and the colony had more food.
3. A promise or agreement between people that the law will enforce. Examples: the Pilgrims' agreement with the London investors and their 1626 buyout; the vineyard workers who agreed to work for a penny a day.
4. A right that lets an inventor alone make and sell his invention for some years so he can earn a reward. It is limited so that afterward everyone can use the idea and the whole country gains.
5. Patents give inventors a reason (the reward of profit, their interest) to use their creative gifts, so more good inventions are made.
6. $400 \times \$0.30 = \$120$.
7. Good: it made kerosene much cheaper by working efficiently, so millions could light their homes. Unfair: it got secret railroad rebates its rivals did not get and drove rivals out of business.
8. It forbids agreements and schemes that block trade and fair competition. In 1911 the Supreme Court ordered Standard Oil broken up into 34 separate companies.
9. It made it illegal to sell adulterated (impure or unsafe) or misbranded (falsely labeled) food and drugs. Honest businesses no longer had to compete with cheaters selling fake or harmful goods.
10. Without rules, cheaters could sell fake or harmful goods and customers could not trust anything. With too many rules, honest people could not start businesses and goods would become scarce and costly. A good referee enforces fair play and safety but lets the game be played.

PORTFOLIO PIECE: MY FAIR RULES BOOKLET

Make a small booklet with one page for each fair rule in this unit: property rights, contracts, patents, antitrust law and honest labels. On each page, write the problem the rule fixed, how it works, a real story from history, and one cost or limit of the rule. Add a drawing to each page. On the last page, paste or copy your signed family contract and your weekly record of keeping it, and write a paragraph explaining why good rules work like a fair referee.

LOOK FOR	WHAT IT MEANS
Accuracy	Each page tells the history and the rule correctly.
Understanding	Each page explains the problem, how the rule helps, and one cost or limit.
Contract	The family contract is clear and fair, and the weekly record is complete and honest.
Care	The booklet is neat, illustrated and easy to read.

ENTREPRENEURSHIP AND SALES

An **entrepreneur** is a person who sees a need, comes up with a way to meet it, and takes the risk of starting a business to do it. Then comes the next challenge: finding customers and selling to them honestly. In this unit you will learn how great entrepreneurs turned ideas into businesses, how honest stores changed the way people shop, how to advertise without stretching the truth, and why taking care of customers after the sale matters as much as the sale itself.

You will visit Thomas Edison’s “invention factory” at Menlo Park, where inventing itself became a business; walk into John Wanamaker’s store in Philadelphia, where every item had one fair price and could be brought back for a refund; read the pages of the Sears, Roebuck catalog; and meet L.L. Bean, who refunded ninety of his first hundred pairs of boots and built a famous company by doing it. In every lesson ask: **how does this business serve its customers honestly?**

PREREQUISITES

- Knows supply, demand and competition (Unit 3)
- Knows patents (Lesson 5.2) and honest labels (Lesson 5.4)
- Can add, subtract and multiply money amounts

MASTERY CHECKLIST

- ☐ I can explain what an entrepreneur does and what risks he takes.
- ☐ I can tell how Edison ran his laboratory as a business.
- ☐ I can explain why Wanamaker’s one price and money-back guarantee built trust.
- ☐ I can tell the difference between honest persuasion and false advertising.
- ☐ I can give examples of good customer service and explain why it brings customers back.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Thomas Edison National Historical Park (National Park Service)**: Free. Photographs, history and virtual tours of Edison's laboratory complex in West Orange, New Jersey, where he moved after Menlo Park. Good for Lesson 6.1.
- ***The Toothpaste Millionaire*, by Jean Merrill (HarperCollins)**: Ages 8–12. A funny, much-loved novel about a sixth grader who makes his own toothpaste, sells it honestly at a fair price, and learns about costs, advertising and running a business. Read alongside this unit.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

6.1 Edison's Invention Factory: Turning Ideas into a Business

2 sessions of 45 minutes

6.2 One Fair Price: Wanamaker's Price Tags and Money-Back Guarantee

2 sessions of 45 minutes

6.3 Truthful Advertising: The Sears Catalog and Honest Persuasion

2 sessions of 45 minutes

6.4 Customer Service: L.L. Bean's Leaky Boots

2 sessions of 45 minutes

UNIT 6 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What is an entrepreneur? Name one risk an entrepreneur takes.

2. **5 pts**

Why did Edison need investors and a whole system, not just a light bulb?

3. (5 pts)

An inventor tests 8 filament materials a day. How many materials can her team test in 3 weeks of 5 working days each?

4. (5 pts)

What was unfair about haggling in the 1800s?

5. (5 pts)

How did Wanamaker's one price and money-back guarantee help his business?

6. (5 pts)

A store sells 40 coats at \$25 each. Customers return 2 coats for a full refund. How much money does the store keep?

7. (5 pts)

What is the difference between honest persuasion and false advertising?

8. (5 pts)

How did Sears, Roebuck learn to make its catalog more trustworthy?

9. (5 pts)

What did L.L. Bean do when 90 of his first 100 pairs of boots came back? Why was that wise?

10. (5 pts)

What would happen to a business that ignored every complaint? Explain.

ANSWER KEY

1. A person who sees a need, finds a way to meet it and starts a business to do it.
Risks: losing money, time or reputation if the business fails.
2. A bulb was useless without electricity delivered to homes, so he needed generators, wires, meters and switches, which cost a great deal of money that investors provided.
3. $3 \times 5 = 15$ days. $15 \times 8 = 120$ materials.
4. Customers paid different prices for the same item depending on how well they bargained or how the clerk judged them, so shy or trusting customers often paid more and no one knew if he was cheated.
5. Customers trusted they were treated fairly and would not be stuck with bad goods, so they came back and told friends, and his store grew.
6. $40 \times \$25 = \$1,000$. Refunds: $2 \times \$25 = \$50$. $\$1,000 - \$50 = \$950$.
7. Honest persuasion gives true facts, clear pictures, real prices and promises the seller keeps. False advertising uses lies, tricks, hidden costs or misleading pictures.
8. Julius Rosenwald insisted descriptions be accurate, the company tested its goods in its own laboratory, and it guaranteed satisfaction or money back.
9. He refunded every customer and fixed the boot. It kept his promise, earned customers' trust and gave him a second chance with a better product.
10. Unhappy customers would leave and tell others, the business would never learn how to improve, and in time it would lose its customers and fail.

PORTFOLIO PIECE: MY PRODUCT LAUNCH KIT

Choose one simple product or service you could really offer at the family market day. Put together a launch kit with four parts: a test log showing at least three versions you tried and what you improved; a fair price tag; an honest advertisement with a claims checklist; and a one-sentence customer promise or guarantee you will keep. Add a short page explaining how you would handle an unhappy customer.

LOOK FOR	WHAT IT MEANS
Testing	The test log shows real trials with numbers and clear improvements.
Honesty	The price tag and advertisement are fair and truthful, and every claim can be checked.
Service	The guarantee and the plan for an unhappy customer are kind, clear and fair.
Presentation	The kit is neat, complete and ready for market day.

6.1 EDISON'S INVENTION FACTORY: TURNING IDEAS INTO A BUSINESS

OBJECTIVES

- Explain what an entrepreneur is and what risks he takes.
- Tell how Thomas Edison ran his Menlo Park laboratory as a business, with a team, investors and many tests.
- Run a test of several materials, keep a test log, and choose the best design for its cost.

Warm-up. Flip a light switch on and off. Now imagine your house with no electric lights at all. What would you use instead at night? List three problems with that kind of light.

WATCH

Thomas Edison's Menlo Park Laboratory | The Henry Ford's Innovation Nation

The Henry Ford • 4:01

<https://www.youtube.com/watch?v=jU3lj4jTUWw>

WHEN TO WATCH

After the story, before the picture study.

BACKUP VIDEO

How Edison Implemented his Lighting System in New York City | The Henry Ford's Innovation Nation

The Henry Ford • 3:35

<https://www.youtube.com/watch?v=BgNtuQluu0A>

After "How they figured it out": how Edison built his power station in New York.

KEY TERMS

entrepreneur

A person who sees a need, comes up with a way to meet it and takes the risk of starting a business.

laboratory

A room or building where people test ideas and do experiments.

prototype

A first working model of a new invention, built to test the idea.

investor

A person who puts money into a business, hoping to share in its profits.

risk

The chance that you will lose time or money if things do not work out.

CORE IDEAS

The story. Thomas Edison sold newspapers and candy on trains as a boy and later became a telegraph operator. He loved tinkering, and his first successful inventions improved the telegraph and the stock ticker. With money from selling them, in 1876 he built something new: a laboratory in the village of Menlo Park, New Jersey, where a team of skilled workers did nothing but invent. Edison promised to turn out a small invention every few days and a big one every few months. In 1877 the team made the phonograph, the first machine that could record and play back sound. Newspapers made Edison famous across the country. Then he set out to make a safe, cheap electric light to replace gas lamps and candles.

How they figured it out. Electric lights already existed, but they burned out in minutes or were far too bright and costly for homes. Edison and his team tested thousands of materials for the thin glowing thread inside the bulb, called the filament, keeping careful notes on every trial. In October 1879 a bulb with a carbon thread made from cotton burned for many hours, and later bulbs with carbonized bamboo lasted much longer. But a light bulb was useless without electricity, so Edison planned the whole system: generators, underground wires, switches, fuses and meters to measure how much each customer used. This was costly, so he formed the Edison Electric Light Company, and **investors**, including the banker J. P. Morgan, put in money. In September 1882 his Pearl Street Station in New York began sending electric power to paying customers.

The big idea. An **entrepreneur** sees a need, finds a way to meet it, and takes a **risk**. Edison risked his money, his time and his name on ideas that might fail, and many did. He succeeded because he treated inventing as work: a team, a laboratory, careful records, many **prototypes**, and a clear goal of something customers would pay for at a fair price. He is often quoted as saying that genius is one percent

inspiration and ninety-nine percent perspiration. An invention becomes a business only when it is made well, priced right and sold to people who need it.

In business today. Companies today still run research laboratories, and small businesses test new products in kitchens and garages. Entrepreneurs still need investors or savings to get started, and they still face the risk of losing their money. Most new ideas fail at first. The entrepreneurs who succeed keep good records of what they tried, listen to customers, and keep improving. Your own business, even a small one, works the same way: test, record, improve, and ask what customers will gladly pay for.

PICTURE STUDY



Edison's Workers outside the Menlo Park Laboratory, Unknown photographer, 1880 · Photograph · Thomas Edison National Historical Park, West Orange, New Jersey
Image: [Wikimedia Commons](#), public domain

This photograph shows Edison's team posing in front of the main laboratory building at Menlo Park around the time they perfected the electric light. The building looks plain, like a long country schoolhouse, but inside it was full of chemicals, tools, wires and glass. Edison called it his "invention factory." Years later, Henry Ford had the building moved to his museum in Dearborn, Michigan, where you can still see it.

Look closely

- Count the people on the porch and balcony. Why did Edison need so many helpers?
- Look at the building. Does it look like a fancy office, a house or a workshop? What clues tell you?
- Find the windows. Why would a laboratory want lots of daylight?
- Look at the setting around the building. Is this a city or a country village? Why might Edison want to work there?

Talk about it

1. Why was a team better than one inventor working alone?
2. Who besides Edison took a risk on the electric light?

3. What would have happened to Edison's business if he had invented a light bulb but no way to deliver electricity?

PROJECT

The Kitchen Invention Factory

You will act like Edison's team: test five materials to find the best one for a job, keep a careful test log with costs, and present your best design as if to an investor.

You will need

- Five materials to test for a paper boat: printer paper, wax paper, aluminum foil, a paper towel, and paper covered with crayon wax
- A sink, tub or bowl of water and a handful of pennies
- A stopwatch or clock
- Ledger notebook

Steps

1. Make one small boat of the same size and shape from each material.
2. In your ledger, rule a test log with columns: Trial, Material, Pennies held before sinking, Minutes afloat, Cost of material (estimate), Notes.
3. Test each boat: float it, then add pennies one at a time until it sinks. Record the number of pennies.
4. Test again for time: float each boat with 3 pennies and record how many minutes it stays afloat (stop at 10 minutes).
5. Ask a parent to help you estimate the cost of each material per boat (for example, foil costs more than printer paper).
6. Choose the best boat for a customer who wants a cheap boat that holds 5 pennies for 5 minutes. Is the strongest boat always the best choice?
7. Give a one-minute pitch to your "investor" (a parent): the problem, your best design, what it costs and why someone would buy it.

Tips

- Edison's team tested thousands of materials. A failed test is not wasted if you record what you learned.
- Change only one thing at a time, so you know what made the difference.

Check your work

- ☐ I can explain what an entrepreneur does.
- ☐ My test log records every trial with numbers and costs.
- ☐ I can explain how Edison turned his laboratory into a business.

LEDGER NOTEBOOK

1. Draw a light bulb and label the glass, the filament, the base and the wires. Write one sentence about why the filament was so hard to get right.
2. Draw Edison's whole electric system in a chain: generator, wires, meter, switch, bulb.
3. Make a bar graph from your test log showing how many pennies each boat held.

From history. Edison held more than a thousand U.S. patents during his life, more than almost anyone else in American history. Many of them were for improvements his team made to the phonograph, electric lighting, motion pictures and batteries.

COMMON MISTAKES

- Thinking Edison did everything alone. He led a team of skilled workers.
- Thinking an invention is the same as a business. A business must make the invention well, price it fairly and sell it.
- Thinking failed tests are a waste. Careful records of failures lead to success.

Make it a game • Ten Tries Factory. Edison tried many tests before one worked. Challenge: build the tallest tower you can from index cards in three rounds of one minute. After each round, write what failed. Beat your own tower height each time. Finish by saying what risk an entrepreneur takes and why a prototype helps.

6.2 ONE FAIR PRICE: WANAMAKER'S PRICE TAGS AND MONEY-BACK GUARANTEE

OBJECTIVES

- Explain how shopping worked before fixed prices and why haggling could be unfair.
- Tell how John Wanamaker's one-price policy and money-back guarantee built trust and a great store.
- Run a one-price shop with a guarantee and keep a sales and returns ledger.

Warm-up. Imagine a store where nothing has a price tag. You must ask the clerk, and he can charge you whatever he thinks you will pay. Write down how you would feel shopping there. Who would get the best prices?

WATCH

Wanamaker's Price Tags Made In PA

Historical Society of Pennsylvania · 2:30

<https://www.youtube.com/watch?v=0YABsq4IAAg>

WHEN TO WATCH

After the story, before the big idea.

Note: A short segment from a Philadelphia television station, filmed at the Historical Society of Pennsylvania; it may begin with a brief commercial.

BACKUP VIDEO

Behind the Price Tag: The Many Mansions of John Wanamaker

This House · 5:15

<https://www.youtube.com/watch?v=xRfhDwN5mGo>

Watch the first two minutes, about the Grand Depot and "satisfaction guaranteed."

KEY TERMS

haggle

To argue back and forth with a seller over the price of something.

fixed price

A price marked on the item that is the same for every customer.

guarantee

A promise that a product is good, often with a refund or repair if it is not.

refund

Money given back to a customer who returns something.

department store

A large store that sells many kinds of goods in different sections, or departments.

CORE IDEAS

The story. In the 1800s, shopping in most stores meant **haggling**. Prices were not marked. A clerk sized you up and named a price, and the customer argued it down. A clever bargainer might pay half what a shy farmer's wife paid for the same coat. Customers left wondering whether they had been cheated. In 1861, a young Philadelphia man named John Wanamaker opened a men's clothing store called Oak Hall. Wanamaker was a Sunday-school superintendent who believed a store should treat every customer by the Golden Rule. So he marked every item with **one fair price**, the same for everyone, and promised that a customer who was not satisfied could bring the goods back.

How they figured it out. Other merchants thought he was foolish. Would customers not cheat him by returning clothes they had worn? Would he not lose sales by refusing to bargain? But customers loved knowing they would be treated fairly. They told their friends. Wanamaker advertised his promises in the newspapers, and in time he offered a written guarantee that money would be refunded for goods returned in good condition. In 1876 he opened a huge store in an old railroad freight station, which he called the Grand Depot, with many departments under one roof. It became one of the first great **department stores** in America, and it was crowded with shoppers for decades.

The big idea. A **fixed price** treats every customer the same, and a **guarantee** takes away the buyer's fear of being stuck with something bad. Both build **trust**, and trust brings customers back again and again. A merchant who cheats can make extra money once; a merchant who is trusted makes fair money for a lifetime. Jesus taught, "let your communication be, Yea, yea; Nay, nay" (Matthew 5:37): an honest seller does not need tricks, because his word and his price tag mean what they say.

In business today. Almost every store you visit has price tags and a return policy because of merchants like Wanamaker. Some things are still bargained over, such as houses, cars and goods at a yard sale, and that is fair when both sides know they are bargaining. But in everyday shopping, customers expect one honest price. A clear return policy is still one of the best ways a business can show it stands behind what it sells. When you sell something yourself, mark a fair price and be ready to make things right if a customer is not satisfied.

PICTURE STUDY



John Wanamaker, Bain News Service, about 1900 · Photograph · Library of Congress, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

John Wanamaker (1838–1922) began work as an errand boy in a bookstore at age fourteen and became one of the most successful merchants in America. He also started a Sunday school in a poor neighborhood of Philadelphia that grew to thousands of students, and he served the country as Postmaster General. This photograph shows him in his later years.

Look closely

- Look at Wanamaker's face and eyes. What words would you use to describe him?
- Look at his clothes. What do they tell you about how he wanted to appear to customers?
- Find the writing at the top of the photograph. Why would a news photo service label its pictures?

Talk about it

1. Why would customers trust a merchant who gave every person the same price?
2. How did Wanamaker's faith shape the way he ran his store?

3. Would you rather shop in a store with price tags or one where you must haggle? Why?

PROJECT

Haggling Shop versus One-Price Shop

You will run a small shop twice: once with no price tags, where you haggle, and once with fixed prices and a money-back guarantee. You will keep a ledger of sales and returns and see which one customers trust.

You will need

- Six small items to “sell” (pencils, erasers, stickers, small toys)
- Index cards for price tags and a guarantee sign
- Play money
- Two or more family members as customers
- Ledger notebook

Steps

1. Round 1 (haggling): put out the items with no price tags. Each customer must ask and bargain. You may charge different customers different prices. Record each sale: Customer, Item, Price paid.
2. Ask each customer afterward: Do you think you got a fair price? Do you think someone else paid less? Record their answers.
3. Round 2 (one price): write a fair price tag for each item and make a sign: “One price for all. Money back if not satisfied.” Sell the items again.
4. Let one customer return an item for a full refund. Record it in a Returns column.
5. In your ledger, compare the rounds: total money taken in, refunds, and how customers felt.
6. Ask your customers: Which shop would you come back to? Why?
7. Write a short paragraph explaining why Wanamaker’s policies built trust, even though he sometimes gave refunds.

Tips

- A guarantee should be fair to both sides. Wanamaker asked that goods be returned in good condition.

- Notice that refunds cost money, but customers who trust you come back and bring friends.

Check your work

- ☐ I can explain what haggling is and why it could be unfair.
- ☐ My ledger shows sales and returns in both rounds.
- ☐ I can explain how one price and a guarantee build trust.

LEDGER NOTEBOOK

1. Design a price tag for a store in 1876 with the item, the one fair price, and Wanamaker's guarantee in small print.
2. Make a T-chart: Shopping with haggling and Shopping with one price.
3. Write your own store's guarantee in one or two sentences, as clearly as you can.

From history. In 1879 Wanamaker paid for one of the first full-page newspaper advertisements ever bought by a store. Instead of wild boasts, his ads were known for describing the goods plainly and giving honest prices.

COMMON MISTAKES

- Thinking a guarantee means losing money. Some refunds cost a little, but trust brings many more sales.
- Thinking haggling is always wrong. It is fair when both sides know they are bargaining, as at a yard sale.
- Forgetting the conditions of a guarantee. A good guarantee is fair to the buyer and the seller.

Make it a game • Tags and Guarantees. Stick pretend price tags on ten household items. Round one: your parent haggles with you and you must hold firm, saying this is a fixed price. Round two: your parent returns an item with a complaint and you give a refund with a smile, as Wanamaker's guarantee promised. Say why one fair price builds trust.

Scripture. “But let your communication be, Yea, yea; Nay, nay: for whatsoever is more than these cometh of evil.” (Matthew 5:37, KJV)

An honest person does not need tricks or extra promises. A fair price tag is a simple “yes” that means what it says to every customer.

6.3 TRUTHFUL ADVERTISING: THE SEARS CATALOG AND HONEST PERSUASION

OBJECTIVES

- Explain what advertising is for and the difference between honest persuasion and false advertising.
- Tell how the Sears, Roebuck catalog grew and how the company learned to describe its goods accurately.
- Write and test an honest advertisement and check every claim in it.

Warm-up. Find an advertisement in a magazine, store flyer or on a cereal box. Write down every promise it makes. Put a check next to each promise you could prove true, and a question mark next to each one you could not.

WATCH

RUFF RUFFMAN | Say? Cheese! How Ads Work | PBS KIDS

PBS KIDS • 3:44

<https://www.youtube.com/watch?v=NEsGX1ck2F4>

WHEN TO WATCH

After the warm-up, before the story of the Sears catalog.

KEY TERMS

advertising

Messages that tell people about a product or service and try to persuade them to buy it.

persuade

To give someone good reasons to believe or do something.

claim

A statement that something is true, such as “lasts twice as long.”

false advertising

Advertising that tells lies or tricks people about a product.

catalog

A book or list of goods for sale, with descriptions, pictures and prices.

CORE IDEAS

The story. In 1886, a young railroad station agent in Minnesota named Richard Sears received a box of watches that a local jeweler had refused. Instead of sending them back, Sears sold them to other station agents along the line and made a profit. Soon he was selling watches by mail and hired a watch repairman named Alvah Roebuck. Their company, Sears, Roebuck and Co., began printing a **catalog**, and by the 1890s it was a thick book with hundreds of pages offering farm families almost anything: shoes, stoves, sewing machines, plows, toys, medicines and even, later, whole houses delivered as kits. A farm family far from any big store could order by mail and pick up the package at the railroad station.

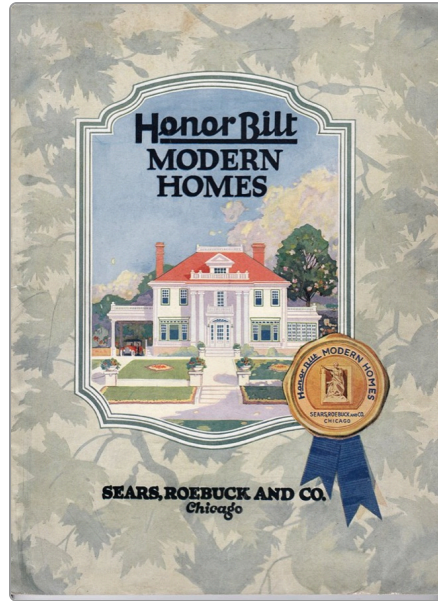
How they figured it out. Richard Sears was a gifted writer of ads, but in the early years some of his descriptions promised more than the goods could deliver. Customers who felt fooled complained or sent things back. A Chicago clothing businessman named Julius Rosenwald became a partner in 1895 and insisted that every catalog description be accurate. In time the company set up its own testing laboratory to check its goods against the catalog's claims, and it promised "Satisfaction guaranteed or your money back." Farm families came to trust the catalog so much that some called it the "wish book." Around the same years, advertising men themselves began a "truth in advertising" movement, and laws were passed in many states against false advertising.

The big idea. **Advertising** is useful: it tells customers that a product exists, what it does and what it costs. Good advertising **persuades** with true reasons: real facts, clear pictures, honest prices and promises the seller keeps. **False advertising** tricks people with lies, hidden costs or pictures that make a product look better than it is. False ads may bring a quick sale, but they destroy trust. Honest ads build a good name. As Proverbs says, "Lying lips are abomination to the LORD: but they that deal truly are his delight" (Proverbs 12:22).

In business today. Advertising is everywhere: on websites, signs, packages, radio and phones. Laws forbid false claims, and businesses that make them can be fined. But laws cannot catch everything, so a wise customer asks: What exactly is being promised? Can it be checked? What is left out? And a wise seller asks: Would I be comfortable if every customer checked every word of my ad? When you advertise

your own product, describe it plainly, show what it really looks like, give the real price, and promise only what you will gladly keep.

PICTURE STUDY



Sears, Roebuck and Co. "Honor Bilt" Modern Homes Catalog, Sears, Roebuck and Co., 1918 · Printed catalog cover · Published in Chicago

Image: [Wikimedia Commons](#), public domain

Sears sold so many things by mail that it even sold houses. A family could choose a house from this catalog, and Sears would ship all the lumber, nails, windows, doors and paint by railroad in numbered pieces, with a thick book of instructions. Tens of thousands of these kit houses were built across America, and many are still lived in today. A family buying a whole house by mail had to trust that the catalog's pictures and descriptions were true.

Look closely

- Find the words "Honor Bilt." What is the company promising with that name?
- Find the gold seal and blue ribbon. What does a seal like that usually mean?
- Look at the house in the picture. What makes it look inviting?
- Find the company's name and city. Why put them on the cover?

Talk about it

1. What would a family need to believe about Sears before ordering a whole house by mail?
2. Which claims about a house could a buyer check, and which could he not check until it arrived?

3. How would a false picture in this catalog hurt both the family and Sears?

PROJECT

Two Ads: Stretched and Straight

You will write two advertisements for the same simple product, one that stretches the truth and one that is honest and still persuasive. Then you will test them on your family and check every claim.

You will need

- A simple product you or your family made or own (a bookmark, a jar of cookies, a potholder)
- Two sheets of paper, markers and colored pencils
- Ledger notebook

Steps

1. Look closely at your product. In your ledger, list five true facts about it: what it is made of, its size, what it does, how long it took to make, and its price.
2. Ad 1 (stretched): write an ad that exaggerates. Use words like “the best in the world” and “lasts forever,” and draw it bigger or shinier than it is. (This one is only for learning and will not be used.)
3. Ad 2 (straight): write an honest ad using only your true facts. Make it persuasive with clear pictures, real reasons to buy, a fair price and a promise you will keep, such as a guarantee.
4. Show both ads to two or three family members. Ask: Which would make you want to buy? Which do you trust more? Record their answers.
5. Make a claims checklist in your ledger: write every claim from Ad 2 and next to each one write how a customer could check it.
6. Show your product beside Ad 1. Ask your family how they would feel if they had bought it from that ad.
7. Write a paragraph explaining the difference between persuading and tricking, and keep Ad 2 for your market day.

Tips

- Honest ads can still be lively and fun. Good pictures, kind words and a clear price are powerful.

- Watch for hidden tricks: tiny print, missing costs or a picture of something different from what you sell.

Check your work

- ☐ I can explain the difference between honest persuasion and false advertising.
- ☐ Every claim in my honest ad is on my checklist with a way to check it.
- ☐ I can tell how Sears learned to describe its goods accurately.

LEDGER NOTEBOOK

1. Draw a catalog page for three items you could sell, each with an honest picture, a short description and a price.
2. Make a list of “red flag” words in ads that are hard to check, such as “best ever” or “miracle.”
3. Draw a farm family in 1900 waiting at the railroad station for their catalog order.

From history. Many rural families kept their old Sears catalogs for years. Children cut out the pictures to make paper dolls and play store, and some schoolteachers in country schools used the catalog to teach reading and arithmetic.

COMMON MISTAKES

- Thinking all advertising is bad. Honest advertising helps customers learn about good products.
- Thinking an ad is honest just because no single sentence is a lie. Pictures and missing facts can also mislead.
- Promising more than you can deliver. A promise in an ad is a promise you must keep.

Make it a game · Stretched or Straight. Pick any object in the room, such as a spoon. Write two one-sentence ads, one honest and one stretched with a claim nobody could prove. Read both in your best announcer voice. Your parent guesses which is false and names the claim that cannot be tested. Switch roles, then describe how Sears learned to write accurate catalog words.

6.4 CUSTOMER SERVICE: L.L. BEAN'S LEAKY BOOTS

OBJECTIVES

- Explain what customer service is and why it matters after the sale.
- Tell how L.L. Bean handled his failed first boots and built a company on keeping customers satisfied.
- Practice good customer service in role-play and record customer feedback.

Warm-up. Think about a time you or your family got very good service at a store, a restaurant or a doctor's office. What exactly did the person do? Then think of a time the service was poor. Write one sentence about each.

WATCH

100th Anniversary Maine Hunting Shoe | L.L.Bean

L.L.Bean • 1:32

<https://www.youtube.com/watch?v=VogqTpKL5u8>

WHEN TO WATCH

After the story of the leaky boots.

KEY TERMS

customer service

The way a business helps and treats its customers before, during and after a sale.

feedback

What customers say about a product or service, good or bad, that helps a business improve.

mail order

Buying goods from a catalog or advertisement and having them sent by mail.

complaint

A customer's report that something was wrong with a product or service.

loyal customer

A customer who keeps coming back to the same business because he trusts it.

CORE IDEAS

The story. Leon Leonwood Bean, called L.L., lived in Freeport, Maine, and loved hunting in the woods. He was tired of coming home with cold, wet feet, because leather boots soaked through in the wet Maine woods. In 1912 he had an idea: he had a shoemaker sew leather tops onto rubber bottoms, making a boot that kept feet dry and was still light for walking. He called it the Maine Hunting Shoe. He wrote a small booklet describing it and mailed it to hunters who had bought Maine hunting licenses, offering a full guarantee. He sold 100 pairs by mail.

How they figured it out. Then disaster struck: 90 of the first 100 pairs came back. The stitching had failed, and the rubber pulled away from the leather. Many people would have given up or argued with the customers. Bean did neither. He kept his promise and refunded every customer's money. He borrowed money, worked with his shoemaker and a rubber company to fix the problem, and made the boots sturdier. Then he offered them again. Customers who had been treated so fairly gave him a second chance, and the improved boots worked. L.L. Bean posted a simple rule in his store: sell good goods at a reasonable profit, treat customers like human beings, and they will always come back for more.

The big idea. Customer service means caring for customers before, during and especially after the sale. A **complaint** is not just a problem; it is **feedback**, free advice about how to get better. A business that fixes its mistakes quickly and kindly turns unhappy customers into **loyal customers** who come back and tell their friends. This is the Golden Rule in business: treat customers the way you would want to be treated. Paul wrote, "Look not every man on his own things, but every man also on the things of others" (Philippians 2:4).

In business today. L.L. Bean grew from one small shop into a large company that still sells the Maine Hunting Shoe, and its store in Freeport has been open twenty-four hours a day for many years. Good businesses today train workers to listen, answer questions, fix problems and say thank you. They ask customers for feedback and use it to improve. Small businesses can serve customers even better than big ones, because the owner knows each customer by name. When you run your own business, remember: the sale is not finished until the customer is glad he bought from you.

PICTURE STUDY



General Store Interior, Moundville, Alabama, Walker Evans, 1936 · Photograph for the U.S. Farm Security Administration · Library of Congress, Washington, D.C.

Image: [Wikimedia Commons](#), public domain

Walker Evans photographed this small country store in Alabama for a U.S. government project that recorded American life in the 1930s. A country storekeeper like this one knew nearly every customer by name. He weighed out flour and sugar, ordered things people needed, and often let trusted farm families pay at harvest time. His whole business depended on good service and a good name in the community.

Look closely

- Find the stacks of flour sacks. Why would a store keep so many?
- Find the lanterns and dishes. What does this tell you about what customers needed?
- Find the calendar. What month and year does it show?
- Find the iron safe. Why would a storekeeper need one?

Talk about it

1. How might this storekeeper give good customer service without any computers or phones?
2. Why would service matter even more in a small town with only one or two stores?

3. What would happen to this store if the storekeeper treated customers rudely?

PROJECT

The Customer Service Desk

You will practice handling real customer situations kindly and fairly, keep a log of each one, and then ask your family for feedback on a product or service you provide.

You will need

- Index cards for customer situations
- A small product to “sell” (a bookmark, a snack, a drawing)
- Ledger notebook

Steps

1. With a parent, write six customer situations on cards. For example: “The cookie I bought was broken.” “I want to know what is in this.” “I was charged the wrong amount.” “I love this; do you have another color?” “I waited a long time.” “I changed my mind; can I return it?”
2. Take turns: a parent draws a card and plays the customer; you play the business owner and respond.
3. After each one, rate your answer together from 1 to 5: Did I listen? Was I polite? Did I fix the problem fairly? Did I thank the customer?
4. Record each situation in your ledger: Situation, What I did, Rating, What I would do better.
5. Now offer a real small service to your family this week, such as making a snack or helping with a chore. Afterward, ask two family members three feedback questions: What did you like? What could be better? Would you ask me again?
6. Record their answers, and write one change you will make.
7. Write a short paragraph: Why did L.L. Bean refund 90 pairs of boots, and why did it help his business?

Tips

- Listen first. Many unhappy customers mostly want to be heard.
- Always thank customers for feedback, even when it is hard to hear.

Check your work

- ☐ I can explain what good customer service is.
- ☐ My ledger records each situation with a rating and an improvement.
- ☐ I can tell the story of L.L. Bean's boots and what it teaches.

LEDGER NOTEBOOK

1. Draw the Maine Hunting Shoe and label the rubber bottom, the leather top and the stitching that failed at first.
2. Write your own business's customer promise in one sentence, like L.L. Bean's rule.
3. Draw a "feedback thermometer" and color it to show how your family rated your service.

From history. L.L. Bean's first booklet for the Maine Hunting Shoe was just a few pages long. Within a few decades, the company's catalog was mailed to customers all over the country, and Bean himself kept answering letters from hunters and fishermen who wrote asking his advice.

COMMON MISTAKES

- Thinking the job is done once the money is paid. Good service continues after the sale.
- Treating complaints as attacks. They are free advice that helps you improve.
- Promising a guarantee and then making excuses. A guarantee must be kept gladly.

Make it a game • The Leaky Boot Desk. Your parent comes to your desk with a complaint about a boot that leaks, the way L.L. Bean's first boots did. You earn a point for each step: listen, say sorry, offer a fix, and ask for feedback. Win a loyal customer at four points. Swap roles, and try to be a customer who stays kind.

Scripture. "Look not every man on his own things, but every man also on the things of others." (Philippians 2:4, KJV)

Good customer service looks at things from the customer's side. Caring about what others need is not only kind; it is the heart of a business people trust.

ENTREPRENEURSHIP AND SALES

An **entrepreneur** is a person who sees a need, comes up with a way to meet it, and takes the risk of starting a business to do it. Then comes the next challenge: finding customers and selling to them honestly. In this unit you will learn how great entrepreneurs turned ideas into businesses, how honest stores changed the way people shop, how to advertise without stretching the truth, and why taking care of customers after the sale matters as much as the sale itself.

You will visit Thomas Edison’s “invention factory” at Menlo Park, where inventing itself became a business; walk into John Wanamaker’s store in Philadelphia, where every item had one fair price and could be brought back for a refund; read the pages of the Sears, Roebuck catalog; and meet L.L. Bean, who refunded ninety of his first hundred pairs of boots and built a famous company by doing it. In every lesson ask: **how does this business serve its customers honestly?**

PREREQUISITES

- Knows supply, demand and competition (Unit 3)
- Knows patents (Lesson 5.2) and honest labels (Lesson 5.4)
- Can add, subtract and multiply money amounts

MASTERY CHECKLIST

- ☐ I can explain what an entrepreneur does and what risks he takes.
- ☐ I can tell how Edison ran his laboratory as a business.
- ☐ I can explain why Wanamaker’s one price and money-back guarantee built trust.
- ☐ I can tell the difference between honest persuasion and false advertising.
- ☐ I can give examples of good customer service and explain why it brings customers back.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Thomas Edison National Historical Park (National Park Service)**: Free. Photographs, history and virtual tours of Edison's laboratory complex in West Orange, New Jersey, where he moved after Menlo Park. Good for Lesson 6.1.
- ***The Toothpaste Millionaire*, by Jean Merrill (HarperCollins)**: Ages 8–12. A funny, much-loved novel about a sixth grader who makes his own toothpaste, sells it honestly at a fair price, and learns about costs, advertising and running a business. Read alongside this unit.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

6.1 Edison's Invention Factory: Turning Ideas into a Business

2 sessions of 45 minutes

6.2 One Fair Price: Wanamaker's Price Tags and Money-Back Guarantee

2 sessions of 45 minutes

6.3 Truthful Advertising: The Sears Catalog and Honest Persuasion

2 sessions of 45 minutes

6.4 Customer Service: L.L. Bean's Leaky Boots

2 sessions of 45 minutes

UNIT 6 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What is an entrepreneur? Name one risk an entrepreneur takes.

2. **5 pts**

Why did Edison need investors and a whole system, not just a light bulb?

3. (5 pts)

An inventor tests 8 filament materials a day. How many materials can her team test in 3 weeks of 5 working days each?

4. (5 pts)

What was unfair about haggling in the 1800s?

5. (5 pts)

How did Wanamaker's one price and money-back guarantee help his business?

6. (5 pts)

A store sells 40 coats at \$25 each. Customers return 2 coats for a full refund. How much money does the store keep?

7. (5 pts)

What is the difference between honest persuasion and false advertising?

8. (5 pts)

How did Sears, Roebuck learn to make its catalog more trustworthy?

9. (5 pts)

What did L.L. Bean do when 90 of his first 100 pairs of boots came back? Why was that wise?

10. (5 pts)

What would happen to a business that ignored every complaint? Explain.

ANSWER KEY

1. A person who sees a need, finds a way to meet it and starts a business to do it.
Risks: losing money, time or reputation if the business fails.
2. A bulb was useless without electricity delivered to homes, so he needed generators, wires, meters and switches, which cost a great deal of money that investors provided.
3. $3 \times 5 = 15$ days. $15 \times 8 = 120$ materials.
4. Customers paid different prices for the same item depending on how well they bargained or how the clerk judged them, so shy or trusting customers often paid more and no one knew if he was cheated.
5. Customers trusted they were treated fairly and would not be stuck with bad goods, so they came back and told friends, and his store grew.
6. $40 \times \$25 = \$1,000$. Refunds: $2 \times \$25 = \$50$. $\$1,000 - \$50 = \$950$.
7. Honest persuasion gives true facts, clear pictures, real prices and promises the seller keeps. False advertising uses lies, tricks, hidden costs or misleading pictures.
8. Julius Rosenwald insisted descriptions be accurate, the company tested its goods in its own laboratory, and it guaranteed satisfaction or money back.
9. He refunded every customer and fixed the boot. It kept his promise, earned customers' trust and gave him a second chance with a better product.
10. Unhappy customers would leave and tell others, the business would never learn how to improve, and in time it would lose its customers and fail.

PORTFOLIO PIECE: MY PRODUCT LAUNCH KIT

Choose one simple product or service you could really offer at the family market day. Put together a launch kit with four parts: a test log showing at least three versions you tried and what you improved; a fair price tag; an honest advertisement with a claims checklist; and a one-sentence customer promise or guarantee you will keep. Add a short page explaining how you would handle an unhappy customer.

LOOK FOR	WHAT IT MEANS
Testing	The test log shows real trials with numbers and clear improvements.
Honesty	The price tag and advertisement are fair and truthful, and every claim can be checked.
Service	The guarantee and the plan for an unhappy customer are kind, clear and fair.
Presentation	The kit is neat, complete and ready for market day.

BOOKKEEPING: LEDGERS, INVENTORY, COST AND PROFIT

Every business, from a lemonade stand to a giant company, must answer a few simple questions: How much money came in? How much went out? What do we have on the shelves? Are we making a profit? The way to answer them is **bookkeeping**: writing down every amount, honestly and in order, so that the numbers tell the truth. In this unit you will learn to keep a **ledger with columns**, count **inventory**, set a price above **cost**, and figure out a **profit margin**.

You will look over George Washington's shoulder as he records every shilling in his account books; follow young Abraham Lincoln into a country store that failed and left him with a debt he spent years repaying; watch Frank Woolworth learn from a failed store and build a chain of five-and-ten-cent stores; and see how the A&P grocery company grew huge by earning only a few cents on each dollar. Through it all, you will keep a real ledger of your own. As Jesus said, "He that is faithful in that which is least is faithful also in much" (Luke 16:10).

PREREQUISITES

- Can add and subtract money amounts with decimals
- Can multiply and divide whole numbers by one-digit numbers
- Knows what profit means (money in minus money out)

MASTERY CHECKLIST

- ☐ I can keep a ledger with columns for date, description, money in, money out and balance.
- ☐ I can take an inventory and use it to decide what to reorder.
- ☐ I can explain cost, price and markup and set a price above cost.
- ☐ I can figure out profit and profit margin in cents per dollar.
- ☐ I can explain why honest, careful books matter.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **George Washington’s Mount Vernon: digital collections and Washington Library:** Free at mountvernon.org. Articles and images about Washington’s life as a farmer and businessman, including his account books, mill and fishery. Good for Lesson 7.1.
- **A free spreadsheet: Google Sheets or LibreOffice Calc:** Free. With a parent, set up your ledger in a spreadsheet so the balance column adds itself. Never required; a paper ledger is just as good.
- **Pay Day (family board game, Hasbro):** Ages 8 and up. A board game about earning, paying bills and keeping track of money over a month. A good partner for the ledger lessons.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

7.1 A Ledger with Columns: George Washington’s Account Books

2 sessions of 45 minutes

7.2 Inventory: Lincoln’s Country Store and Knowing What You Have

2 sessions of 45 minutes

7.3 Cost and Price: Woolworth’s Five-and-Ten

2 sessions of 45 minutes

7.4 Profit Margin: The A&P and a Few Cents on Every Dollar

2 sessions of 45 minutes

UNIT 7 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Name the five columns of a simple ledger.

2. **5 pts**

Your balance is \$12.00. You earn \$5.00 raking leaves, spend \$3.50 on a book, and give \$1.50 at church. What is your new balance?

3. **5 pts**

Why did Washington keep an exact record of his expenses during the War of Independence?

4. **5 pts**

What is inventory, and why is too much inventory a problem?

5. **5 pts**

What did Lincoln do about the debts from his failed store, and what did it earn him?

6. **5 pts**

A store has 30 notebooks. It sells 4 a day and reorders when 10 are left. After how many days must it reorder?

7. **5 pts**

A toy costs a store 6¢ and sells for 10¢. What is the markup? If the store sells 500 toys, what is the total markup?

8. **5 pts**

How did Frank Woolworth keep his costs low enough to sell goods for five and ten cents?

9. **5 pts**

A grocery store sells \$200 of food and has \$190 of expenses. What is its profit, and how many cents of profit does it keep from each dollar of sales?

10. **5 pts**

What would happen to a business that never counted its money or its inventory? Explain.

ANSWER KEY

1. Date, Description, Money in, Money out, Balance.
2. $\$12.00 + \$5.00 - \$3.50 - \$1.50 = \$12.00$.
3. He took no salary and asked Congress only to repay his expenses, so he had to show exactly what he spent; a leader handling other people's money must keep honest books that can be checked.
4. Inventory is the goods a business has on hand to sell. Too much ties up money the owner already spent, and the goods may spoil, go out of style or never sell.
5. He paid them back a little at a time over many years instead of running away from them. It earned him the name "Honest Abe" and a trusted reputation.
6. $30 - 10 = 20$ notebooks can be sold first. $20 \div 4 = 5$ days.
7. $10\text{¢} - 6\text{¢} = 4\text{¢}$. $500 \times 4\text{¢} = 2,000\text{¢} = \$20.00$.
8. He bought huge amounts directly from factories, chose fast-selling goods, dropped items that did not sell, and used the same buying system for many stores.
9. Profit: $\$200 - \$190 = \$10$. $\$10 \div \$200 = 0.05$, so 5 cents per dollar (5%).
10. It would not know whether it was making a profit, would run out of things customers want or buy too much, would not notice loss or theft, and could fall into debt without realizing it.

PORTFOLIO PIECE: A MONTH OF LEDGER PAGES

Keep your ledger for a full month, building on your two-week ledger from Lesson 7.1. Record every transaction with a date, description, money in, money out and balance, and keep your receipts. At the end of the month, write a one-page report: your starting and ending balance, your total money in and out, what you spent the most on, what you saved and gave, and whether your books balanced. Add one inventory count or cost sheet from this unit and one sentence on what you will do differently next month.

LOOK FOR	WHAT IT MEANS
Completeness	Every transaction for the month is recorded with all five columns.
Accuracy	Balances are correctly added and subtracted and match the real money, or differences are explained.
Report	The report gives correct totals and clearly explains what the numbers show.
Honesty and neatness	Corrections are shown clearly, receipts are kept, and the pages are easy to read.

7.1 A LEDGER WITH COLUMNS: GEORGE WASHINGTON'S ACCOUNT BOOKS

OBJECTIVES

- Tell how George Washington kept careful account books all his life.
- Set up a ledger with columns for date, description, money in, money out and balance.
- Record two weeks of real transactions and keep a running balance.

Warm-up. Empty a coin purse, piggy bank or jar and count the money. Write the total. Now try to remember: how did that money get there, and how much have you spent from it this month? Is it hard to remember? Why?

WATCH

Special Collections: A Ledger from Mount Vernon, Kept by George Washington

Washington and Lee University • 3:05

<https://www.youtube.com/watch?v=ffQSTxlw5JQ>

WHEN TO WATCH

After the story, before the big idea: a real ledger kept by George Washington.

BACKUP VIDEO

The Fairfax Ledger: A Well of Knowledge

George Washington's Mount Vernon • 6:58

<https://www.youtube.com/watch?v=TN1l7vg6P18>

After the lesson: how curators at Mount Vernon use an old ledger to learn about Washington's household.

KEY TERMS

bookkeeping

Writing down every amount of money that comes in and goes out, in order, so the records are complete and true.

ledger

A book or page where money records are kept in columns.

transaction

Any time money or goods change hands, such as a sale, a purchase or a gift.

balance

The amount of money you have after adding what came in and subtracting what went out.

receipt

A paper that shows what was bought or paid, when, and for how much.

CORE IDEAS

The story. George Washington learned to keep accounts as a boy, copying out models of business forms and records in his school notebooks. As a young surveyor and then as a farmer at Mount Vernon, he wrote down almost every **transaction**: what he paid for seed and tools, what he sold his wheat and flour for, what he spent on clothes and books, what he lent and what he gave to the poor and to his church. He kept separate pages for each person he did business with, so he could see at a glance who owed him and whom he owed. Some of his account books still survive, and historians use them to learn how a Virginia farm worked.

How they figured it out. When Washington became commander of the Continental Army in 1775, he told Congress he would not take a salary. He asked only that Congress repay the expenses he paid for the army's business. For eight years, through the whole war, he kept an exact record of those expenses: horses, food, spies, travel, letters and more. In 1783 he turned in his account books to be checked by the government's accountants, and they were found careful and complete. Washington knew that a leader who handles other people's money must keep honest books that anyone can check.

The big idea. A **ledger** is a page with columns that turns a jumble of payments into a clear story. The simplest ledger has five columns: *Date*, *Description* (what happened), *Money in*, *Money out* and *Balance*. Each line is one transaction. To find the new balance, start with the old balance, add money in, and subtract money out. If your balance matches the money you can actually count, your books are right. If not, something was missed. Keeping **receipts** helps you check.

In business today. Every business keeps a ledger, though most use computer programs instead of pen and paper. Banks keep a ledger for every account and send

customers a statement each month. Families keep track of spending in notebooks, spreadsheets or phone apps. The rules have not changed since Washington's time: write it down when it happens, write it down honestly, and check your balance against what you really have. A business owner who does not keep good books is like a ship's captain with no map.

PICTURE STUDY



Hermann von Wedigh III, a Merchant with His Book, Hans Holbein the Younger, 1532 · Oil and gold on oak panel · The Metropolitan Museum of Art, New York

Image: [Wikimedia Commons](#), public domain

Hans Holbein painted this young man in London in 1532. He was Hermann von Wedigh, from a merchant family of Cologne who traded at the Steelyard, the great office of the Hanseatic merchants in London. Holbein shows him with a book on the table. Merchants' books were their most important tools: in them they recorded every sale, every debt and every shipment.

Look closely

- Find the book on the table. Is it open or closed? What is tucked under it?
- Read the gold letters with a parent: "Anno 1532" means "in the year 1532," and "Ætatis suae 29" means "at the age of 29." Why would a portrait record the date and age?
- Look at his clothes. Are they showy or plain? What might that say about a merchant?
- Look at his face. What kind of person would you trust with your money?

Talk about it

1. Why would a merchant want to be painted with his book?
2. What might be recorded in a merchant's book in 1532?

3. How is this book like Washington's account books, and how is it like your ledger?

PROJECT

My Two-Week Ledger

You will set up a real ledger with five columns and keep it for two weeks, recording every bit of money you receive, spend, save or give. At the end you will check your balance against the money you can count.

You will need

- Ledger notebook, ruler and pencil
- Your own money: allowance, gifts or earnings (a parent can give a set amount for the project if you have none)
- An envelope for receipts

Steps

1. Rule a ledger page with five columns: Date, Description, Money in, Money out, Balance.
2. On the first line, count the money you have now and write it as your starting balance.
3. Every time money comes in or goes out, write a line that same day. Example: "May 3 | Allowance | \$3.00 | | \$8.00."
4. Keep every receipt in the envelope, and write the description from the receipt.
5. At the end of each day with a transaction, add or subtract to find the new balance. Use a calculator to check.
6. After two weeks, count your real money. Does it match the last balance? If not, look for a missing line.
7. Write two sentences: What did my ledger show me that I did not know? What will I do differently?

Tips

- Write each transaction the same day. Waiting even a few days makes it easy to forget.
- Use pencil and fix mistakes neatly with a single line through the wrong number, so the record stays honest and clear.

Check your work

- ☐ My ledger has five labeled columns and a line for every transaction.
- ☐ My final balance matches the money I can count, or I found and explained the difference.
- ☐ I can tell how Washington kept his accounts during the war.

LEDGER NOTEBOOK

1. Copy a sample ledger page with five lines of made-up transactions and work out each balance.
2. Draw Washington at his desk at Mount Vernon with his account book, a quill pen and an inkwell.
3. Make a pie chart or bar graph showing how your money was used: Spent, Saved, Given.

From history. As a teenager, Washington copied a list of 110 “Rules of Civility and Decent Behaviour in Company and Conversation” into his school notebook. Near the same pages he practiced writing out business papers, like bills and receipts, the way a young clerk would learn them.

COMMON MISTAKES

- Forgetting small amounts. Little purchases add up and make the balance wrong.
- Adding when you should subtract. Money out always makes the balance smaller.
- Erasing or hiding mistakes. Honest books show corrections clearly.

Make it a game • Washington's Page. Rule a page into five columns: date, description, money in, money out, balance. Your parent calls eight quick transactions, such as sold lemonade for three, bought cups for two. You write them down in ninety seconds. Check the final balance against your parent's own tally. Beat your time on the next round and keep a receipt for each entry.

7.2 INVENTORY: LINCOLN'S COUNTRY STORE AND KNOWING WHAT YOU HAVE

OBJECTIVES

- Define inventory and explain why a store must count and track it.
- Tell the story of Abraham Lincoln's store in New Salem and how he repaid its debts.
- Take an inventory of a family pantry or supply shelf and decide what to reorder.

Warm-up. Open a kitchen cupboard. Without touching anything, guess how many cans or boxes are inside. Now count them. How close was your guess? What would happen to a store owner who only guessed?

WATCH

Don't Eat Your Inventory! Tip #6 for Youth Entrepreneurs

Kids Markets • 2:09

<https://www.youtube.com/watch?v=qylaBlgb0Zw>

WHEN TO WATCH

After the big idea, before the project.

KEY TERMS

inventory

The goods a business has on hand to sell, or a list and count of those goods.

stock

Another word for the goods a store keeps on its shelves to sell.

reorder point

The number of items left that tells you it is time to order more.

shrinkage

Inventory that is lost, broken, spoiled or stolen instead of sold.

credit

Buying now and promising to pay later.

CORE IDEAS

The story. In 1831 a tall young man named Abraham Lincoln arrived in the little village of New Salem, Illinois, and went to work as a clerk in a general store. His

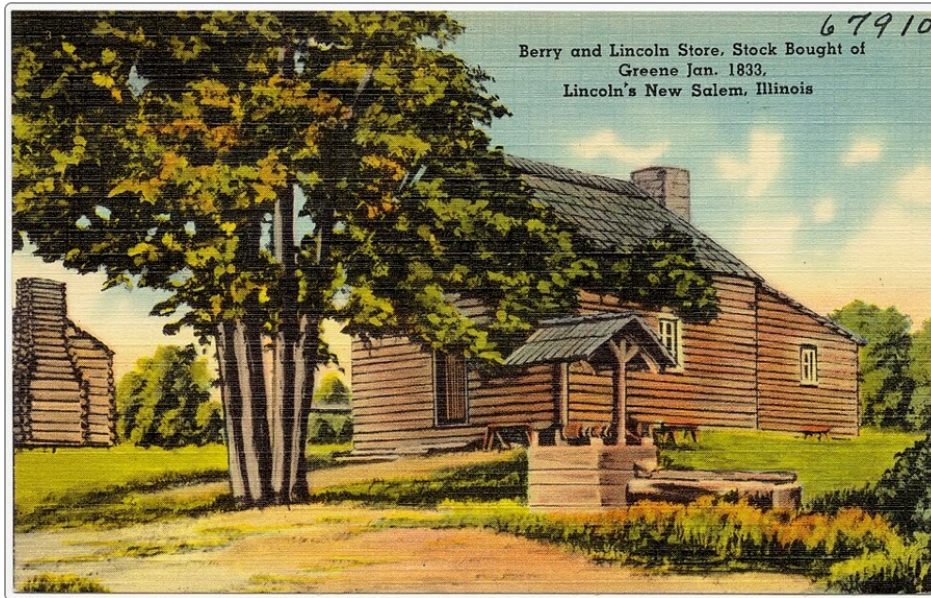
neighbors later told stories of his honesty there: once, they said, he found he had charged a customer a few cents too much and walked miles after closing to return the money. In 1832 Lincoln and a partner, William Berry, bought a store of their own on **credit**, signing promises to pay for it later, and soon bought the **stock** of another store as well. Their shelves held cloth, tools, salt, sugar, coffee, nails and dishes.

How they figured it out. The store did not do well. New Salem was small, other stores competed for the same customers, and the partners had bought more goods than they could sell. Money went out faster than it came in. Within about a year the store “winked out,” as Lincoln put it, and in 1835 Berry died, leaving Lincoln with debts of more than a thousand dollars, a huge sum for a young man then. He jokingly called it his “national debt.” Lincoln could have run away from it, as some men did. Instead, he paid it back a little at a time over many years. His neighbors called him “Honest Abe,” and that good name helped him later in law and in public life.

The big idea. A store’s **inventory** is money sitting on the shelves. The owner paid for every item, and he gets that money back only when it sells. Too little inventory, and customers leave because what they want is missing. Too much, and money is tied up in goods that may spoil, go out of style or never sell. A wise owner counts his inventory regularly, knows which items sell fast and which sit, sets a **reorder point** for each item, and watches for **shrinkage**. As Proverbs says, “Be thou diligent to know the state of thy flocks” (Proverbs 27:23).

In business today. Stores today scan a bar code on every item at the checkout, so their computers keep a running count of inventory and can order more automatically when the count falls to the reorder point. Many stores still close once or twice a year to count every item by hand and check that the computer is right. Restaurants count food every night; farmers count seed, feed and animals. And debts still have to be paid: an honest business owner, like Lincoln, keeps his promises even when the business fails.

PICTURE STUDY



The Berry and Lincoln Store, Lincoln's New Salem, Unknown (postcard publisher), about 1930s · Printed color postcard · Lincoln's New Salem State Historic Site, Illinois

Image: [Wikimedia Commons](#), public domain

After Lincoln became famous, people wanted to see the village where he had lived as a young man. In the 1930s, workers rebuilt New Salem's log houses, shops and stores on their original spots. This postcard shows the rebuilt Berry and Lincoln store, the second store the partners bought in January 1833. Today visitors can step inside and see shelves of goods like those Lincoln sold.

Look closely

- Read the caption with a parent. What does it say was bought in January 1833?
- Look at the store building. How big is it compared with a store today?
- Find the well in front. Why would a well be useful at a village store?
- Imagine the inside. Where would you keep barrels of salt, bolts of cloth and kegs of nails?

Talk about it

1. Why would a small store in a small village be hard to keep in business?
2. What might Lincoln and Berry have done differently with their inventory?
3. Why did repaying his debts matter so much for Lincoln's good name?

PROJECT

The Pantry Inventory

You will take a real inventory of your family's pantry or a supply shelf, set reorder points with a parent, track what is used for one week, and make a shopping list from your numbers.

You will need

- Ledger notebook and pencil
- A pantry, cupboard or supply shelf (snacks, cans, cereal, paper towels, soap)
- A parent to help choose items

Steps

1. Choose 8 items your family uses often, such as cereal, canned soup, rice, peanut butter, paper towels, soap, crackers and pasta.
2. Rule an inventory table: Item, Count on Day 1, Reorder point, Count on Day 7, Used this week, Need to buy?
3. Count each item carefully on Day 1 and record it.
4. With your parent, set a reorder point for each item: the number left when it is time to buy more (for example, reorder cereal when only 1 box is left).
5. On Day 7, count again. Subtract to find how many were used.
6. Mark which items are at or below their reorder point and write a shopping list.
7. Write two sentences: Which item was used fastest? What would happen to a store that ran out of its fastest-selling item?

Tips

- Count partly used items as "1 open" so you know what is really there.
- If something spoiled or was thrown away, record it as shrinkage.

Check your work

- ☐ I can explain what inventory is and why stores count it.

- ☐ My table shows counts for Day 1 and Day 7 and a shopping list from the reorder points.
- ☐ I can tell the story of Lincoln's store and his "national debt."

LEDGER NOTEBOOK

1. Draw the shelves of a country store in 1832 and label at least ten kinds of goods.
2. Make a bar graph of how many of each pantry item your family used in a week.
3. Write Lincoln's "national debt" as a ledger: Debt at start, payments over several years, Debt left.

From history. Lincoln did not give up on New Salem after the store failed. He worked as the village postmaster, carrying letters in his hat to deliver them, and as a surveyor, and he studied law books at night. A few years later he moved to Springfield and became a lawyer.

COMMON MISTAKES

- Thinking more inventory is always better. Too much stock ties up money and may spoil or go unsold.
- Counting carelessly. A wrong count leads to wrong orders.
- Forgetting that inventory was paid for. Goods on the shelf are money that has not come back yet.

Make it a game • What's Missing on the Shelf. Set ten pantry items on a table and write down your inventory list. Close your eyes while your parent hides two items, a pretend shrinkage. Open and say which are missing. Then guess how many cans remain, count, and decide a reorder point for the item you think will run out first.

Scripture. "Be thou diligent to know the state of thy flocks, and look well to thy herds." (Proverbs 27:23, KJV)

A shepherd counts his sheep and a storekeeper counts his stock. Knowing exactly what you have is part of faithful stewardship.

7.3 COST AND PRICE: WOOLWORTH'S FIVE-AND-TEN

OBJECTIVES

- Define cost, price, markup and profit per item.
- Tell how Frank Woolworth learned from a failed store and built a chain of five-and-ten-cent stores.
- Make a cost sheet for a product and choose a price that covers costs and earns a fair profit.

Warm-up. Pick up any item in your house that came from a store. Guess: how much did the store pay for it, and how much did your family pay? Why might those two numbers be different?

WATCH

What is cost, price, profit? | KidEntrepreneurship.com for Elementary & Middle Schools (old video)

Kid Entrepreneurship Programs • 3:14

<https://www.youtube.com/watch?v=Y-CMkeuHra8>

WHEN TO WATCH

After the big idea, before the project.

KEY TERMS

cost

What a business pays to buy or make an item.

markup

The amount added to the cost to set the price: $\text{price} - \text{cost}$.

price

What the customer pays the business for the item.

profit per item

What the business keeps from each sale after paying the item's cost and its other expenses.

chain store

One of many stores with the same name and owner, selling the same kinds of goods.

CORE IDEAS

The story. Frank W. Woolworth grew up on a farm in northern New York and became a shy, hard-working clerk in a dry-goods store in Watertown. In 1878 his employers set up a table of odds and ends, all priced at five cents each. The items sold out in a day. Woolworth thought: what if a whole store sold only five-cent goods? In February 1879 he borrowed \$300 worth of goods from his employer and opened his “Great Five Cent Store” in Utica, New York. It failed within a few months: the street was quiet and there were too few customers. Woolworth did not give up. In June 1879 he opened another store in Lancaster, Pennsylvania, a busy town, and added goods for ten cents. This time it was a success.

How they figured it out. To sell things for five and ten cents and still make money, Woolworth had to keep his **costs** very low. He bought enormous amounts directly from the factories that made the goods, instead of from middlemen, so the factories gave him lower prices. He picked goods that sold quickly, put them out where customers could pick them up and look, and trained clerks to be quick and friendly. If an item did not sell, he stopped buying it. He opened store after store, and each one could buy through the same system. By 1913 his company owned hundreds of stores, and he built the Woolworth Building in New York, then the tallest building in the world.

The big idea. Every business must set a **price** higher than its **cost**. The difference is the **markup**: $\text{price} - \text{cost}$. If a toy costs Woolworth 3¢ and he sells it for 5¢, his markup is 2¢. But the markup is not all profit. Out of it he must pay rent, clerks’ wages, lights and shipping. What is left is the true **profit**. A low price can still make a big total profit if many, many items are sold. Woolworth earned a little on each item but sold millions of them.

In business today. Dollar stores and discount stores still follow Woolworth’s plan: low prices, huge buying, fast-selling goods and many stores. Every business owner still makes a cost sheet before setting a price: what does it cost to buy or make one item, what else must be paid, and what will customers gladly pay? A price too low

loses money on every sale. A price too high drives customers away. A fair price covers the costs, rewards the work and gives the customer good value.

PICTURE STUDY



F. W. Woolworth's 5 and 10 Cent Store by Night, Unknown photographer (postcard), 1910s · Printed postcard · New Albany, Indiana

Image: [Wikimedia Commons](#), public domain

Woolworth stores were especially busy at Christmas, when families came to buy small, inexpensive gifts, toys, ornaments and candy. This postcard shows the inside of a Woolworth store decorated for the season and lit up at night, with the counters ready for the next day's shoppers. Notice how the goods are laid out on open counters and in glass cases, where customers could see them, which was new in Woolworth's time.

Look closely

- Look at the counters. How are the goods arranged?
- Look up. What hangs from the ceiling? Why might the store decorate?
- Find the aisles between the counters. How would shoppers move through the store?
- Read the caption at the bottom. What does "5 and 10 cent store" promise customers?

Talk about it

1. Why would a store full of low-priced goods be so busy at Christmas?
2. How could Woolworth make money selling things for only five or ten cents?

3. Why do you think he let customers see and choose the goods themselves?

PROJECT

My Cost Sheet and Price Tag

You will make a simple product, figure out exactly what one costs to make, and choose a price that covers the cost and earns a fair profit. Then you will see what happens to profit if you sell a few or many.

You will need

- Supplies for a simple product, such as bookmarks (cardstock, markers, ribbon) or trail-mix bags (cereal, raisins, small bags)
- The receipts or prices of the supplies (ask a parent)
- Ledger notebook and calculator

Steps

1. List every supply and what it cost in a cost table: Supply, Cost of package, How many products it makes, Cost per product.
2. Example: a \$3.00 pack of cardstock makes 30 bookmarks, so each bookmark's paper costs $\$3.00 \div 30 = \$0.10$. Do the same for every supply.
3. Add the cost per product for all supplies. That is the cost of one product.
4. Choose a price. Find the markup: price – cost.
5. Make a table showing profit if you sell 5, 20 and 50 products. (Profit = markup $\times$ number sold.)
6. Now try a lower price and a higher price. Ask three family members which price they would gladly pay. Record their answers.
7. Choose your final price and make a price tag. Write two sentences explaining why it is fair to you and to your customers.

Tips

- Do not forget small supplies like ribbon, glue or bags. They are part of the cost.
- If your time is worth something too (it is), you may add a little for your work.

Check your work

- ☐ I can explain cost, price and markup.

- ☐ My cost sheet shows the cost per product correctly.
- ☐ I can tell how Woolworth kept costs low and why a low price can still make a big profit.

LEDGER NOTEBOOK

1. Draw a price tag split into two parts: the part that pays the cost and the part that is markup.
2. Make a timeline of Woolworth's start: 1878 five-cent table; February 1879 Utica store fails; June 1879 Lancaster store succeeds; 1913 Woolworth Building.
3. Draw a bar graph of your profit at 5, 20 and 50 products sold.

From history. When the Woolworth Building opened in 1913, President Woodrow Wilson pressed a button in Washington, D.C., that lit up all of its windows at once. Frank Woolworth paid for the whole skyscraper in cash, built from nickels and dimes.

COMMON MISTAKES

- Thinking the markup is all profit. Rent, wages and other expenses come out of it.
- Leaving small supplies out of the cost.
- Thinking the highest price is always best. Customers may not buy, and you sell nothing.

Make it a game • Mark It Up. Your parent holds up household items with cost cards, such as three cents or twelve cents. You have ten seconds to set a price, say the markup, and state the profit per item. Wrong math sends the item back. Reach ten correct prices before the timer hits five minutes, then say what Woolworth learned from his first store.

7.4 PROFIT MARGIN: THE A&P AND A FEW CENTS ON EVERY DOLLAR

OBJECTIVES

- Define revenue, expenses, profit and profit margin.
- Tell how the A&P grocery company grew by cutting costs and earning a small margin on huge sales.
- Compare a high-margin, low-sales plan with a low-margin, high-sales plan using a ledger.

Warm-up. Suppose a lemonade stand sells 10 cups for \$1 each and spends \$6 on lemons, sugar and cups. How much money did it really make? Now suppose it sells 100 cups for 50¢ each and spends \$40. Which stand made more?

WATCH

What is Profit Margin?

Stickman Business • 3:40

<https://www.youtube.com/watch?v=4lu-uHrI8y8>

WHEN TO WATCH

After the big idea, before the project; pause at each example and work the numbers yourself.

KEY TERMS

revenue

All the money that comes in from sales.

profit

Revenue minus expenses: what the business keeps.

expenses

All the money a business spends to make and sell its goods: supplies, rent, wages and more.

profit margin

How much profit a business keeps from each dollar of sales, often given in cents per dollar or as a percent.

cash and carry

A store where customers pay cash and carry their own groceries home, with no credit or delivery.

CORE IDEAS

The story. In 1859, in New York City, George Huntington Hartford and his partner George Gilman started a business selling tea. By buying tea in huge amounts straight from ships, they could sell it for less than other shops. Their company, later called the **Great Atlantic & Pacific Tea Company**, or the A&P, opened more stores selling tea, coffee, spices and then all kinds of groceries. In those days most grocers delivered to customers' homes, let them buy on credit, and gave away prizes to keep their business. All of that cost money, and customers paid for it in higher prices.

How they figured it out. In 1912 Hartford's son John tried an experiment. He opened a small store with no delivery, no credit and no prizes: an "Economy Store," where customers paid **cash and carried** their own groceries home. With lower costs, the store could charge lower prices. The family worried it might fail, but customers crowded in. The A&P opened Economy Stores everywhere, sometimes several in one week, and by 1930 it had about 16,000 stores, the largest chain of stores in the world. The A&P earned only a few cents of profit on each dollar of groceries it sold. But it sold so many groceries that those few cents added up to a great deal.

The big idea. **Revenue** is all the money that comes in from sales. **Expenses** are all the money spent to run the business. **Profit** = revenue – expenses. The **profit margin** tells how much of each dollar of sales the business keeps. If a store sells \$100 of groceries and has \$96 of expenses, its profit is \$4, so it keeps 4 cents of every dollar: a profit margin of 4%. Some businesses earn a big margin on a few sales, like a jeweler. Others earn a small margin on very many sales, like a grocery store. Both can be good businesses. "He that gathereth by labour shall increase" (Proverbs 13:11): steady, honest profit, a little at a time, builds lasting wealth.

In business today. Grocery stores still earn only a few cents on each dollar, which is why they watch costs so closely and try to sell a great deal. Warehouse stores sell in bulk with very thin margins. A bakery or a craftsman may earn more per item but sells fewer. When you run your own business, figure out both your profit and your margin. A high margin on nothing sold is nothing; a tiny margin on a huge amount

sold can be plenty. And remember that some costs, like rent, stay the same whether you sell a little or a lot, so selling more can raise your margin.

PICTURE STUDY



An A&P Store in the 1880s, Unknown photographer, 1880s · Photograph · Wikimedia Commons

Image: [Wikimedia Commons](#), public domain

Before the Economy Stores of 1912, A&P stores looked like this: handsome shops with big signs, selling tea, coffee and groceries, often with delivery wagons ready to take orders to customers' homes. Look closely at the store and think about which of its costs John Hartford later cut to lower prices.

Look closely

- Find the company's name on the sign. What does it tell customers the store sells?
- Find the big T-shaped sign. Why might a tea company hang a giant "T"?
- Count the round lamps. What would they look like at night?
- Find the men by the door. Who might be clerks and who might be customers?

Talk about it

1. Which of this store's costs could be cut without hurting the customers much?
2. Why would customers choose a plainer store if its prices were lower?
3. How could earning only a few cents on each dollar make the A&P very large?

Safety first. If you make and serve real lemonade, wash your hands and the pitcher first, and serve only your own family unless a parent has checked your town's rules.

PROJECT

Two Stands, Two Plans: A Profit Margin Contest

You will compare two pretend lemonade stands, one with a high price and few sales, one with a low price and many sales, and work out revenue, expenses, profit and margin for each. Then you will test the plans with a real taste-and-price survey.

You will need

- Ledger notebook and calculator
- Optional: a pitcher of lemonade and paper cups for a family taste test

Steps

1. Rule a ledger table with rows Stand A and Stand B and columns: Price per cup, Cups sold, Revenue, Expenses, Profit, Profit per dollar of sales.
2. Stand A (high margin): sells cups for \$1.00. It sells 20 cups. Supplies cost 30¢ a cup, and the stand pays \$4 to rent a table. Find its revenue, expenses and profit.
3. Stand B (low margin): sells cups for 50¢. It sells 60 cups. Supplies cost 30¢ a cup, and it also pays \$4 for a table. Find its revenue, expenses and profit.
4. For each stand, divide profit by revenue to find how many cents of profit it keeps from each dollar.
5. Which stand made more profit? Which had the higher margin? Write both answers.
6. Optional: offer family members a cup of lemonade and ask, “Would you buy this for \$1.00? For 50¢?” Record how many say yes to each.
7. Write a paragraph: Which plan would you choose for your own stand, and why? How is Stand B like the A&P?

Tips

- Stand A: revenue $20 \times \$1.00 = \$20.00$; expenses $20 \times \$0.30 + \$4 = \$10.00$. Work out Stand B the same way.
- To find cents per dollar, divide profit by revenue and multiply by 100.

Check your work

- ☐ I can define revenue, expenses, profit and profit margin.
- ☐ My ledger shows correct numbers for both stands.
- ☐ I can explain how the A&P grew large on a small margin.

LEDGER NOTEBOOK

1. Draw a dollar bill divided into parts: the part that pays for supplies, the part for rent and wages, and the small part that is profit.
2. Draw an A&P Economy Store with a sign saying “Cash and Carry.” Label three costs it cut.
3. Make a bar graph comparing the profit of Stand A and Stand B.

From history. The A&P started a famous coffee brand called Eight O’Clock Coffee in 1919, and it built its own bakeries and factories to make bread and other foods for its stores. Making goods itself cut out middlemen and helped keep prices low.

COMMON MISTAKES

- Mixing up revenue and profit. Revenue is all the money in; profit is what is left after expenses.
- Thinking a small margin means a bad business. Many great businesses earn a small margin on huge sales.
- Forgetting fixed costs, like rent, that must be paid no matter how much is sold.

Make it a game • Pennies on the Dollar. Two stands, two plans. Your parent's stand sells few items at a big markup; yours sells many items at a small markup. Roll a die to see how many customers each gets each round. After five rounds, add revenue, subtract expenses and find profit. Whose profit margin is better? Tell how the A&P earned a few cents on huge sales.

Scripture. “Wealth gotten by vanity shall be diminished: but he that gathereth by labour shall increase.” (Proverbs 13:11, KJV)

Quick, easy riches tend to vanish, but wealth gathered by steady work grows.
A business that earns a fair profit honestly, a little on each sale, can last for generations.

BOOKKEEPING: LEDGERS, INVENTORY, COST AND PROFIT

Every business, from a lemonade stand to a giant company, must answer a few simple questions: How much money came in? How much went out? What do we have on the shelves? Are we making a profit? The way to answer them is **bookkeeping**: writing down every amount, honestly and in order, so that the numbers tell the truth. In this unit you will learn to keep a **ledger with columns**, count **inventory**, set a price above **cost**, and figure out a **profit margin**.

You will look over George Washington's shoulder as he records every shilling in his account books; follow young Abraham Lincoln into a country store that failed and left him with a debt he spent years repaying; watch Frank Woolworth learn from a failed store and build a chain of five-and-ten-cent stores; and see how the A&P grocery company grew huge by earning only a few cents on each dollar. Through it all, you will keep a real ledger of your own. As Jesus said, "He that is faithful in that which is least is faithful also in much" (Luke 16:10).

PREREQUISITES

- Can add and subtract money amounts with decimals
- Can multiply and divide whole numbers by one-digit numbers
- Knows what profit means (money in minus money out)

MASTERY CHECKLIST

- ☐ I can keep a ledger with columns for date, description, money in, money out and balance.
- ☐ I can take an inventory and use it to decide what to reorder.
- ☐ I can explain cost, price and markup and set a price above cost.
- ☐ I can figure out profit and profit margin in cents per dollar.
- ☐ I can explain why honest, careful books matter.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **George Washington’s Mount Vernon: digital collections and Washington Library:** Free at mountvernon.org. Articles and images about Washington’s life as a farmer and businessman, including his account books, mill and fishery. Good for Lesson 7.1.
- **A free spreadsheet: Google Sheets or LibreOffice Calc:** Free. With a parent, set up your ledger in a spreadsheet so the balance column adds itself. Never required; a paper ledger is just as good.
- **Pay Day (family board game, Hasbro):** Ages 8 and up. A board game about earning, paying bills and keeping track of money over a month. A good partner for the ledger lessons.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

7.1 A Ledger with Columns: George Washington’s Account Books

2 sessions of 45 minutes

7.2 Inventory: Lincoln’s Country Store and Knowing What You Have

2 sessions of 45 minutes

7.3 Cost and Price: Woolworth’s Five-and-Ten

2 sessions of 45 minutes

7.4 Profit Margin: The A&P and a Few Cents on Every Dollar

2 sessions of 45 minutes

UNIT 7 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

Name the five columns of a simple ledger.

2. **5 pts**

Your balance is \$12.00. You earn \$5.00 raking leaves, spend \$3.50 on a book, and give \$1.50 at church. What is your new balance?

3. **5 pts**

Why did Washington keep an exact record of his expenses during the War of Independence?

4. **5 pts**

What is inventory, and why is too much inventory a problem?

5. **5 pts**

What did Lincoln do about the debts from his failed store, and what did it earn him?

6. **5 pts**

A store has 30 notebooks. It sells 4 a day and reorders when 10 are left. After how many days must it reorder?

7. **5 pts**

A toy costs a store 6¢ and sells for 10¢. What is the markup? If the store sells 500 toys, what is the total markup?

8. **5 pts**

How did Frank Woolworth keep his costs low enough to sell goods for five and ten cents?

9. **5 pts**

A grocery store sells \$200 of food and has \$190 of expenses. What is its profit, and how many cents of profit does it keep from each dollar of sales?

10. **5 pts**

What would happen to a business that never counted its money or its inventory? Explain.

ANSWER KEY

1. Date, Description, Money in, Money out, Balance.
2. $\$12.00 + \$5.00 - \$3.50 - \$1.50 = \$12.00$.
3. He took no salary and asked Congress only to repay his expenses, so he had to show exactly what he spent; a leader handling other people's money must keep honest books that can be checked.
4. Inventory is the goods a business has on hand to sell. Too much ties up money the owner already spent, and the goods may spoil, go out of style or never sell.
5. He paid them back a little at a time over many years instead of running away from them. It earned him the name "Honest Abe" and a trusted reputation.
6. $30 - 10 = 20$ notebooks can be sold first. $20 \div 4 = 5$ days.
7. $10\text{¢} - 6\text{¢} = 4\text{¢}$. $500 \times 4\text{¢} = 2,000\text{¢} = \$20.00$.
8. He bought huge amounts directly from factories, chose fast-selling goods, dropped items that did not sell, and used the same buying system for many stores.
9. Profit: $\$200 - \$190 = \$10$. $\$10 \div \$200 = 0.05$, so 5 cents per dollar (5%).
10. It would not know whether it was making a profit, would run out of things customers want or buy too much, would not notice loss or theft, and could fall into debt without realizing it.

PORTFOLIO PIECE: A MONTH OF LEDGER PAGES

Keep your ledger for a full month, building on your two-week ledger from Lesson 7.1. Record every transaction with a date, description, money in, money out and balance, and keep your receipts. At the end of the month, write a one-page report: your starting and ending balance, your total money in and out, what you spent the most on, what you saved and gave, and whether your books balanced. Add one inventory count or cost sheet from this unit and one sentence on what you will do differently next month.

LOOK FOR	WHAT IT MEANS
Completeness	Every transaction for the month is recorded with all five columns.
Accuracy	Balances are correctly added and subtracted and match the real money, or differences are explained.
Report	The report gives correct totals and clearly explains what the numbers show.
Honesty and neatness	Corrections are shown clearly, receipts are kept, and the pages are easy to read.

SAVING, INVESTING AND GIVING

Everything we have belongs to God, and we are His stewards: “The earth is the LORD’s, and the fulness thereof” (Psalm 24:1). A good steward plans how to use money before he spends it, saves for the future, lets savings grow, shares in good businesses wisely, and gives generously. In this unit you will learn to make a **budget**, see how **interest** makes savings grow, find out what it means to own a **share** of a business, and practice **giving** cheerfully.

You will read Benjamin Franklin’s warnings about “little expenses”; meet a Scottish minister who started a bank so that poor families could save; stand under the buttonwood tree on Wall Street where twenty-four brokers signed an agreement in 1792; and open the account book of a teenage clerk who wrote down his gifts to church and to the poor. The year ends with a **family market day**, where you show your best work, sell something you made, and decide what part of your earnings to save and to give.

PREREQUISITES

- Can keep a ledger with a running balance (Unit 7)
- Can multiply money amounts and find a simple percent such as 10%
- Knows the six stakeholders (Unit 4)

MASTERY CHECKLIST

- ☐ I can make a simple budget with money for giving, saving and spending.
- ☐ I can calculate simple interest and show how interest on interest makes savings grow faster.
- ☐ I can explain what a share of stock is and why owners share both profits and risks.
- ☐ I can tell the story of the Buttonwood Agreement of 1792.
- ☐ I can explain why Christians give, and I can plan and run a family market day.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- ***The Way to Wealth*, by Benjamin Franklin (1758, free at Project Gutenberg):** Free. Franklin’s famous collection of Poor Richard’s sayings about work, thrift and debt. Read a few aloud in Lesson 8.1 and choose one as a family motto. Ages 9 and up with a parent.
- ***John Wesley’s sermon “The Use of Money” (1760):*** Free from the Christian Classics Ethereal Library (search “Wesley Use of Money”). A parent may read aloud the closing section on “gain all you can, save all you can, give all you can” for Lesson 8.4 and the bonus unit.
- ***A Chair for My Mother*, by Vera B. Williams (HarperCollins):** Ages 5–9. A picture book about a family that saves coins in a big jar for a year to buy a comfortable chair after a fire. A gentle read-aloud for younger siblings during Lesson 8.1.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

8.1 A Budget: Franklin’s “Small Leak” and Planning Before You Spend

2 sessions of 45 minutes

8.2 Interest: A Minister’s Savings Bank and Money That Grows

2 sessions of 45 minutes

8.3 The Buttonwood Agreement: Owning a Share of a Business

2 sessions of 45 minutes

8.4 Tithing, Giving and the Family Market Day

2 sessions of 45 minutes

UNIT 8 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What is a budget, and why should you make one before spending?

2. (5 pts)

You earn \$30 this month. You plan to give 10%, save 30% and spend the rest. How much goes to each?

3. (5 pts)

What did Franklin mean by “a small leak will sink a great ship”?

4. (5 pts)

Why does a bank pay interest on savings?

5. (5 pts)

You save \$200 at 5% simple interest a year. How much interest do you earn in 3 years? What is the total?

6. (5 pts)

You save \$100 at 10% compound interest a year. What is the balance after 2 years?

7. (5 pts)

What happened on May 17, 1792?

8. (5 pts)

What is a share of stock? Name one way a shareholder can gain and one way he can lose.

9. (5 pts)

What would happen to a person who put all his savings into one company and that company failed? What should he have done?

10. (5 pts)

What is a tithe? Name one person from history or Scripture in this unit who gave, and what he did.

ANSWER KEY

1. A plan for how money will be used before it is spent. It helps your money go to what matters most instead of leaking away on little things.
2. Give: \$3. Save: \$9. Spend: $\$30 - \$3 - \$9 = \$18$.
3. Many small expenses, each one seeming unimportant, can add up and ruin a budget, just as a tiny leak can sink a large ship.
4. It lends the savers' money to borrowers, who pay the bank interest; the bank shares part of that interest with the savers.
5. 5% of $\$200 = \$10$ a year. $3 \times \$10 = \$30$. Total: $\$230$.
6. Year 1: $\$100 + \$10 = \$110$. Year 2: $\$110 + \$11 = \$121$.
7. Twenty-four stockbrokers signed the Buttonwood Agreement on Wall Street, agreeing to deal with each other at a fixed fee; it was the beginning of the New York Stock Exchange.
8. A share is one part of the ownership of a company. Gain: dividends or a higher share price. Lose: the share price can fall, or the company can fail and the shares become worthless.
9. He would lose all his savings. He should have diversified, spreading his money among several businesses (Ecclesiastes 11:2).
10. A tenth of one's income given to God. Examples: Abraham gave Melchizedek a tenth of all; Jacob promised a tenth; young Rockefeller recorded gifts to his church and the poor in Ledger A; Wesley taught "give all you can."

PORTFOLIO PIECE: MY MARKET DAY AND YEAR-END MONEY REPORT

Put together the record of your family market day and your year of money: your market-day ledger with every sale, your cost and profit calculation, how you divided the profit among Give, Save and Spend, and where your gift went. Add your one-month budget from Lesson 8.1 with its comparison table, your compound interest table, and your pretend portfolio results. Finish with a one-page letter to yourself, to read next year, about what you learned about earning, saving, investing and giving.

LOOK FOR	WHAT IT MEANS
Records	The market-day ledger, budget, interest table and portfolio are complete and correctly calculated.
Stewardship	The report shows a clear plan for giving and saving, and the plan was carried out.
Reflection	The letter thoughtfully explains what was learned and what will change.
Presentation	The portfolio is neat, organized and ready to share with family.

8.1 A BUDGET: FRANKLIN'S "SMALL LEAK" AND PLANNING BEFORE YOU SPEND

OBJECTIVES

- Explain what a budget is and why planning comes before spending.
- Explain Franklin's saying about little expenses and find the "small leaks" in a real spending record.
- Make a one-month budget with money for giving, saving and spending, and compare it with what really happens.

Warm-up. Poke a tiny hole near the bottom of a paper cup and fill it with water over the sink. Time how long it takes to empty. A tiny hole can empty a whole cup. What might be the "tiny holes" in a family's money?

WATCH

Budgeting for Kids

MoneyMoments · 2:56

<https://www.youtube.com/watch?v=WRcgRimBac8>

WHEN TO WATCH

After the story of Franklin's sayings, before the project.

BACKUP VIDEO

Budgeting Basics!

Two Cents · 5:13

<https://www.youtube.com/watch?v=sVKQn2I4HDM>

After the lesson, for more budgeting ideas.

KEY TERMS

budget

A plan for how money will be used before it is spent.

income

Money that comes in, such as wages, allowance or earnings.

need

Something we must have to live and work, such as food, clothing and shelter.

want

Something we would like to have but can live without.

frugal

Careful with money; not wasteful.

CORE IDEAS

The story. In 1758 Benjamin Franklin wrote a short piece for the last edition of his yearly almanac. In it, an old man called Father Abraham stands in a crowd waiting for an auction to begin and gives a speech made almost entirely of the sayings of “Poor Richard” from Franklin’s almanacs over the years. It came to be called *The Way to Wealth*, and it was printed again and again in many languages. Among its sayings: “Beware of little expenses; a small leak will sink a great ship.” And: “Many a little makes a mickle,” meaning many small amounts add up to a large one. Franklin practiced what he preached. As a young printer he listed thirteen virtues he wanted to grow in, and one was **frugality**: spend only to do good to others or yourself, and waste nothing.

How they figured it out. Franklin noticed that people rarely become poor from one big mistake. More often, money slips away a few coins at a time on things they barely remember buying. The cure is to plan ahead. A **budget** is a plan for money before it is spent. First list your **income**. Then decide what to give, what to save and what to spend. Put **needs** before **wants**. Then keep a ledger and compare what really happened with your plan. Joseph did this for a whole nation in Egypt, storing grain in seven years of plenty to prepare for seven years of famine (Genesis 41). Jesus said that no one builds a tower without first sitting down to “count the cost” (Luke 14:28).

The big idea. A budget does not make you poorer; it makes you **free**. When you plan, your money goes to what matters most to you instead of leaking away. Many families use a simple plan: give first, save next, and spend what is left wisely. For example, if you earn \$10, you might give \$1, save \$3 and spend \$6. When you are tempted to buy something not in your budget, ask Franklin’s question: is this worth giving up something in my plan? Remember opportunity cost from Unit 1: every dollar spent on one thing cannot be spent on another.

In business today. Every well-run business has a budget. A bakery plans how much to spend on flour, wages and rent each month. Churches, schools and governments make budgets too. Many families keep a budget in a notebook, spreadsheet or app, and sit down together each month to compare their plan with what they really spent. Grown-ups often find that small daily purchases, like snacks or coffee, add up to surprising amounts over a year, just as Franklin warned.

PICTURE STUDY



The Return from Market (La Pourvoyeuse), Jean-Siméon Chardin, 1739 · Oil on canvas · Musée du Louvre, Paris

Image: [Wikimedia Commons](#), public domain

Jean-Siméon Chardin painted quiet scenes of ordinary French households. Here a young woman has just come back from the market, carrying a heavy bag of meat and two great loaves of bread for the family. She has spent the household's money, and now she pauses for a moment. Chardin painted this picture several times because buyers loved its calm, honest view of everyday work.

Look closely

- Find the loaves of bread. Where has she set them?
- Look at what she is carrying on her arm. What might be inside?
- Look through the doorway behind her. What is happening there?
- Look at her face. What might she be thinking after a trip to market?

Talk about it

1. What needs is this young woman buying for the family?
2. If you were planning this family's food budget for a week, what would you buy first?
3. How could a household's money "leak away" at the market?

PROJECT

My One-Month Budget

You will make a real one-month budget with three jars or envelopes, Give, Save and Spend, keep track of what really happens, and look for any “small leaks.”

You will need

- Three jars or envelopes labeled Give, Save and Spend
- Your allowance or earnings for a month (or an amount a parent sets for the project)
- Ledger notebook from Unit 7
- A copy of a few of Franklin’s sayings

Steps

1. List all the money you expect to receive this month. That is your income.
2. With a parent, choose how to divide it. Example: give 10%, save 30%, spend 60%. If your income is \$20, that is \$2, \$6 and \$12.
3. In your ledger, write your budget plan: Give, Save, Spend, each with an amount and a purpose (for example, Save for a book; Give to church; Spend on snacks and a small toy).
4. Each time money comes in, divide it into the jars right away.
5. Record every purchase in your ledger as you did in Unit 7.
6. At the end of the month, make a comparison table: Planned and Actual for Give, Save and Spend. Circle any small purchases that added up.
7. Write a short paragraph: Did I keep my budget? Where was my “small leak”? What will I change next month? Choose one of Franklin’s sayings as your motto.

Tips

- Give first, before you spend. It is much easier to give from the top than from what is left over.
- A budget can be changed. If your plan did not work, adjust it honestly for next month.

Check your work

- ☐ I can explain what a budget is.
- ☐ My budget shows give, save and spend amounts that add up to my income.
- ☐ I compared my plan with what really happened and found my “small leaks.”

LEDGER NOTEBOOK

1. Draw a ship with a small leak and write Franklin’s saying underneath. Around the ship, label some little expenses that could “sink” a budget.
2. Draw your three jars and color each to show how much went into it this month.
3. Make a two-column list: Needs and Wants, with at least five items in each.

From history. Franklin kept a small chart in a notebook with his thirteen virtues down the side and the days of the week across the top. Each night he put a dot next to any virtue he had failed to keep that day, so he could watch himself improve, a kind of ledger for character.

COMMON MISTAKES

- Thinking a budget is only for people with lots of money. Even a few dollars go further with a plan.
- Making a budget and never checking it. Compare your plan with what really happened each month.
- Forgetting to give and save until all the money is spent.

Make it a game • Find the Small Leaks. Your parent writes a pretend week of spending: twelve items, some big, some tiny, like a daily snack. You have sixty seconds to circle the small leaks and add them up. Then sort each item into need or want with paper chips and set a budget for the next week. Franklin would be proud.

Scripture. “For which of you, intending to build a tower, sitteth not down first, and counteth the cost, whether he have sufficient to finish it?” (Luke 14:28, KJV)

Jesus says a wise builder counts the cost before he begins. A budget is counting the cost before we spend.

8.2 INTEREST: A MINISTER'S SAVINGS BANK AND MONEY THAT GROWS

OBJECTIVES

- Explain what a bank does with savings and why it pays interest.
- Tell how Rev. Henry Duncan started a savings bank for poor families in 1810, and how savings banks came to America in 1816.
- Calculate simple interest and build a table showing how interest on interest grows.

Warm-up. If you planted one seed of corn and it grew a plant with 100 seeds, and you planted all of those next year, how many seeds might you have after two years? Make a guess, then work it out. That is the idea of today's lesson.

WATCH

Compound Interest Explained for Kids

MoneyMoments • 2:28

<https://www.youtube.com/watch?v=qxltazxfaSk>

WHEN TO WATCH

After the story, before the big idea.

BACKUP VIDEO

Growing Money - No-Frills Money Skills

Federal Reserve Bank of St. Louis • 7:21

<https://www.youtube.com/watch?v=aqu8pALMtOs>

After the big idea: a longer look at savings, interest and safe banks.

KEY TERMS

savings account

An account at a bank where you keep money you are saving, which earns interest.

deposit

Money you put into a bank account.

interest

Money a bank pays you for keeping your savings there, or money a borrower pays for using someone else's money.

interest rate

The amount of interest for each year, given as a percent, such as 5% a year.

compound interest

Interest earned on both your savings and the interest already added, so savings grow faster and faster.

CORE IDEAS

The story. In the early 1800s, banks were mostly for merchants and wealthy people. A poor farm worker or a widow who saved a few shillings kept them in a jar or under a floorboard, where they could be lost or stolen and never grew. In 1810, in the little village of Ruthwell in Scotland, the minister, Rev. Henry Duncan, wanted to help the poor families of his church become more independent. He started a bank for them, where they could **deposit** even very small amounts and earn **interest**. People called it the first savings bank of its kind. The idea spread quickly. In 1816 savings banks opened in Philadelphia and Boston, started by citizens who wanted working people to be able to save safely and see their money grow.

How they figured it out. Why would a bank pay you to keep your money? Because the bank does not just let it sit. It lends some of it to people who need to borrow, such as a farmer buying land or a family building a house, and the borrowers pay the bank interest. The bank pays part of that interest to the savers and uses the rest to cover its costs. The savers' money is put to work helping others, and it grows for the savers too. In the parable of the talents, the master told the servant who buried his money that he should at least have put it "into the bank," so it would have earned something (Luke 19:23).

The big idea. **Simple interest** is figured on the amount you first saved. If you deposit \$100 at an **interest rate** of 5% a year, you earn \$5 each year. **Compound interest** is interest on interest. After the first year you have \$105, and the next year you earn 5% on \$105, which is \$5.25, and so on. Each year the amount grows a little faster, like seeds that are replanted. The two secrets of growing savings are to start early and to be patient. Money saved when you are young has many years to grow.

In business today. Today banks and credit unions offer savings accounts to children and adults, and in the United States deposits are insured by the government up to a large limit, so savers do not lose their money if a bank fails. Interest rates go up and down over the years. Interest also works the other way: people who borrow money pay interest, so debts grow too if they are not paid off. A wise steward lets interest work *for* him by saving, and avoids letting it work *against* him through needless debt.

PICTURE STUDY



The Great Hall of the Bank of England, Thomas Rowlandson and Augustus Charles Pugin, 1808 · Hand-colored etching and aquatint from *The Microcosm of London* · The Metropolitan Museum of Art, New York

Image: [Wikimedia Commons](#), public domain

The Microcosm of London was a book of pictures of famous places in London, published in parts from 1808. Augustus Pugin drew the buildings and Thomas Rowlandson drew the people. This plate shows the busy hall of the Bank of England, founded in 1694. Savers, merchants and clerks came here every day to deposit money, take it out and pay what they owed.

Look closely

- Find the clerks behind the counters. What are they doing?
- Find the customers. What might they have come to do?
- Look for ledgers or books. Where are they kept?
- Look at the building itself. Why might a bank want a grand, solid building?

Talk about it

1. Why would a saver trust this bank with his money?
2. Who in this picture might be lending money, and who might be borrowing it?
3. How is a big city bank like this different from Henry Duncan's small village bank? How is it the same?

PROJECT

The Family Savings Bank

You will figure out how savings grow with simple and compound interest, and then run a small family savings bank for four weeks in which a parent pays you interest on your savings.

You will need

- Ledger notebook and calculator
- Your Save jar from Lesson 8.1
- A parent to be the banker

Steps

1. Make a table with columns: Year, Simple interest balance, Compound interest balance. Start both at \$100 and use a rate of 10% a year (a classroom number that makes the math easy).
2. Simple interest: add \$10 each year for 5 years.
3. Compound interest: each year, find 10% of the balance and add it. Year 1: $\$100 + \$10 = \$110$. Year 2: $\$110 + \$11 = \$121$. Keep going for 5 years, rounding to the nearest cent.
4. Compare the two columns after 5 years. How much more did compound interest earn?
5. Now open your family bank. Agree with your parent on a weekly interest rate for your Save jar, for example 5¢ for every \$1 saved, paid each week on the whole balance.
6. Each week for four weeks, count your savings, record the interest paid, and add it to the balance in your ledger.
7. Write two sentences: Why does starting to save early matter so much? How is interest on a debt like interest on savings?

Tips

- To find 10% of an amount, move the decimal point one place to the left: 10% of \$121 is \$12.10.

- Real savings accounts usually pay much less than 10% a year. The classroom number just makes the pattern easy to see.

Check your work

- ☐ I can explain why a bank pays interest.
- ☐ My table shows simple and compound interest for 5 years correctly.
- ☐ I can tell the story of Henry Duncan's savings bank.

LEDGER NOTEBOOK

1. Draw a plant growing from a coin, with new coins as its leaves. Label it "Compound interest."
2. Make a bar graph of your compound interest table, with one bar for each year.
3. Draw the path of a dollar saved in a bank: saver, bank, borrower, interest back to the bank, interest to the saver.

From history. Benjamin Franklin left £1,000 each to Boston and Philadelphia in his will of 1790, to be lent to young tradesmen at interest for two hundred years. By the 1990s each gift had grown into millions of dollars, which the cities used for education and trade schools.

COMMON MISTAKES

- Thinking the bank keeps your exact coins in a box. Banks lend money out and keep careful records of what they owe each saver.
- Forgetting that debts also grow with interest.
- Expecting quick growth. Interest works slowly; patience is part of saving.

Make it a game • Beans That Grow. Deposit ten beans in your savings bank, a bowl. Before starting, guess how many you will have after five years if the bank adds one bean for every ten each year, and adds interest to the new total. Play five rounds, then compare with a pile you left in your pocket. Explain why compound interest grows faster.

Scripture. "Wherefore then gavest not thou my money into the bank, that at my coming I might have required mine own with usury?" (Luke 19:23, KJV)

In this parable, "usury" means interest. The master expected his servant to put his money to good use. Saving wisely is part of faithful stewardship.

8.3 THE BUTTONWOOD AGREEMENT: OWNING A SHARE OF A BUSINESS

OBJECTIVES

- Explain what a share of stock is and how shareholders gain and risk.
- Tell the story of the Buttonwood Agreement of May 17, 1792, and the beginning of the New York Stock Exchange.
- Track a pretend portfolio for two weeks and explain why spreading money among several businesses lowers risk.

Warm-up. Imagine you and three friends want to start a lemonade stand that needs \$20 of supplies, but each of you has only \$5. How could you start it together? If it earns \$8 profit, how should you share it?

WATCH

17th May 1792: The Buttonwood Agreement establishes the New York Stock Exchange

HistoryPod · 2:30

<https://www.youtube.com/watch?v=lyIYBXCeU5I>

WHEN TO WATCH

After the story of the buttonwood tree.

BACKUP VIDEO

What is the Stock Market? - Super Simple Money for kids and beginners

Super Simple Money for Kids · 3:54

<https://www.youtube.com/watch?v=2fLd4VQHKNg>

Before "How they figured it out": what a stock is, in simple words.

KEY TERMS

share

One part of the ownership of a company; also called a stock.

shareholder

A person who owns one or more shares of a company.

dividend

A part of a company's profit paid to its shareholders.

stockbroker

A person who buys and sells shares for other people and earns a fee.

stock exchange

A marketplace where shares of companies are bought and sold.

diversify

To spread your savings among several different investments so one loss does not ruin you.

CORE IDEAS

The story. After the War of Independence, the new United States government owed a great deal of money, and it paid its debts with paper certificates called bonds that people could buy and sell. New banks, like the Bank of New York, sold **shares** to raise money. In New York City, men who bought and sold these papers for other people, called **stockbrokers**, met outdoors on Wall Street, sometimes under a large buttonwood tree, also called a sycamore. In early 1792 a sudden panic hit the market when a man who had borrowed heavily to buy shares could not pay his debts, and prices tumbled. Then, on **May 17, 1792**, twenty-four brokers signed a short agreement, the **Buttonwood Agreement**, promising to deal with each other and to charge a fair, fixed fee. The next year they moved indoors into the new Tontine Coffee House at Wall and Water Streets. This group grew into the New York Stock Exchange.

How they figured it out. Why would anyone buy a share? When a company sells shares, it gets money to build, hire and grow. Each **shareholder** owns a small piece of the company. If the company earns a profit, it may pay part of it to shareholders as a **dividend**, and the shares may become worth more because others want to buy them. But if the company does poorly, the shares can lose value, and if it fails, they can become worth nothing. The brokers' agreement made buying and selling shares more orderly and trustworthy, so more people were willing to invest, and more businesses could raise money.

The big idea. Owning a share means you take part in both the **rewards and the risks** of a business. No one knows for sure which businesses will do well, so wise investors **diversify**: they spread their money among many different businesses, so that one failure does not ruin them. The Bible gave this advice long ago: "Give a portion to

seven, and also to eight; for thou knowest not what evil shall be upon the earth” (Ecclesiastes 11:2). Investing is not a game of chance when you buy a real share of a real business, study it, spread your risk and are patient for many years.

In business today. The New York Stock Exchange is still on Wall Street, a few steps from where the buttonwood tree stood, though most trading now happens on computers. Millions of families own shares, often through retirement savings or funds that hold shares of hundreds of companies at once, which is a simple way to diversify. Share prices go up and down every day, sometimes a great deal. A wise investor does not panic at every drop and does not chase quick riches; “he that maketh haste to be rich shall not be innocent” (Proverbs 28:20). In this course you will practice only with pretend money.

PICTURE STUDY



The Tontine Coffee House, Wall and Water Streets, Francis Guy, about 1797 · Oil on canvas · New-York Historical Society, New York

Image: [Wikimedia Commons](#), public domain

Francis Guy, an English-born painter, painted this lively view of the corner of Wall Street and Water Street in New York around 1797. The tall building on the left with the flag is the Tontine Coffee House, where the brokers of the Buttonwood Agreement moved in 1793 to buy and sell shares and bonds. All around it, merchants, porters and cart drivers carry the goods that came in by ship at the docks nearby.

Look closely

- Find the Tontine Coffee House. What makes it stand out from the other buildings?
- Look at the people on the steps and balcony. What might they be doing?
- Find the barrels, crates and carts. Where do you think the goods came from?
- Look at the end of the street. What do you see there?

Talk about it

1. Why would brokers want to meet so close to the docks and the merchants?
2. How is trading shares in a coffee house like trading goods at a market?
3. What can you tell about New York's business life from this painting?

Safety first. Use pretend money only. Never open an account, buy shares or enter personal or payment information online; that is a decision for parents.

PROJECT

My Pretend Portfolio

You will invest \$100 of pretend money in shares of three or four businesses, track their value for two weeks, and compare a diversified portfolio with putting everything in one business. No real money is used.

You will need

- Ledger notebook and calculator
- A parent's help to look up the share prices of three or four well-known companies whose products your family uses, in a newspaper or on a reliable financial website (or use the dice method in the tips)
- A pencil and a die (for the dice method)

Steps

1. Choose three or four companies whose products you know and use. Write why you chose each one.
2. With a parent, write each company's share price on Day 1. Decide how much of your pretend \$100 to put in each, and figure how many shares you can buy (amount $\div$ price; round down).
3. Rule a ledger table: Date, Company, Shares, Price per share, Value (shares $\times$ price), Total portfolio value.
4. Record the prices and values three times a week for two weeks.
5. Also track a pretend "all eggs in one basket" portfolio: \$100 in just one of your companies.
6. At the end, compare: Which portfolio went up or down more? Which was steadier?
7. Write a paragraph: What did I learn about risk and diversification? Why should I never invest real money without a parent and without studying first?

Tips

- Dice method: if you cannot look up prices, start each share at \$10. Each time you record, roll a die for each company: 1 means down \$2, 2 down \$1, 3 or 4 no change, 5 up \$1, 6 up \$2.

- Prices over two weeks tell you very little about a company. Real investors think in years, not days.

Check your work

- ☐ I can explain what a share is and what a shareholder risks and gains.
- ☐ My ledger tracks both portfolios for two weeks.
- ☐ I can explain why diversifying lowers risk, and I can tell the story of the Buttonwood Agreement.

LEDGER NOTEBOOK

1. Draw the buttonwood tree on Wall Street with twenty-four brokers gathered under it, and write the date May 17, 1792.
2. Draw a pie divided into the shares of a company. Color the slice you would own if you held 1 share of 10.
3. Draw two baskets: one with all the eggs, one with eggs spread across several baskets. Label which is safer and why.

From history. The Buttonwood Agreement was very short: just one long sentence. The brokers promised to buy and sell for no less than one-quarter of one percent commission and to give each other preference in their dealings. The original paper is kept by the New York Stock Exchange.

COMMON MISTAKES

- Thinking a share price can only go up. Shares can lose value, and a failed company's shares can become worthless.
- Putting everything into one company. Diversifying spreads the risk.
- Confusing investing with a game of chance. Investing means owning part of a real business for the long term, not trying to win money by luck.

Make it a game · Under the Buttonwood Tree. Draw a buttonwood tree and write May 17, 1792 beneath it. Your pretend company is a family sandwich shop with four paper shares. Sell two shares to your parent for five beans each. Flip a coin each round: heads pays a bean dividend, tails pays nothing. After six flips, count and say how a shareholder gains and risks.

Scripture. “Give a portion to seven, and also to eight; for thou knowest not what evil shall be upon the earth.” (Ecclesiastes 11:2, KJV)

Solomon advises spreading what you have among many, because no one knows the future. Wise investors diversify for the same reason.

8.4 TITHING, GIVING AND THE FAMILY MARKET DAY

OBJECTIVES

- Explain tithing and generous giving from Scripture and from history.
- Tell how a teenage clerk named John D. Rockefeller recorded his gifts in his first account book.
- Plan and run a family market day, keep its ledger and decide what to give and save from the earnings.

Warm-up. Think of a time someone gave you something you did not expect: a gift, help with a hard job, or a kind word. How did it make you feel? Write one sentence. Then think of someone you could give to this week.

WATCH

God's Story: Generosity

Crossroads Kids' Club • 3:59

<https://www.youtube.com/watch?v=VyXe25LycY>

WHEN TO WATCH

After the story, before the big idea.

BACKUP VIDEO

What is Tithing?

Crossroads Kids' Club • 1:06

<https://www.youtube.com/watch?v=5q7JkO32DPc>

Before planning your market-day giving.

KEY TERMS

tithe

A tenth (10%) of one's income given to God, usually through one's church.

offering

A gift given to God or to others, beyond what is required.

generosity

Giving freely and gladly to help others.

charity

Help given to people in need; also an organization that helps them.

steward

A person who manages something that belongs to someone else; we are stewards of what God gives us.

CORE IDEAS

The story. Long ago, after a great victory, Abraham met Melchizedek, the priest-king of Salem, who blessed him and brought out bread for him and his men. Abraham “gave him tithes of all” (Genesis 14:20): a tenth of everything. Years later his grandson Jacob promised God, “of all that thou shalt give me I will surely give the tenth unto thee” (Genesis 28:22). The law of Moses taught Israel to bring a **tithe** of their crops and flocks, and the New Testament teaches Christians to give generously and cheerfully: “God loveth a cheerful giver” (2 Corinthians 9:7).

How they figured it out. In 1855, a sixteen-year-old boy in Cleveland, Ohio, got his first job as an assistant bookkeeper for a produce company. His name was John D. Rockefeller, the same man who later built Standard Oil (Lesson 5.3). He bought a little red book for ten cents and called it Ledger A. In it he wrote every penny he earned and spent, and also every gift: small amounts to his church, to missions and to the poor, given from his first small wages. He kept giving all his life, and in later years he gave enormous sums to schools, hospitals, medical research and churches. More than a century earlier, the preacher John Wesley had taught in a famous sermon of 1760 that Christians should “gain all you can, save all you can, give all you can.”

The big idea. Giving is not the leftover part of a budget; for a Christian it comes **first**, as a way of thanking God and remembering that everything belongs to Him. Many Christians give a tithe, a tenth, as a starting point, and add offerings beyond it. Giving also blesses the giver: it frees us from loving money too much, and “It is more blessed to give than to receive” (Acts 20:35). A business can give too, by paying fair wages, serving its community and supporting good causes, as Hershey, Cadbury and many others did.

In business today. Churches, missions, food pantries, hospitals and schools are supported by the gifts of families and businesses. Many companies give part of their profits to charity, and many workers give part of their pay. Wise givers give regularly, choose trustworthy places to give, and keep a record of their giving, just as

Rockefeller did. This week you will finish the year with a family market day, and you will decide in advance what part of your earnings you will give.

PICTURE STUDY



The Meeting of Abraham and Melchizedek, Dieric Bouts, about 1464–1467 · Oil on panel (a wing of the Altarpiece of the Holy Sacrament) · St. Peter's Church, Leuven, Belgium

Image: [Wikimedia Commons](#), public domain

Dieric Bouts was a painter in the city of Leuven in what is now Belgium. He painted this scene as one panel of a large altarpiece for a church. It shows Abraham, dressed as a knight of Bouts's own time, meeting Melchizedek, who brings out bread and a cup. Right after this meeting, Abraham gave Melchizedek a tenth of everything he had won.

Look closely

- Find Abraham and Melchizedek. How can you tell which is which?
- Find the bread and the cup. Who is offering them?
- Look at the people behind each leader. What do they tell you about the moment?
- Look at the landscape. What time of year does it seem to be?

Talk about it

1. Why do you think Abraham gave a tenth of everything?
2. What does this picture teach about thankfulness?
3. How could you give a "tenth" of something this week: money, time or work?

Safety first. A parent supervises all selling and keeps the cash box. Invite only people you know, sell at home or another place your parent approves, and check local rules before selling any food.

PROJECT

The Family Market Day

This is the big finish of the year. You will plan a market-day table, show your best project from each unit, sell or show something you made, keep a market-day ledger, and decide ahead of time what you will give and save from your earnings.

You will need

- A table, a tablecloth and a sign
- Your best project or portfolio piece from each of Units 1–7
- A product to sell or show (from your Unit 6 launch kit or the cost sheet in Lesson 7.3), with price tags
- A cash box with small bills and coins for change (kept by a parent)
- Ledger notebook and your Give, Save and Spend jars

Steps

1. Choose a date and invite family and friends you know. With a parent, plan where the table will go.
2. Before market day, write your giving and saving plan in your ledger: for example, “I will give 10% and save 30% of my profit.” Choose where your gift will go.
3. Set up your table: a sign, your price list, your honest advertisement, and a small display of your best project from each unit with a card explaining what you learned.
4. During the market, record every sale in a ledger: Time, Item, Price, Paid with, Change given. A parent keeps the cash box and checks the change.
5. Explain to at least three guests how you priced your product and what each unit taught you.
6. After the market, count the money, subtract your costs, and find your profit. Divide the profit into your Give, Save and Spend jars as you planned.
7. Give your gift this week, and write a one-page report: sales, costs, profit, what you gave and saved, and what you would do differently next time.

Tips

- Practice making change before the market. Count up from the price to the amount paid.
- Smile, thank every guest, and be honest about your product. You are showing a whole year of good work.

Check your work

- ☐ I can explain tithing and why Christians give.
- ☐ My market-day ledger records every sale, my costs and my profit.
- ☐ I gave and saved the amounts I planned.

LEDGER NOTEBOOK

1. Draw your market-day table from above, with labels for your sign, your products, your project display and the cash box.
2. Make a pie chart showing how your market-day profit was divided among Give, Save and Spend.
3. Write a thank-you note to someone who helped you this year, and copy it into your ledger notebook.

From history. Rockefeller's Ledger A still exists. Years later he would show it to visitors and to his children and grandchildren, to teach them to keep careful records and to give from the very first dollars they earned.

COMMON MISTAKES

- Giving only if something is left over. Plan your giving first.
- Counting all the money taken in as profit. Subtract your costs first.
- Forgetting to thank customers and helpers.

Make it a game • Ten Beans, First Tenth. Earn ten pretend beans each round for four pretend weeks. Each time, set aside the first tenth for giving and write it in a tiny account book like young Rockefeller's. When done, set a sixty-second timer and list as many ways to give, such as time, skill or money, as you can. Beat your own count.

Scripture. "And he gave him tithes of all." (Genesis 14:20, KJV)

Abraham gave a tenth of everything he had gained. Giving first, before spending, is an old and faithful way to remember that all we have comes from God.

SAVING, INVESTING AND GIVING

Everything we have belongs to God, and we are His stewards: “The earth is the LORD’s, and the fulness thereof” (Psalm 24:1). A good steward plans how to use money before he spends it, saves for the future, lets savings grow, shares in good businesses wisely, and gives generously. In this unit you will learn to make a **budget**, see how **interest** makes savings grow, find out what it means to own a **share** of a business, and practice **giving** cheerfully.

You will read Benjamin Franklin’s warnings about “little expenses”; meet a Scottish minister who started a bank so that poor families could save; stand under the buttonwood tree on Wall Street where twenty-four brokers signed an agreement in 1792; and open the account book of a teenage clerk who wrote down his gifts to church and to the poor. The year ends with a **family market day**, where you show your best work, sell something you made, and decide what part of your earnings to save and to give.

PREREQUISITES

- Can keep a ledger with a running balance (Unit 7)
- Can multiply money amounts and find a simple percent such as 10%
- Knows the six stakeholders (Unit 4)

MASTERY CHECKLIST

- ☐ I can make a simple budget with money for giving, saving and spending.
- ☐ I can calculate simple interest and show how interest on interest makes savings grow faster.
- ☐ I can explain what a share of stock is and why owners share both profits and risks.
- ☐ I can tell the story of the Buttonwood Agreement of 1792.
- ☐ I can explain why Christians give, and I can plan and run a family market day.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- ***The Way to Wealth*, by Benjamin Franklin (1758, free at Project Gutenberg):** Free. Franklin’s famous collection of Poor Richard’s sayings about work, thrift and debt. Read a few aloud in Lesson 8.1 and choose one as a family motto. Ages 9 and up with a parent.
- ***John Wesley’s sermon “The Use of Money” (1760):*** Free from the Christian Classics Ethereal Library (search “Wesley Use of Money”). A parent may read aloud the closing section on “gain all you can, save all you can, give all you can” for Lesson 8.4 and the bonus unit.
- ***A Chair for My Mother*, by Vera B. Williams (HarperCollins):** Ages 5–9. A picture book about a family that saves coins in a big jar for a year to buy a comfortable chair after a fire. A gentle read-aloud for younger siblings during Lesson 8.1.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

8.1 A Budget: Franklin’s “Small Leak” and Planning Before You Spend

2 sessions of 45 minutes

8.2 Interest: A Minister’s Savings Bank and Money That Grows

2 sessions of 45 minutes

8.3 The Buttonwood Agreement: Owning a Share of a Business

2 sessions of 45 minutes

8.4 Tithing, Giving and the Family Market Day

2 sessions of 45 minutes

UNIT 8 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**

What is a budget, and why should you make one before spending?

2. (5 pts)

You earn \$30 this month. You plan to give 10%, save 30% and spend the rest. How much goes to each?

3. (5 pts)

What did Franklin mean by “a small leak will sink a great ship”?

4. (5 pts)

Why does a bank pay interest on savings?

5. (5 pts)

You save \$200 at 5% simple interest a year. How much interest do you earn in 3 years? What is the total?

6. (5 pts)

You save \$100 at 10% compound interest a year. What is the balance after 2 years?

7. (5 pts)

What happened on May 17, 1792?

8. (5 pts)

What is a share of stock? Name one way a shareholder can gain and one way he can lose.

9. (5 pts)

What would happen to a person who put all his savings into one company and that company failed? What should he have done?

10. (5 pts)

What is a tithe? Name one person from history or Scripture in this unit who gave, and what he did.

ANSWER KEY

1. A plan for how money will be used before it is spent. It helps your money go to what matters most instead of leaking away on little things.
2. Give: \$3. Save: \$9. Spend: $\$30 - \$3 - \$9 = \$18$.
3. Many small expenses, each one seeming unimportant, can add up and ruin a budget, just as a tiny leak can sink a large ship.
4. It lends the savers' money to borrowers, who pay the bank interest; the bank shares part of that interest with the savers.
5. 5% of $\$200 = \$10$ a year. $3 \times \$10 = \$30$. Total: $\$230$.
6. Year 1: $\$100 + \$10 = \$110$. Year 2: $\$110 + \$11 = \$121$.
7. Twenty-four stockbrokers signed the Buttonwood Agreement on Wall Street, agreeing to deal with each other at a fixed fee; it was the beginning of the New York Stock Exchange.
8. A share is one part of the ownership of a company. Gain: dividends or a higher share price. Lose: the share price can fall, or the company can fail and the shares become worthless.
9. He would lose all his savings. He should have diversified, spreading his money among several businesses (Ecclesiastes 11:2).
10. A tenth of one's income given to God. Examples: Abraham gave Melchizedek a tenth of all; Jacob promised a tenth; young Rockefeller recorded gifts to his church and the poor in Ledger A; Wesley taught "give all you can."

PORTFOLIO PIECE: MY MARKET DAY AND YEAR-END MONEY REPORT

Put together the record of your family market day and your year of money: your market-day ledger with every sale, your cost and profit calculation, how you divided the profit among Give, Save and Spend, and where your gift went. Add your one-month budget from Lesson 8.1 with its comparison table, your compound interest table, and your pretend portfolio results. Finish with a one-page letter to yourself, to read next year, about what you learned about earning, saving, investing and giving.

LOOK FOR	WHAT IT MEANS
Records	The market-day ledger, budget, interest table and portfolio are complete and correctly calculated.
Stewardship	The report shows a clear plan for giving and saving, and the plan was carried out.
Reflection	The letter thoughtfully explains what was learned and what will change.
Presentation	The portfolio is neat, organized and ready to share with family.

BONUS: RUN A REAL SERVICE BUSINESS

This optional unit puts the whole year to work. With a parent as your partner, you will start, run and close the books on a small **service business**: a business that sells work instead of things. You might feed and walk a neighbor's pets while they travel, water plants, rake leaves, pull weeds, sweep porches, or carry in groceries for an older neighbor, always for people your family knows.

You will learn from young George Washington, who earned his first real wages as a surveyor at seventeen; from young Abraham Lincoln, who earned his first dollar rowing two travelers out to a steamboat; from Booker T. Washington, who won his place at school by sweeping a room better than anyone expected; and from John Wesley, who taught “gain all you can, save all you can, give all you can.” You will plan, price, do the work faithfully, keep a ledger, and finish with a profit report and a gift.

PREREQUISITES

- Can keep a ledger with a running balance (Unit 7)
- Can figure cost, price and profit (Units 6 and 7)
- A parent who agrees to be a partner and supervisor

MASTERY CHECKLIST

- ☐ I can choose a service that meets a real need, is safe and is approved by my parent.
- ☐ I can write a one-page plan and set a fair price for my time and costs.
- ☐ I can do the job faithfully, safely and well, and ask customers for feedback.
- ☐ I can keep a ledger of every job and payment and figure my profit.
- ☐ I can decide how much of my profit to save and to give, and do it.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Biz Kid\$ (public television series):** Free videos and lesson ideas from the public-television series about young people who start real businesses. Watch with a parent for ideas and encouragement.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

9.1 Choose a Service and Plan It	2 sessions of 45 minutes
9.2 Price Your Time and Your Costs	2 sessions of 45 minutes
9.3 Do the Job Well: Faithful Service	2 sessions of 45 minutes
9.4 Close the Books: Profit, Lessons and Giving	2 sessions of 45 minutes

UNIT 9 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**
What is the difference between a goods business and a service business? Give an example of each.
2. **5 pts**
What service did young George Washington sell, and why did customers want him?
3. **5 pts**
Name four things a one-page service plan should include.
4. **5 pts**
How did young Abraham Lincoln earn his first dollar?

5. **5 pts**

Raking a yard takes 90 minutes and uses \$1.50 of bags. You charge \$12. What is your profit per job and per hour?

6. **5 pts**

What did Booker T. Washington do when he was asked to sweep a room, and what does it teach about service?

7. **5 pts**

Why is a checklist useful in a service business?

8. **5 pts**

You did 8 jobs at \$6 each. Supplies cost \$5 in all, and you owe your parent \$3 for gloves. What is your net profit?

9. **5 pts**

What are John Wesley's three rules for the use of money?

10. **5 pts**

What would happen to a service business that was often late, skipped steps and hid its mistakes? Explain.

ANSWER KEY

1. A goods business sells things it makes or buys (a bakery, a toy store). A service business sells work done for customers (pet sitting, lawn care, surveying).
2. Surveying land; he was careful, accurate, honest and dependable, so landowners could trust his boundaries.
3. Any four: the need, the customers, what you will do, your price, what you need (tools and supplies), safety, saving and giving, a goal.
4. He rowed two travelers and their trunks out to a steamboat on the Ohio River, and each paid him a silver half-dollar.
5. Profit: $\$12.00 - \$1.50 = \$10.50$. Per hour: $\$10.50 \div 90 \times 60 = \$7.00$ per hour.
6. He swept it three times and dusted it four times until no dust could be found. Doing every job with great care earns trust and opportunities.
7. It makes sure every step is done every time, so the work is the same high quality and nothing is forgotten.
8. Revenue: $8 \times \$6 = \$48$. Costs: $\$5 + \$3 = \$8$. Net profit: $\$48 - \$8 = \$40$.
9. Gain all you can (honestly), save all you can, give all you can.
10. Customers would stop trusting it and stop hiring it, tell others, and the business would lose its customers and fail.

PORTFOLIO PIECE: MY SERVICE BUSINESS FOLDER

Gather the whole record of your service business in one folder: your one-page plan and signed partnership agreement, your price list and cost table, your job checklist, your job log, your customers' feedback, your ledger and receipts, and your final business report showing revenue, costs, profit, and what you saved and gave. Add a thank-you note from or to one of your customers if you have one, and a short paragraph on what you learned about serving others.

LOOK FOR	WHAT IT MEANS
Planning	The plan, agreement and price list are complete, clear and approved.
Faithful work	The job log and feedback show jobs done carefully, safely and on time.
Records	The ledger and report are complete and correctly added, with costs and profit shown.
Stewardship	Savings and giving were carried out as planned, and the reflection is thoughtful.

9.1 CHOOSE A SERVICE AND PLAN IT

OBJECTIVES

- Explain the difference between a goods business and a service business.
- Tell how young George Washington earned money as a surveyor.
- Choose a safe, needed service with a parent and write a one-page plan and a partnership agreement.

Warm-up. Walk around your house and yard with a parent. Make a list of every job that needs doing each week: watering, sweeping, raking, feeding the pets, taking out trash. Put a star next to the jobs a neighbor might pay someone to do while they are busy or away.

WATCH

Biz Kid\$: Crash Course On Starting A Business (Accessible Preview)

Described and Captioned Media Program • 4:07

<https://www.youtube.com/watch?v=kB7bGNBPaCM>

WHEN TO WATCH

Before writing your one-page plan.

BACKUP VIDEO

Young entrepreneur starts a pet minding business at the age of eight | ABC Australia

ABC Australia • 4:15

<https://www.youtube.com/watch?v=FrHArU1GmM>

After the story: an eight-year-old who runs a pet-minding business with her family.

KEY TERMS

service

Work done for someone else, such as caring for pets or raking leaves, instead of a thing that is made and sold.

service business

A business that earns money by doing work for customers.

business plan

A written plan that says what a business will do, for whom, at what price, and how.

partnership

An agreement between two or more people to run a business together and share its work and profits.

reference

A person who can tell others that you did good, honest work.

CORE IDEAS

The story. George Washington's father died when George was eleven, and the family did not have much money to spare. As a teenager, George studied surveying: measuring land with a compass and a long chain and drawing exact maps of where one person's property ended and another's began. In 1748, at sixteen, he joined a surveying trip into the wild Shenandoah Valley for Lord Fairfax, the great landowner of northern Virginia. In 1749, at seventeen, he was appointed the official surveyor of Culpeper County. Over the next few years he surveyed many farms and tracts of land, and he was well paid for careful work. He saved his earnings and bought land of his own.

How they figured it out. Surveying was a **service**: Washington did not make a product to sell. He sold his skill, his time and his trustworthiness. Landowners needed exact surveys so there would be no arguments about boundaries, so they wanted a surveyor who was careful, honest and dependable. Washington worked long days outdoors in all kinds of weather, slept in the woods, and recorded every measurement in his notebooks. Each good survey led to more work, because satisfied customers told others, and his good name became his best **reference**.

The big idea. A **service business** sells work. It usually needs fewer supplies than a goods business, but it depends completely on doing the job well, being on time and being trustworthy, because customers are letting you into their yard, their home or the care of their animals. Before starting, a wise business owner writes a **business plan**: What need will I meet? Who are my customers? What exactly will I do? What will I charge? What could go wrong, and how will I keep it safe? And for a young person, every plan needs a parent as a **partner**.

In business today. Service businesses are everywhere: plumbers, doctors, barbers, lawn-care companies, pet sitters, teachers and house cleaners. Many successful companies began with one person offering a service to neighbors. The best ones still win customers the way Washington did: careful work, honest dealing and happy customers who tell their friends. “Seest thou a man diligent in his business? he shall stand before kings” (Proverbs 22:29).

PICTURE STUDY



Young George Washington Surveying, National Park Service artist, 1956 · Ink drawing · George Washington Birthplace National Monument, Virginia

Image: [Wikimedia Commons](#), public domain

This drawing was made in 1956 for the National Park Service at George Washington's birthplace in Virginia. It imagines young Washington at work as a surveyor, sighting through his instrument with his maps tucked under his arm. Americans have long liked to remember that their first president started out earning his living with careful, honest work.

Look closely

- Find Washington's surveying instrument. What is it standing on?
- Find the rolled papers under his arm. What might be drawn on them?
- Look at the setting. Why would surveying land like this be hard work?
- Look at Washington's face and posture. What qualities does the artist want you to see?

Talk about it

1. Why would a landowner want a careful and honest surveyor?
2. What did Washington sell, if not a product?
3. What service could you offer, and what qualities would your customers need to see in you?

Safety first. A parent must approve the business and every customer. Offer your service only to family, friends and neighbors your family knows; never go door to door alone or advertise online, and never give out personal information. A parent should know where you are and check on you during every job.

PROJECT

My One-Page Service Plan and Partnership Agreement

You will choose your service with your parent, ask a few possible customers what they need, and write a one-page plan and a simple partnership agreement.

You will need

- Ledger notebook and one clean sheet of paper for the final plan
- A list of neighbors and family friends your parent approves
- A parent partner

Steps

1. With your parent, list three services you could do well and safely, such as feeding and walking a pet, watering plants and bringing in mail while a family is away, raking leaves, pulling weeds or sweeping porches.
2. Choose one. Make sure it meets a real need, that you can do it well, and that your parent approves.
3. With your parent, talk to three or four possible customers you know. Ask: Would you use this service? How often? What would you want done? Record their answers.
4. Write your one-page plan with seven headings: The need, My customers, What I will do, My price, What I need (tools and supplies), Safety, Saving and giving.
5. Set one goal with a number and a date, such as “Do 6 jobs by June 30.”
6. Write a partnership agreement with your parent: who drives or walks with you, who keeps the money, who pays for supplies, how many jobs you will do a week, and what share of the profit you will save and give. Both sign it.
7. Make a calendar for the next three weeks showing when you will work, when you will collect payment and when you will close the books.

Tips

- Start small. One or two reliable customers are better than many you cannot serve well.

- If your parent buys supplies for you, such as gloves or bags, record it in your ledger as money you owe the partnership.

Check your work

- ☐ I chose a service that meets a real need and is safe and approved.
- ☐ My one-page plan answers all seven headings.
- ☐ My parent and I signed a partnership agreement and a calendar.

LEDGER NOTEBOOK

1. Draw your service in action, with labels for the tools you will use.
2. Make a T-chart: Goods businesses and Service businesses, with three examples of each.
3. Copy your goal in large letters and draw a progress bar you can fill in as you complete jobs.

From history. Washington kept the instruments of his surveying days all his life. Years later, as a general and a president, he still drew careful maps and plans of his farms at Mount Vernon, measuring and recording every field.

COMMON MISTAKES

- Choosing a service you cannot do well or safely. Pick something you can do excellently every time.
- Promising more jobs than you have time for.
- Starting without a written plan and agreement with your parent.

Make it a game • Goods or Service. Beat the clock: one minute to name as many service businesses as you can, then one minute for goods businesses. Count each point on a sheet. Next, play surveyor like young Washington. Guess your hallway's length in steps, then measure it with string and compare. The closest guess wins and charges a pretend fee.

Scripture. “Seest thou a man diligent in his business? he shall stand before kings; he shall not stand before mean men.” (Proverbs 22:29, KJV)

Washington's careful work as a young surveyor helped prepare him for much greater responsibilities. Diligence in small jobs opens doors to bigger ones.

9.2 PRICE YOUR TIME AND YOUR COSTS

OBJECTIVES

- Tell the story of young Abraham Lincoln's first dollar.
- Figure the cost of a service job, including supplies and time, and choose a fair price per job or per hour.
- Make a price list and estimate profit for a week of jobs.

Warm-up. Time yourself doing one real chore at home, like sweeping the kitchen or watering all the plants. Write down how many minutes it took. If someone paid you for that chore, what would be a fair amount? Why?

WATCH

Price Your Items To Sell! Tip #4 for Youth Entrepreneurs

Kids Markets • 2:31

<https://www.youtube.com/watch?v=NLMDM8jq7JI>

WHEN TO WATCH

Before making your price list.

KEY TERMS

wage

Money paid for work, often by the hour.

per job

A price charged for a whole task, no matter how long it takes.

per hour

A price charged for each hour of work.

supplies

Things used up to do a job, such as trash bags, pet treats or gloves.

fair price

A price that pays the worker honestly for his time and costs and gives the customer good value.

CORE IDEAS

The story. Years after he became president, Abraham Lincoln told a friend about the day he earned his first dollar. As a boy of about eighteen in southern Indiana, he had built a small flatboat to carry some produce down the river. While he stood at the landing on the Ohio River, two men came down in a carriage with their trunks and asked him to take them out to a steamboat that was coming down the river. Lincoln rowed them and their trunks out to the steamboat. Each man then tossed a silver half-dollar into the bottom of his boat. Lincoln said he could hardly believe that he, a poor boy, had earned a whole dollar in less than a day. The world, he said, seemed wider and fairer, and he felt more hopeful from that time on.

How they figured it out. Lincoln's customers paid him **per job**: so much for the trip, not by the hour. Workers can also be paid **per hour**. To choose a **fair price**, a service business asks several questions. How long does the job take? What **supplies** will I use up, and what do they cost? What do others nearby charge for the same service? How much is the job worth to the customer? A fair price covers your costs, pays you honestly for your time, and gives the customer good value, so he is glad to hire you again.

The big idea. In a service business, your **time** is the main thing you sell, so you must count it. Suppose raking a yard takes 2 hours and uses \$1 of trash bags. If you charge \$11, your profit is \$10, which is \$5 for each hour of work. If you get faster and finish in 1 hour, you earn more for each hour, and the customer pays the same. Doing good work faster, without cutting corners, is how a service business grows.

In business today. Plumbers, electricians and lawyers usually charge by the hour. Lawn-care companies, house painters and pet sitters often charge per job or per visit. Many post a simple price list so customers know exactly what they will pay, like Wanamaker's price tags. A good service business is honest about its prices before the job begins, so there are no surprises, and it never charges for work it did not do.

PICTURE STUDY



The Weeders, Jules Breton, 1868 • Oil on canvas • The Metropolitan Museum of Art, New York

Image: [Wikimedia Commons](#), public domain

Jules Breton grew up in a farming village in northern France and spent his life painting the people who worked its fields. Here, at the end of a long day, women and girls are weeding a field by hand, working row by row. Pulling weeds was paid work for many country families, and a good weeder was valued for being careful not to pull up the young crop.

Look closely

- Count the people working. How are they working: standing, bending or kneeling?
- Look at the sky. What time of day is it? How long might they have worked?
- Find any tools or baskets. What do they use to carry the weeds?
- Look at the field. How much is finished and how much is left to do?

Talk about it

1. How would you set a fair price for weeding a field like this: by the hour, by the row, or by the whole field?
2. Why would a farmer pay more for a careful weeder than a careless one?
3. What part of this work would be the same if you were weeding a neighbor's garden today?

PROJECT

My Price List and a Week of Jobs

You will time a sample job, list its supplies, compare prices, and make a price list. Then you will estimate a week's revenue, costs and profit.

You will need

- A timer and ledger notebook
- A list of supplies for your service and their costs (ask a parent)
- A calculator and an index card for your price list

Steps

1. Do one sample job at home (for example, rake one part of your own yard, or feed and walk your own pet) and time it.
2. List the supplies used for one job and their cost. Example: 2 trash bags at 25¢ each = 50¢.
3. With a parent, find out what others in your area charge for a similar job, or ask two adults you know what they think is fair.
4. Choose a price per job (or per visit). Make a cost table: Price, Supplies cost, Profit per job, Minutes per job, Profit per hour.
5. To find profit per hour: $\text{profit per job} \div \text{minutes} \times 60$. Example: \$4 profit in 30 minutes = $\$4 \div 30 \times 60 = \$8$ per hour.
6. Make a price list on an index card with each service, what it includes, and the price.
7. Estimate a week: if you do 4 jobs, what are your revenue, supplies cost and profit? Record it in your ledger.

Tips

- Be clear about what each price includes: "Walk dog 20 minutes, fresh water, clean up" is better than just "Dog walk."
- It is fine to offer a lower price to a family member or an older neighbor as a kindness. Write it in your ledger as a gift of service.

Check your work

- ☐ I can tell the story of Lincoln's first dollar.
- ☐ My cost table shows profit per job and profit per hour.
- ☐ My price list is clear, fair and approved by my parent.

LEDGER NOTEBOOK

1. Draw young Lincoln rowing two travelers and their trunks out to a steamboat, with two half-dollars in the bottom of his boat.
2. Design your price list as a neat little sign.
3. Make a bar graph comparing profit per hour at three different prices.

From history. Lincoln's first dollar nearly got him into trouble. Two brothers who ran a ferry on the other side of the river said he had no right to carry passengers and took him to a local justice of the peace. The judge decided Lincoln had not broken the law, because he had only rowed people out to a steamboat, not across the river. Lincoln said the case made him curious about the law for the first time.

COMMON MISTAKES

- Forgetting the cost of supplies.
- Charging so little that you lose interest, or so much that no one hires you.
- Changing the price after the job is done. Agree on the price first.

Make it a game • Quote Counter. Your parent names three jobs, such as washing the car or raking leaves, with supplies and hours listed. You have two minutes per job to figure the cost of supplies, add your time at a rate, and call out a fair price. Your parent may challenge it; defend your price with your numbers. Then tell how Lincoln earned his first dollar.

9.3 DO THE JOB WELL: FAITHFUL SERVICE

OBJECTIVES

- Tell how Booker T. Washington won his place at Hampton Institute by sweeping a room with great care.
- Make a job checklist so every job is done the same careful way.
- Do real jobs safely, keep a job log, and ask customers for feedback.

Warm-up. Sweep or dust one small area of your home as well as you possibly can. Then ask a parent to inspect it with a white tissue or paper towel. Did you miss anything? What would “excellent” look like?

WATCH

Pet Sitting Tips

Animal Wonders Montana • 5:40

<https://www.youtube.com/watch?v=JGjtopH-Yes>

WHEN TO WATCH

Before writing your job checklist, if your service is pet care. Note what an owner wants a sitter to do.

KEY TERMS

faithful

Steady, loyal and trustworthy in doing what you promised.

quality

How good and careful a piece of work is.

job log

A record of each job: date, customer, what was done, time spent and payment.

checklist

A list of steps to complete so nothing is forgotten.

dependable

Able to be counted on to do what you said, when you said.

CORE IDEAS

The story. In 1872 a poor sixteen-year-old named Booker T. Washington set out for Hampton Institute in Virginia, a school where students could work to pay for their education. It was about five hundred miles from his home in West Virginia. He walked much of the way and begged rides, slept one night under a wooden sidewalk in Richmond, and worked unloading a ship to earn money for food. When he finally arrived, dirty and tired, the head teacher was not sure she should admit him. After a while she said: the room next door needs sweeping; take the broom and sweep it.

How they figured it out. Washington knew this was his chance. He swept the room three times. He dusted it four times, moving every bench and table, and dusted the woodwork around the walls and every corner. When he reported he was done, the teacher came in, took out a white handkerchief and rubbed it on the tables and benches. She could not find a speck of dust. “I guess you will do to enter this institution,” she said. Washington later wrote that the sweeping of that room was his college entrance examination. He was given a job as the school’s janitor to pay for his studies, and he worked early and late to do it well. He went on to found Tuskegee Institute in Alabama and became one of the most famous educators in America.

The big idea. In a service business, the work *is* the product. Customers judge you by its **quality**, and they keep you if you are **faithful** and **dependable**: on time, careful, honest and polite. A **checklist** helps you do every job the same excellent way, and a **job log** helps you keep track of what you did and what you are owed. “Whatsoever ye do, do it heartily, as to the Lord, and not unto men” (Colossians 3:23). Even sweeping a floor can be done for God.

In business today. Hospitals, airlines and restaurants use checklists so that important steps are never skipped. Good service businesses train workers to follow them, to leave every place cleaner than they found it, and to report problems honestly. Customers notice the little things: a gate closed, a pet’s water bowl filled, tools put away. Those little things are what turn a first job into a regular customer.

PICTURE STUDY



A Shepherdess with Her Flock, Jean-François Millet, about 1860s · Black crayon drawing on paper · The Metropolitan Museum of Art, New York
Image: [Wikimedia Commons](#), public domain

Jean-François Millet drew and painted French country people doing ordinary work with quiet dignity. A shepherdess like this one cared for sheep that often belonged to someone else. Her job was to keep them fed, watered and safe all day, to bring every one home, and to notice if any were hurt or missing. It was patient, faithful service.

Look closely

- Find the shepherdess. Where is she looking?
- Count the sheep, or estimate how many there are.
- Find the dog in the distance. How might it help her work?
- Look at her staff and cape. How do they help her do her job outdoors all day?

Talk about it

1. How is caring for a neighbor's pets like this shepherdess's work?
2. What would a careless shepherd do, and what would happen to the flock?
3. What does it mean to be faithful when no one is watching you work?

Safety first. Work only for customers your parent approves, with a parent nearby or checking on you. With animals, follow the owner's instructions exactly, wash your hands afterward, and never handle an animal that seems sick or unfriendly. With yard work, wear gloves and closed shoes, use only hand tools a parent approves, and never use power tools, ladders or chemicals.

PROJECT

My Job Checklist and Job Log

You will write a checklist for your service, do at least three real jobs following it, keep a job log, and ask each customer for feedback.

You will need

- Ledger notebook
- Index cards for your checklist
- The tools and supplies for your service
- A parent partner

Steps

1. Write a checklist on an index card with every step of your job in order.
Example for pet care: arrive on time; greet the pet calmly; fill fresh water; give the measured food; walk or play for the agreed time; clean up; check doors and gates; write a note to the owner; lock up as instructed.
2. Show your checklist to your parent and your first customer and ask whether anything is missing.
3. Do at least three real jobs, following every step of the checklist each time.
4. After each job, write a line in your job log: Date, Customer, What I did, Minutes, Price, Paid?
5. Leave a short, polite note for the customer after each job saying what you did and anything they should know.
6. Ask each customer three questions: What did I do well? What could I do better? Would you hire me again? Record the answers.
7. Write two sentences about how Booker T. Washington's sweeping test is like your own work.

Tips

- Arrive a few minutes early. Being dependable is one of the best things you can offer.
- If something goes wrong, such as a pet that got out or a broken pot, tell the customer and your parent right away. Honesty matters more than looking

perfect.

Check your work

- ☐ My checklist covers every step of my job.
- ☐ My job log records every job I did.
- ☐ I asked each customer for feedback and wrote down one improvement.

LEDGER NOTEBOOK

1. Draw your checklist card and decorate its border.
2. Draw a room swept three times and dusted four times, with a white handkerchief that shows no dust.
3. Make a “quality thermometer” for each job and color it to show your customer’s rating.

From history. At Tuskegee Institute, which he started in 1881 in a borrowed church building, Booker T. Washington had students make the bricks and build many of the school’s own buildings, so they learned trades while they studied.

COMMON MISTAKES

- Skipping steps when no one is watching. Faithful work is the same whether or not anyone checks.
- Hiding mistakes. Tell the customer and your parent right away.
- Forgetting to write each job in the log the same day.

Make it a game • Sweep It Right. Write a four-step checklist for a small job, such as setting the table or sweeping a room, as Booker T. Washington did at Hampton. Do the job while your parent inspects each step with a clipboard or paper. Earn one point for every checked box done carefully. Finally, fill in a quick job log line.

Scripture. “And whatsoever ye do, do it heartily, as to the Lord, and not unto men;” (Colossians 3:23, KJV)

Paul tells us to work heartily, as if we were working for the Lord Himself. Even a small job, done faithfully, honors God and serves our neighbor.

9.4 CLOSE THE BOOKS: PROFIT, LESSONS AND GIVING

OBJECTIVES

- Close the books on your service business: total revenue, costs and profit.
- Explain John Wesley's rule: gain all you can, save all you can, give all you can.
- Write a short business report and carry out your plan for saving and giving.

Warm-up. Look back through your job log. Without adding anything up yet, guess: How many jobs did you do? How much money did you earn in all? Write your guesses, then check them in this lesson.

WATCH

Earn Save Give - Wesley's Simple Rules for Money

First United Methodist Church of Austin · 1:59

<https://www.youtube.com/watch?v=BX1q25ummlw>

WHEN TO WATCH

After the story of John Wesley.

Note: A short introduction to a church study book on Wesley's rules; the book is not needed.

BACKUP VIDEO

Manage the Money! Tip #3 for Youth Entrepreneurs

Kids Markets · 2:52

<https://www.youtube.com/watch?v=II5ojLdatcU>

Before closing your books: young sellers explain how they decide to save, spend or reinvest.

KEY TERMS

close the books

To add up all the records at the end of a period and find the final totals and profit.

total revenue

All the money earned from customers.

total costs

All the money spent on supplies and other expenses.

net profit

Total revenue minus total costs.

report

A short written summary of what happened and what the numbers show.

CORE IDEAS

The story. John Wesley was an English preacher of the 1700s who traveled thousands of miles on horseback preaching the gospel. In 1760 he published a sermon called “The Use of Money.” In it he gave three simple rules. First, *gain all you can*: work hard and honestly, without harming your health, your neighbor or your soul. Second, *save all you can*: do not waste money on things you do not need. Third, *give all you can*: use what you have to provide for your family and to help others, because it all belongs to God. Wesley lived by his own rules. As his income from his books grew, he kept living simply and gave away most of what he earned.

How they figured it out. Wesley knew that money is neither good nor evil by itself; what matters is how we earn it, keep it and use it. A business owner at the end of a season must look honestly at his numbers to know how he did: how much he earned, what it cost, what is left, and what he learned. Then he decides what to do with the profit: some to save, some to give, some to spend, and some, perhaps, to put back into the business for next season. Closing the books is the moment when a steward stops to give an account, like the servants in the parable of the talents (Matthew 25:14-30).

The big idea. To close the books, add up your **total revenue** from your job log, add up your **total costs** for supplies and anything you owe your partner, and subtract: revenue – costs = **net profit**. Then divide your profit according to your plan. Finally, write a short **report**: what went well, what did not, what customers said, and what you would do differently. A business that learns from its records gets better every season.

In business today. Every business closes its books at the end of each month and year, and reports its profit or loss to its owners, its bank and the government. Many business owners who are Christians set aside part of their profit for their church and

for charity, as Wesley taught. You have now done what every business owner does: planned, priced, served, recorded, closed the books and decided how to use what you earned. *Fabricando fit faber*: by making, one becomes a maker, and by serving, one becomes a servant worth hiring.

PICTURE STUDY



John Wesley, Nathaniel Hone, about 1766 · Oil on canvas · National Portrait Gallery, London

Image: [Wikimedia Commons](#), public domain

Nathaniel Hone, an Irish-born painter who worked in London, painted this portrait of John Wesley when Wesley was in his sixties and still traveling and preaching almost every day. Wesley wrote that he did not want to be remembered for riches. When he died in 1791, he left very little money, because he had given so much of it away.

Look closely

- Look at Wesley's clothes. Are they rich and showy or plain?
- Look at his raised hand. What does it seem he is doing?
- Find the small book in his other hand. What book do you think it might be?
- Look at the outdoor setting. Wesley often preached outdoors to crowds. Why might the painter show him outside?

Talk about it

1. How does Wesley's plain dress fit his rule "save all you can"?
2. What do you think Wesley would say about how to use the profit from your business?
3. Which of Wesley's three rules is hardest for you? Why?

PROJECT

My Business Report and Gift

You will close the books on your service business, write a one-page report, pay back your partner if you owe anything, and divide your profit to save and give as you planned.

You will need

- Your job log, ledger and receipts
- A calculator
- Your Give, Save and Spend jars
- Your partnership agreement from Lesson 9.1

Steps

1. Add up your total revenue from every job in your job log.
2. Add up your total costs: supplies, and anything your parent paid that the agreement says you will pay back.
3. Find your net profit: total revenue – total costs.
4. Pay back your partner what you owe, if anything, and record it in your ledger.
5. Divide your profit as your agreement said, for example 10% give, 40% save, 50% spend. Put the money in the jars.
6. Write a one-page report with these parts: Jobs done, Total revenue, Total costs, Net profit, What customers said, What I learned, What I gave and saved, and What I would do next time.
7. Give your gift this week to your church or a cause your family chooses, and thank each of your customers with a short note.

Tips

- Check your math twice. Your ledger's ending balance should match the money you actually have.
- Even a small profit, honestly earned and wisely used, is a real success.

Check your work

- ☐ My report shows correct totals for revenue, costs and profit.
- ☐ I paid back my partner and divided my profit as planned.
- ☐ I can explain Wesley's three rules for the use of money.

LEDGER NOTEBOOK

1. Write Wesley's three rules in large letters and draw a picture for each from your own business.
2. Make a pie chart of how your profit was used: Give, Save, Spend and Back into the business.
3. Write a list of three things you would change if you ran your business again next season.

From history. John Wesley kept careful accounts of his own money for most of his life. Near the end, he wrote in his account book that for many years he had kept exact accounts and would not try to do so any longer, because he was satisfied that he saved all he could and gave all he could.

COMMON MISTAKES

- Counting revenue as profit. Subtract all costs first.
- Forgetting to pay back your partner.
- Skipping the report. Writing down what you learned is how you get better next time.

Make it a game • Close the Books Sprint. Your parent hands you ten slips of a pretend week's jobs: some earnings, some costs. Set a two-minute timer. Total revenue, total costs and net profit, then set aside a gift. Finish by reciting John Wesley's three rules, gain, save and give all you can, in order and from memory.

BONUS: RUN A REAL SERVICE BUSINESS

This optional unit puts the whole year to work. With a parent as your partner, you will start, run and close the books on a small **service business**: a business that sells work instead of things. You might feed and walk a neighbor's pets while they travel, water plants, rake leaves, pull weeds, sweep porches, or carry in groceries for an older neighbor, always for people your family knows.

You will learn from young George Washington, who earned his first real wages as a surveyor at seventeen; from young Abraham Lincoln, who earned his first dollar rowing two travelers out to a steamboat; from Booker T. Washington, who won his place at school by sweeping a room better than anyone expected; and from John Wesley, who taught "gain all you can, save all you can, give all you can." You will plan, price, do the work faithfully, keep a ledger, and finish with a profit report and a gift.

PREREQUISITES

- Can keep a ledger with a running balance (Unit 7)
- Can figure cost, price and profit (Units 6 and 7)
- A parent who agrees to be a partner and supervisor

MASTERY CHECKLIST

- ☐ I can choose a service that meets a real need, is safe and is approved by my parent.
- ☐ I can write a one-page plan and set a fair price for my time and costs.
- ☐ I can do the job faithfully, safely and well, and ask customers for feedback.
- ☐ I can keep a ledger of every job and payment and figure my profit.
- ☐ I can decide how much of my profit to save and to give, and do it.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Biz Kid\$ (public television series):** Free videos and lesson ideas from the public-television series about young people who start real businesses. Watch with a parent for ideas and encouragement.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

9.1 Choose a Service and Plan It	2 sessions of 45 minutes
9.2 Price Your Time and Your Costs	2 sessions of 45 minutes
9.3 Do the Job Well: Faithful Service	2 sessions of 45 minutes
9.4 Close the Books: Profit, Lessons and Giving	2 sessions of 45 minutes

UNIT 9 REVIEW

Answer each question. Show your work for calculations and use complete sentences for explanations. The review is worth 50 points.

1. **5 pts**
What is the difference between a goods business and a service business? Give an example of each.
2. **5 pts**
What service did young George Washington sell, and why did customers want him?
3. **5 pts**
Name four things a one-page service plan should include.
4. **5 pts**
How did young Abraham Lincoln earn his first dollar?

5. (5 pts)

Raking a yard takes 90 minutes and uses \$1.50 of bags. You charge \$12. What is your profit per job and per hour?

6. (5 pts)

What did Booker T. Washington do when he was asked to sweep a room, and what does it teach about service?

7. (5 pts)

Why is a checklist useful in a service business?

8. (5 pts)

You did 8 jobs at \$6 each. Supplies cost \$5 in all, and you owe your parent \$3 for gloves. What is your net profit?

9. (5 pts)

What are John Wesley's three rules for the use of money?

10. (5 pts)

What would happen to a service business that was often late, skipped steps and hid its mistakes? Explain.

ANSWER KEY

1. A goods business sells things it makes or buys (a bakery, a toy store). A service business sells work done for customers (pet sitting, lawn care, surveying).
2. Surveying land; he was careful, accurate, honest and dependable, so landowners could trust his boundaries.
3. Any four: the need, the customers, what you will do, your price, what you need (tools and supplies), safety, saving and giving, a goal.
4. He rowed two travelers and their trunks out to a steamboat on the Ohio River, and each paid him a silver half-dollar.
5. Profit: $\$12.00 - \$1.50 = \$10.50$. Per hour: $\$10.50 \div 90 \times 60 = \$7.00$ per hour.
6. He swept it three times and dusted it four times until no dust could be found. Doing every job with great care earns trust and opportunities.
7. It makes sure every step is done every time, so the work is the same high quality and nothing is forgotten.
8. Revenue: $8 \times \$6 = \$48$. Costs: $\$5 + \$3 = \$8$. Net profit: $\$48 - \$8 = \$40$.
9. Gain all you can (honestly), save all you can, give all you can.
10. Customers would stop trusting it and stop hiring it, tell others, and the business would lose its customers and fail.

PORTFOLIO PIECE: MY SERVICE BUSINESS FOLDER

Gather the whole record of your service business in one folder: your one-page plan and signed partnership agreement, your price list and cost table, your job checklist, your job log, your customers’ feedback, your ledger and receipts, and your final business report showing revenue, costs, profit, and what you saved and gave. Add a thank-you note from or to one of your customers if you have one, and a short paragraph on what you learned about serving others.

LOOK FOR	WHAT IT MEANS
Planning	The plan, agreement and price list are complete, clear and approved.
Faithful work	The job log and feedback show jobs done carefully, safely and on time.
Records	The ledger and report are complete and correctly added, with costs and profit shown.
Stewardship	Savings and giving were carried out as planned, and the reflection is thoughtful.