

GRADE 3 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 money through one school year: work and trade, the story of money, markets, great businesses, workers and owners, starting a business and selling, keeping accounts, and saving, investing and giving. Each unit is built on true stories from history: Adam Smith watching ten men make thousands of pins a day, Phoenician sailors trading purple cloth across the sea, the goldsmiths of London writing the first paper receipts, the Medici bankers of Florence, the Sears catalog arriving at farmhouses, Henry Ford's Model T, the Cadbury brothers building a village for their workers, Lord Shaftesbury and Lewis Hine helping children out of the factories, the Wright brothers' bicycle shop and Luca Pacioli teaching the merchants of Venice to keep their books.

Every lesson follows the same path. First comes **the story**. Then **how they figured it out**: what problem was in the way, what they tried, and what they counted and changed. Then **the big idea**, told simply for a third grader: choices and what we give up, dividing the work, supply and demand, competition, profit, saving and interest. Then **in business today**: how families, shops and banks use the idea now, and what an honest and wise person does with it. Last, the student does it in miniature with coins, a kitchen scale, price tags, 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 for a long time. The year ends with a family market day, and an optional bonus unit, **Run a Real Business**, walks the student through a real lemonade or baked-goods stand with a cost sheet, with a parent.

Most videos come from the Federal Reserve banks, museums and trusted teaching channels for children such as Homeschool Pop, Learn Bright, Biz Kid\$ 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 an invitation to subscribe; you can stop the video when the teaching ends. Watch together, and pause when the lesson tells you to guess what comes next.

Start with Lesson 1.1 →

WHO IT IS FOR

Written for students in grade 3 (about ages 8–9) who can read simple chapter books, add and subtract money to \$20, and are beginning to multiply. A parent or teacher reads the stories aloud or alongside, 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, a kitchen scale, 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. The paragraphs marked *The story* and *How they figured it out* tell what happened; *The big idea* explains the money or business idea underneath; *In business today* shows how people use it now. After each paragraph, ask your child to tell it back in his or her own words. Telling back is how the story sticks.
3. **Picture study.** Each lesson has one public-domain painting, print or historic photograph. Look at it quietly for two minutes. Then put it away and have your child 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 chart, a ledger page, a savings chart or a stakeholder scorecard.

Date every page and write one sentence about what you would change. Honest records matter more than big numbers.

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 with a rating from 1 to 5 and a reason; 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, free teaching sites, picture books 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 log, a money timeline, a price survey, a stakeholder report, a shop plan, a month of ledger pages or a savings plan. Reviews may be done aloud. 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. Your child 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, your child 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 your child through planning, costing, selling and closing the books on a real lemonade or baked-goods stand with a parent, for family, friends and neighbors you know. 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; choices and opportunity cost; Adam Smith’s pin factory and dividing the work; and the Phoenician traders who carried purple cloth across the sea.

- 1.1 Made to Work: Work Is a Calling
- 1.2 Choices and Opportunity Cost
- 1.3 Adam Smith’s Pin Factory: Dividing the Work
- 1.4 The Phoenician Traders and Their Purple Cloth

UNIT 3 • WEEKS 9–12

Markets

Supply and demand with simple charts; how competition makes things better and cheaper; what happens when there is only one store in town; and the fairs and guilds of the Middle Ages.

- 3.1 Supply and Demand: The Gold Rush Prices
- 3.2 Competition: The Cereal Makers of Battle Creek
- 3.3 One Store in Town: What Is a Monopoly?
- 3.4 Medieval Fairs and Guilds

UNIT 2 • WEEKS 5–8

The Story of Money

From barter to commodity money; Lydia’s first coins and the gold trade; the goldsmiths’ paper receipts; and the dollar and the Federal Reserve, told simply.

- 2.1 From Barter to Commodity Money
- 2.2 Lydia’s First Coins and the Gold Trade
- 2.3 Goldsmiths and Paper Receipts
- 2.4 The Dollar and the Federal Reserve

UNIT 4 • WEEKS 13–16

Great Businesses and Their Stakeholders

The six stakeholders and the stakeholder scorecard, tried on the Medici bankers of Florence, the Sears catalog, Henry Ford’s Model T and Cadbury’s chocolate and the village of Bournville.

- 4.1 The Six Stakeholders and the Medici Bankers of Florence
- 4.2 The Sears Catalog: A Store for Farm Families
- 4.3 Henry Ford’s Model T: A Car for Everyone
- 4.4 Cadbury’s Chocolate and the Village of Bournville

UNIT 5 • WEEKS 17–20

Workers, Owners and Fair Rules

How owners and workers need each other; Lord Shaftesbury and the Factory Acts; Lewis Hine and the end of most child labor; and honest coins and the U.S. Mint.

- 5.1 Owners and Workers Need Each Other
- 5.2 Lord Shaftesbury and the Factory Acts
- 5.3 Lewis Hine: Children Belong in School
- 5.4 Honest Coins and the U.S. Mint

UNIT 7 • WEEKS 25–28

Bookkeeping

Money in and money out; the ledger; profit and loss; and Luca Pacioli and the merchants of Venice.

- 7.1 Money In and Money Out: Rockefeller's Ledger A
- 7.2 The Ledger: George Washington's Account Books
- 7.3 Profit and Loss: Milton Hershey's First Candy Shop
- 7.4 Luca Pacioli and the Merchants of Venice

UNIT 6 • WEEKS 21–24

Entrepreneurship and Sales

The Wright brothers' bicycle shop that paid for the airplane; finding a need; the honest sales pitch; and setting a fair price.

- 6.1 The Wright Brothers' Bicycle Shop
- 6.2 Finding a Need: Earle Dickson and the Band-Aid
- 6.3 The Honest Sales Pitch: H. J. Heinz's Clear Glass Bottles
- 6.4 Setting a Fair Price: Woolworth's Five-and-Ten

UNIT 8 • WEEKS 29–32

Saving, Investing and Giving

Saving for a goal; compound interest, simply; owning a share of a business; and giving cheerfully and the family market day.

- 8.1 Saving for a Goal: Franklin and the Whistle
- 8.2 Interest Grows: Franklin's 200-Year Gift
- 8.3 Owning a Share: The First Shares in Amsterdam
- 8.4 Giving Cheerfully and the Family Market Day

UNIT 9 • WEEKS 33–36

Bonus: Run a Real Business

Optional bonus unit: plan a real lemonade or baked-goods stand, make a test batch with a cost sheet, sell it honestly, and close the books with a profit report and a gift.

9.1 Plan Your Stand: The One-Page Plan

9.2 The Test Batch and the Cost Sheet

9.3 Selling Day: Honest Selling and Making Change

9.4 Close the Books: Profit, Lessons and Giving

WEEKLY PACING CALENDAR

WEEK	PLAN
1	• Session 1: Lesson 1.1 Made to Work: Work Is a Calling: 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 Choices and Opportunity Cost: warm-up, video, teaching and picture study • Session 2: Lesson 1.2 project and ledger notebook
3	• Session 1: Lesson 1.3 Adam Smith’s Pin Factory: Dividing the Work: warm-up, video, teaching and picture study • Session 2: Lesson 1.3 project and ledger notebook
4	• Session 1: Lesson 1.4 The Phoenician Traders and Their Purple Cloth: warm-up, video, teaching and picture study • Session 2: Lesson 1.4 project and ledger notebook • Session 3: Unit 1 review and portfolio project

WEEK	PLAN
5	• Session 1: Lesson 2.1 From Barter to Commodity Money: warm-up, video, teaching and picture study • Session 2: Lesson 2.1 project and ledger notebook
6	• Session 1: Lesson 2.2 Lydia's First Coins and the Gold Trade: warm-up, video, teaching and picture study • Session 2: Lesson 2.2 project and ledger notebook
7	• Session 1: Lesson 2.3 Goldsmiths and Paper Receipts: warm-up, video, teaching and picture study • Session 2: Lesson 2.3 project and ledger notebook
8	• Session 1: Lesson 2.4 The Dollar and the Federal Reserve: 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: The 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 Competition: The Cereal Makers of Battle Creek: warm-up, video, teaching and picture study • Session 2: Lesson 3.2 project and ledger notebook
11	• Session 1: Lesson 3.3 One Store in Town: What Is a Monopoly?: warm-up, video, teaching and picture study • Session 2: Lesson 3.3 project and ledger notebook
12	• Session 1: Lesson 3.4 Medieval Fairs and Guilds: 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 Six Stakeholders and the Medici Bankers of Florence: warm-up, video, teaching and picture study • Session 2: Lesson 4.1 project and ledger notebook

WEEK	PLAN
14	• Session 1: Lesson 4.2 The Sears Catalog: A Store for Farm Families: warm-up, video, teaching and picture study • Session 2: Lesson 4.2 project and ledger notebook
15	• Session 1: Lesson 4.3 Henry Ford's Model T: A Car for Everyone: warm-up, video, teaching and picture study • Session 2: Lesson 4.3 project and ledger notebook
16	• Session 1: Lesson 4.4 Cadbury's Chocolate and the Village of Bournville: 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 Owners and Workers Need Each Other: warm-up, video, teaching and picture study • Session 2: Lesson 5.1 project and ledger notebook
18	• Session 1: Lesson 5.2 Lord Shaftesbury and the Factory Acts: warm-up, video, teaching and picture study • Session 2: Lesson 5.2 project and ledger notebook
19	• Session 1: Lesson 5.3 Lewis Hine: Children Belong in School: warm-up, video, teaching and picture study • Session 2: Lesson 5.3 project and ledger notebook
20	• Session 1: Lesson 5.4 Honest Coins and the U.S. Mint: 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 The Wright Brothers' Bicycle Shop: warm-up, video, teaching and picture study • Session 2: Lesson 6.1 project and ledger notebook
22	• Session 1: Lesson 6.2 Finding a Need: Earle Dickson and the Band-Aid: warm-up, video, teaching and picture study • Session 2: Lesson 6.2 project and ledger notebook

WEEK	PLAN
23	• Session 1: Lesson 6.3 The Honest Sales Pitch: H. J. Heinz's Clear Glass Bottles: warm-up, video, teaching and picture study • Session 2: Lesson 6.3 project and ledger notebook
24	• Session 1: Lesson 6.4 Setting a Fair Price: Woolworth's Five-and-Ten: 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 Money In and Money Out: Rockefeller's Ledger A: warm-up, video, teaching and picture study • Session 2: Lesson 7.1 project and ledger notebook
26	• Session 1: Lesson 7.2 The Ledger: George Washington's Account Books: warm-up, video, teaching and picture study • Session 2: Lesson 7.2 project and ledger notebook
27	• Session 1: Lesson 7.3 Profit and Loss: Milton Hershey's First Candy Shop: warm-up, video, teaching and picture study • Session 2: Lesson 7.3 project and ledger notebook
28	• Session 1: Lesson 7.4 Luca Pacioli and the Merchants of Venice: 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 Saving for a Goal: Franklin and the Whistle: warm-up, video, teaching and picture study • Session 2: Lesson 8.1 project and ledger notebook
30	• Session 1: Lesson 8.2 Interest Grows: Franklin's 200-Year Gift: warm-up, video, teaching and picture study • Session 2: Lesson 8.2 project and ledger notebook
31	• Session 1: Lesson 8.3 Owning a Share: The First Shares in Amsterdam: warm-up, video, teaching and picture study • Session 2: Lesson 8.3 project and ledger notebook

WEEK	PLAN
32	• Session 1: Lesson 8.4 Giving Cheerfully 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 <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 Plan Your Stand: The One-Page Plan: 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 The Test Batch and the Cost Sheet: warm-up, video, teaching and picture study • Session 2: Lesson 9.2 project and ledger notebook
35	• Session 1: Lesson 9.3 Selling Day: Honest Selling and Making Change: 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, tally charts, ledger pages 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. Most counting in this course can also be done on paper.

A kitchen scale

For weighing coins, beans and ingredients in Units 2, 5 and 9.

Index cards, sticky notes, markers and masking tape

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

Store flyers and receipts

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

Three envelopes or jars labeled Give, Save and Spend

For the saving and giving lessons in Unit 8 and the bonus business.

Household supplies for small projects

Paper, scissors, a ruler, a timer, dried beans, paper cups, sandwich makings or paper for an assembly-line contest, and simple lemonade or baking supplies for the bonus 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 tables, 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 your child guess first, 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.
- Third graders may answer the unit reviews aloud while the parent writes the answers down. Count spoken answers the same as written ones.
- 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 your child'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 but gently. Great businesses are shown with their strengths and their weak spots, and the lessons on fair rules are taught as settled history: what problem a law or a custom fixed, how it worked, and where rules went wrong. 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 your child sells something, 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 child who works heartily, deals honestly, saves wisely and gives cheerfully. *Fabricando fit faber*: by making, one becomes a maker.

UNIT 1

WORK AND TRADE

Why do people work, and why do they trade? In this unit you will learn that work is a good gift from God, given to Adam in the very first garden. You will learn that we cannot have everything we want, so every choice means giving something up, which is called **opportunity cost**. You will see how Adam Smith watched ten workers make thousands of pins a day by **dividing the work**, and you will sail with the Phoenicians, the great sea traders who carried purple cloth, cedar wood and glass all over the Mediterranean Sea.

Along the way you will keep a ledger notebook, a graph-paper book where you count and write down what you learn: a chart of jobs, a list of choices, the results of an assembly-line contest and a log of trades. By the end you will be able to explain why both sides can gain when people trade fairly.

PREREQUISITES

- Can add and subtract to 100
- Can tell time to the minute (for the timed contest in Lesson 1.3)
- Knows the names and values of pennies, nickels, dimes and quarters

MASTERY CHECKLIST

- ☐ I can explain why work is good and name goods and services that people in my town provide.
- ☐ I can explain scarcity and name the opportunity cost of a choice.
- ☐ I can tell how Adam Smith's pin factory shows the power of dividing the work.
- ☐ I can tell the story of the Phoenician traders and explain why both sides gain from a fair trade.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Ox-Cart Man, by Donald Hall, pictures by Barbara Cooney (Viking):** A picture book about a New Hampshire farm family who make goods all year and sell them at the Portsmouth market. A lovely read-aloud for Lessons 1.1 and 1.4. Ages 4–9.
- **Farmer Boy, by Laura Ingalls Wilder (HarperCollins):** Almanzo Wilder’s boyhood on a New York farm. The chapter “Independence Day” holds the half-dollar story in Lesson 1.2; the whole book is full of work, saving and fair trades. Ages 7–11. Look for it at your library or from the publisher, HarperCollins.

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: Work Is a Calling	2 sessions of 45 minutes
1.2	Choices and Opportunity Cost	2 sessions of 45 minutes
1.3	Adam Smith’s Pin Factory: Dividing the Work	2 sessions of 45 minutes
1.4	The Phoenician Traders and Their Purple Cloth	2 sessions of 45 minutes

UNIT 1 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. 5 pts

What job did God give Adam in Genesis 2:15? Why does this show that work is good?

2. 5 pts

Sort these into goods and services: a haircut, a loaf of bread, a piano lesson, a bicycle, a doctor’s checkup, a pair of shoes.

3. 5 pts

What is scarcity? Give an example from your own life.

4. (5 pts)

Almanzo could buy lemonade or a little pig with his half-dollar. He chose the pig. What was his opportunity cost? Why was it a wise choice?

5. (5 pts)

You have \$8. A book costs \$5, a kite costs \$4 and a puzzle costs \$3. Which two things could you buy together? What would you give up?

6. (5 pts)

Adam Smith wrote that one man alone could hardly make 20 pins a day, but 10 workers dividing the work could make 48,000. How many pins is that for each of the 10 workers?

7. (5 pts)

Give two reasons dividing the work helps workers make more.

8. (5 pts)

What would happen if a pin factory divided the work but one step was much slower than all the others?

9. (5 pts)

How was Phoenician purple dye made, and why was it so costly?

10. (5 pts)

King Hiram gave Solomon cedar, and Solomon gave Hiram wheat and oil. Who gained from this trade? Explain.

ANSWER KEY

1. To dress and keep the garden of Eden. God gave it before anything went wrong in the world, so work is part of the good life God planned, not a punishment.
2. Goods: bread, bicycle, shoes. Services: haircut, piano lesson, doctor's checkup.
3. Not having enough of something for everyone to have all they want. Examples vary: not enough money for every toy, not enough time to do every activity.
4. The lemonade. The lemonade would be gone in minutes, but the pig would grow into a hog worth much more than a half-dollar.
5. Book and puzzle (\$8), or kite and puzzle (\$7, with \$1 left). Book and kite (\$9) is too much. The item not chosen is the opportunity cost.
6. $48,000 \div 10 = 4,800$ pins per worker, compared with fewer than 20 working alone.
7. Any two: each worker gets faster and better at one step; no time is wasted switching tasks; workers invent better tools for their step.
8. Pins would pile up waiting at that step and the other workers would have to wait, so the whole line would be slow. The factory should put more workers or a better tool on the slow step.
9. From the glands of murex sea snails; the liquid turned purple in sunlight. It took thousands of snails to dye one cloak, so it was rare and costly, and it never faded.
10. Both kings. Each gave what he had plenty of and got what he needed: Hiram got food, and Solomon got cedar for the temple.

PORTFOLIO PIECE: MY TRADE LOG AND WORK MAP

Make a two-page record of how work and trade reach your family. On the first page, draw a map from your home outward: your town, your state, your country and the world. Mark at least eight goods your family uses and where each one was made or grown, with an arrow to your home. On the second page, copy your trade log from the Trading Game with the before and after scores, and write a short paragraph explaining why both sides gain from a fair trade, using one example from your log and the story of the Phoenicians.

LOOK FOR	WHAT IT MEANS
Map	At least eight goods are shown with where they came from, found by reading labels or asking a parent.
Trade log	Every trade is recorded honestly with what was given, what was received and why.
Explanation	The paragraph clearly explains why both sides gain from a fair trade, with a real example.
Neatness	Pages are dated, titled, labeled and easy to read.

1.1 MADE TO WORK: WORK IS A CALLING

OBJECTIVES

- Explain from Genesis 2:15 that work was given to people as a good gift before anything went wrong in the world.
- Tell the difference between goods and services, and between producers and consumers.
- Make a chart of the jobs that help your family in one week.

Warm-up. Walk through your house and find five things that someone made: a chair, a cup, a book, a shirt, a loaf of bread. For each one, guess what kind of worker made it. Then think of one thing someone did for your family this week that was not a thing you can hold, like a haircut or a doctor's visit.

WATCH

Producers and Consumers for Kids

Homeschool Pop • 5:27

<https://www.youtube.com/watch?v=dTx-co3t71E>

WHEN TO WATCH

After the story of Adam and Paul, before the big idea.

BACKUP VIDEO

Economics for Kids: Goods and Services

Teaching Without Frills • 3:01

<https://www.youtube.com/watch?v=W6rx-fxJeVs>

KEY TERMS

work

Using your hands, mind and time to make something or do something useful.

calling

The work God gives a person to do to serve Him and serve others; also called a vocation.

goods

Things people make or grow that you can touch, like bread, shoes or a bicycle.

services

Useful work people do for others, like teaching, fixing a car or cutting hair.

producer

A person or business that makes goods or provides services.

consumer

A person who buys and uses goods and services.

CORE IDEAS

The story. The very first job in history was given in a garden. The Bible says that God “took the man, and put him into the garden of Eden to dress it and to keep it” (Genesis 2:15). Adam was to care for the plants and keep the garden in order. This was before anything had gone wrong in the world, so work was not a punishment. It was part of the good life God planned for people. Much later, the apostle Paul worked as a tentmaker with his friends Aquila and Priscilla in the city of Corinth (Acts 18:3). He sewed tents to earn his living while he preached, so that he would not be a burden to anyone.

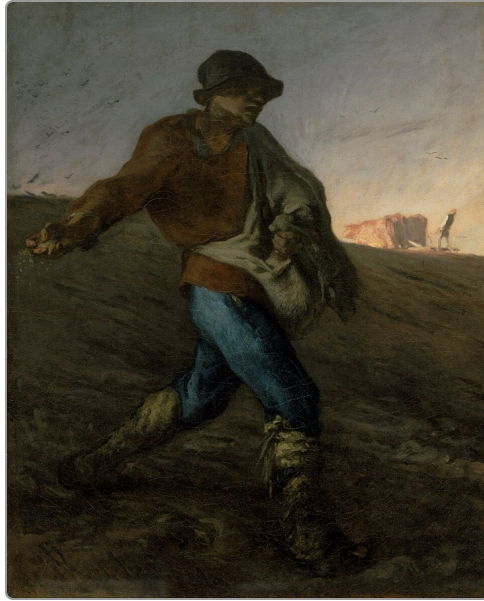
How they figured it out. Every family needs food, clothes and a home. Long ago most families did nearly everything themselves: they grew grain, spun wool, sewed clothes and built their own houses. That was hard, and there was never enough time. Little by little, people found that one person could become very good at one kind of work, such as baking, weaving or making tents, and then trade with neighbors who were good at other work. That is how towns came to have bakers, blacksmiths, shoemakers, teachers and doctors.

The big idea. When you work, you are a **producer**: you make **goods**, which are things you can touch, or you provide **services**, which are useful things you do for others. When you buy and use goods and services, you are a **consumer**. Everyone is both. The baker is a producer when she bakes bread and a consumer when she buys shoes. Christians have long called a person’s work a **calling**, because God calls each of us to serve Him by serving others, whether we bake bread, teach children, build roads or care for a home.

In business today. Every business, from a corner bakery to a giant company, is a group of people doing useful work for others. A good worker shows up on time, does

the job carefully and treats customers well, even when no one is watching. The Bible says, “whatsoever ye do, do it heartily, as to the Lord” (Colossians 3:23). A job done well is a gift to the people it serves.

PICTURE STUDY



The Sower, Jean-François Millet, 1850 · Oil on canvas · Museum of Fine Arts, Boston

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

Jean-François Millet grew up on a farm in Normandy, France, and spent his life painting farmers at work. Here a sower strides across a field, throwing grain with a wide sweep of his arm. Millet wanted people to see that plain, hard work in the fields has dignity and worth.

Look closely

- Look at the sower's arm and legs. How do you know he is moving quickly?
- Find the bag of seed. How does he carry it?
- Look at the sky and the light. What time of day is it? Why might a farmer still be working?
- Is the sower making goods or providing a service? What will his seed become?

Talk about it

1. Who will eat the bread that comes from this farmer's seed? Name all the workers you can think of between this field and your table.
2. Why do you think Millet painted a plain farmer instead of a king or a rich man?
3. How is this farmer like Adam caring for the garden?

PROJECT

My Family's Week of Work

You will discover how many workers help your family in just one week, sort their work into goods and services, and count them up in your ledger notebook.

You will need

- Ledger notebook and a pencil
- Colored pencils
- A receipt or two from your family's shopping, if you have them

Steps

1. In your ledger, draw a table with four columns: Worker, What they did, Good or Service, Day.
2. For seven days, write down every worker who helped your family: the grocer, the mail carrier, the farmer who grew your apples, your pastor, a nurse, a bus driver. Look at receipts to find goods you bought.
3. Write a G next to every good and an S next to every service.
4. At the end of the week, count the goods and count the services. Write the totals at the bottom.
5. Now list the work your own family did for others this week: helping a neighbor, cooking a meal, mowing grass, teaching a class at church.
6. Make a bar graph with two bars: Goods and Services. Which bar is taller?
7. Write one sentence: "The worker I am most thankful for this week is ___ because ___." If you can, write that worker a thank-you note.

Tips

- Some workers make goods and services at once. A restaurant cooks food (a good) and serves it to you (a service). You may mark both.
- Do not forget the workers you never see, like the farmer, the truck driver and the factory worker who made your pencil.

Check your work

- ☐ I can explain the difference between a good and a service.

- ☐ I can explain how one person can be both a producer and a consumer.
- ☐ I counted the workers who helped my family and made a bar graph.

LEDGER NOTEBOOK

1. Draw yourself doing a job you are good at. Label it: Am I making a good or providing a service?
2. Copy Genesis 2:15 neatly at the top of a page, and under it list five kinds of work that care for God's world.
3. Draw a chain from a wheat field to a sandwich, with a box for each worker along the way.

From history. Tents in Paul's day were often made of goats' hair cloth or leather, cut and stitched by hand. A tentmaker could carry his tools with him and work in any city, which made it a good trade for a traveling preacher.

COMMON MISTAKES

- Thinking work is only something grown-ups do for money. Caring for a home, helping a neighbor and doing schoolwork well are real work too.
- Thinking services are not as important as goods. A doctor, a teacher and a firefighter make nothing you can hold, but their work is very valuable.
- Thinking work is a punishment. Work was given in the garden before anything went wrong; it became harder later, but it is still good.

Make it a game • Calling Charades. Take turns acting out a kind of work from your family's week without speaking: cooking, mowing, nursing, farming. The guesser names the job and says whether it makes a good or gives a service, and whether the worker is a producer or consumer at that moment. Score one point per full answer. First to five wins.

Scripture. "And the LORD God took the man, and put him into the garden of Eden to dress it and to keep it." (Genesis 2:15, KJV)

The first thing God gave Adam was a job. Work is part of how God made us, and doing it well is one way we serve Him and our neighbors.

1.2 CHOICES AND OPPORTUNITY COST

OBJECTIVES

- Explain scarcity: we have many wants but only a limited amount of money, time and things.
- Name the opportunity cost of a choice: the next-best thing you gave up.
- Tell how Almanzo Wilder chose between lemonade and a little pig, and why.

Warm-up. Your parent holds out two treats, or two small toys, and says you may have only one. Choose. Then say out loud what you gave up. How did it feel to give up the other one? Was it hard to choose?

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 story of Almanzo, before the big idea.

BACKUP VIDEO

Scarcity and Opportunity Cost for kids

Theteacherlab · 3:47

<https://www.youtube.com/watch?v=SmuztM-WfuE>

KEY TERMS

needs

Things we must have to live, such as food, water, clothing and a home.

wants

Things we would like to have but can live without, such as toys or treats.

scarcity

Not having enough of something for everyone to have all they want of it.

choice

Picking one thing instead of another when you cannot have both.

opportunity cost

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

CORE IDEAS

The story. Laura Ingalls Wilder wrote a book called *Farmer Boy* about her husband Almanzo's boyhood on a farm in northern New York in the 1860s. On the Fourth of July, Almanzo's cousin Frank teased him because Frank had a nickel to spend and Almanzo had none. So Almanzo asked his father for a nickel. Instead, Father gave him a whole half-dollar, worth ten nickels. But first Father asked him a question: did he know what a half-dollar was? Almanzo remembered all the work it took to grow potatoes, and he answered that it was work. Father explained that it took all that work, plowing, planting, hoeing and digging, to raise a bushel of potatoes that would sell for half a dollar.

How they figured it out. Father told Almanzo he could spend the half-dollar on lemonade, which would be gone in a few minutes, or he could buy a little suckling pig. If he cared for the pig, it would grow into a big hog worth much more than a half-dollar. Almanzo thought hard. He went back to cousin Frank and showed him the half-dollar, but he did not spend it on lemonade. He decided he would rather have a pig. Giving up the lemonade was the cost of having the pig.

The big idea. We all have more **wants** than we can have. Money, time and things are limited; this is called **scarcity**. Because of scarcity, we must make **choices**. Every choice has a cost: the next-best thing you give up. This is called the **opportunity cost**. Almanzo's opportunity cost of buying the pig was the lemonade. If you spend Saturday morning playing ball, the opportunity cost might be the bike ride you could have taken instead. It is not every other thing you could have done, only the one you would have picked next.

Think it through. A wise chooser asks two questions. First: is this a need or a want? Needs, like food, clothes and a home, come first. Second: what am I giving up, and is it worth it? Almanzo gave up a quick treat for something that would grow in value. That is why he was glad of his choice later.

In business today. Businesses face scarcity too. A bakery has only so many ovens and so many hours in a day. If it bakes more bread, it bakes fewer pies. A family

must choose whether to spend its money on a vacation or new shoes for school. Wise families and businesses think about the opportunity cost before they choose.

PICTURE STUDY



The Potato Eaters, Vincent van Gogh, 1885 · Oil on canvas · Van Gogh Museum, Amsterdam

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

Vincent van Gogh painted this farm family in the Dutch village of Nuenen. They had worked all day in the fields digging potatoes, and now they are eating the potatoes they dug. Van Gogh wrote that he wanted to show that they had earned their meal honestly with the same hands they put into the dish.

Look closely

- Count the people at the table. Count the dishes of food. Is there a lot or a little?
- Look at their hands. What do they tell you about their work?
- Find the lamp. Why might a family with little money have only one lamp?
- Look at the room. What do you see that is a need? Do you see anything that is only a want?

Talk about it

1. This family had very little. What choices do you think they had to make about how to spend their money?
2. How is this family's meal connected to their work, like Almanzo's half-dollar was connected to potatoes?

3. If this family had one extra coin, what do you think they would choose to buy? What would the opportunity cost be?

PROJECT

The Choice Store

You will shop in a pretend store with only \$10, make hard choices, and record the opportunity cost of each one.

You will need

- Ten \$1 slips of play money
- Ten index cards and a marker
- Ledger notebook and a pencil

Steps

1. With a parent, make ten “store” cards. Write a thing and a price on each, for example: lunch \$3, a book \$4, new socks \$2, a kite \$5, a toy car \$3, a gift for a friend \$2, seeds to plant \$1, a winter hat \$3, a movie ticket \$4, a treat \$1. Lay them on the table.
2. Before you shop, sort the cards into two piles: Needs and Wants.
3. In your ledger, draw a table: What I chose, Price, Next-best choice (what I gave up), Need or Want.
4. Spend your \$10. For each card you buy, write it down, and write the card you almost bought instead. That is your opportunity cost.
5. Count how much you spent on needs and how much on wants.
6. Now pretend you have only \$6. Shop again. What did you give up this time that you kept before?
7. Write two sentences: Which choice was hardest? Would you choose differently next time? Why?

Tips

- There is no single right answer, but you should be able to give a reason for each choice.
- Remember Almanzo: some things are used up quickly, and some things grow or last a long time.

Check your work

- ☐ I can explain scarcity in my own words.
- ☐ I can name the opportunity cost of each of my choices.
- ☐ I can sort needs and wants and explain why needs come first.

LEDGER NOTEBOOK

1. Draw Almanzo holding his half-dollar, with a glass of lemonade on one side and a little pig on the other. Write the opportunity cost under the picture.
2. Make a two-column list called “My Needs” and “My Wants” with at least five things in each.
3. Write about a real choice you made this week and its opportunity cost.

From history. Almanzo Wilder grew up near Malone, New York, and later moved west to Dakota Territory, where he met and married Laura Ingalls in 1885. The house where he grew up still stands and is open to visitors as the Wilder Homestead.

COMMON MISTAKES

- Thinking the opportunity cost is everything you did not choose. It is only the next-best thing you gave up.
- Thinking only money is scarce. Time is scarce too: an hour spent one way cannot be spent another way.
- Thinking a want is bad. Wants are not wrong; we simply cannot have them all, so we must choose wisely.

Make it a game • What Did You Give Up. Give each player twelve paper chips of pretend money. Your parent offers three items at different prices, such as a toy, a book and a snack. Choose one and say the opportunity cost, which is the next-best thing you gave up. Play five rounds with new items. Whoever names the cost most clearly wins.

1.3 ADAM SMITH'S PIN FACTORY: DIVIDING THE WORK

OBJECTIVES

- Tell how Adam Smith described ten workers making thousands of pins a day by dividing the work.
- Explain specialization and the division of labor in your own words.
- Run a timed contest comparing one worker with a team, and record the results.

Warm-up. Think about making a peanut-butter sandwich. List every step: get the bread, open the jar, spread, put the slices together, cut, put on a plate. How many steps did you find? If three people made sandwiches together, how could they split up the steps?

WATCH

What Is an Assembly Line? | Learn all about the History of Assembly Lines

Learn Bright • 9:10

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

WHEN TO WATCH

After the story of the pin factory; pause when Henry Ford appears and remember him for Unit 4.

BACKUP VIDEO

Division of Labor: Burgers and Ships

Marginal Revolution University • 3:50

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

KEY TERMS

specialize

To do one kind of work, or one step of a job, and become very good at it.

division of labor

Splitting a big job into small steps and giving each step to a different worker.

productivity

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

assembly line

A row of workers, each adding one part or doing one step as the product passes by.

CORE IDEAS

The story. Adam Smith was a teacher from the town of Kirkcaldy in Scotland. In 1776 he published a famous book called *The Wealth of Nations*, about why some countries grow rich and others stay poor. Near the beginning of the book he described something very small: a pin. Pins were used every day to hold clothes and cloth together. Smith wrote that a man working all alone, doing every step himself, could hardly make twenty pins in a day, and perhaps not even one.

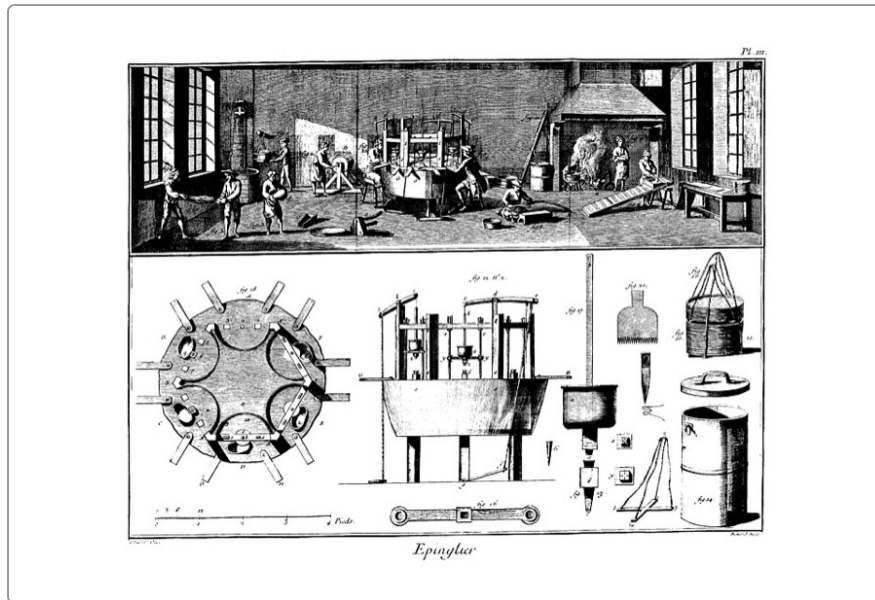
How they figured it out. Then Smith described a small pin factory with only ten workers. They had split the making of a pin into about eighteen separate steps. One man drew out the wire, another straightened it, a third cut it, a fourth sharpened the point, a fifth ground the top for the head, and others made and put on the heads, whitened the pins and put them into paper. Each worker did only one or two steps, over and over. Working this way, the ten workers could make more than forty-eight thousand pins in a day. That is about 4,800 pins for each worker, instead of twenty!

The big idea. Smith called this the **division of labor**. When workers **specialize**, each one gets faster and more skillful at his step, no time is wasted switching from one task to another, and people think of clever tools to do their one step better. This raises **productivity**: more is made in the same time. More goods made more cheaply means more people can afford them.

Think it through. Dividing the work has a cost too. Doing one small step all day can be dull, and Smith himself worried that workers who did only one tiny job might not learn much. Good managers help workers learn more than one step, keep them safe, and remember that workers are people, not parts of a machine.

In business today. Almost everything you own was made by dividing the work: your shoes, your pencil, your breakfast cereal. In a restaurant kitchen, one cook makes salads, another grills, another washes dishes. In Unit 4 you will see how Henry Ford used a moving assembly line to make cars so cheaply that ordinary families could buy them.

PICTURE STUDY



Épinglier (The Pin-Maker), Plate III from the Encyclopédie, Robert Bénard after Louis-Jacques Goussier, for Denis Diderot's Encyclopédie, 1762 · Engraving · Published in Paris

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

In the 1700s, a French writer named Denis Diderot published a giant encyclopedia with hundreds of pictures showing how every kind of work was done. This plate shows a pin-making workshop much like the one Adam Smith described. Many historians think Adam Smith learned about pin-making partly from books like this one.

Look closely

- Count the workers in the workshop at the top. Is each one doing the same step or a different step?
- Find the fire under the big hood. What do you think it is used for?
- Find the large round tub and the workers around it. Look for the same tub drawn again below.
- Look at the bottom half of the plate. Why would the artist draw the tools by themselves?

Talk about it

1. Why could ten workers make far more pins than ten people working alone?
2. Which job in this workshop would you want? Which would you find the dulllest?

3. What everyday thing in your house could be made faster by dividing the work?

PROJECT

The Paper Boat Contest

You will compete to fold paper boats, first one person doing every step and then a team dividing the work, and count which way makes more boats in the same time.

You will need

- At least 30 sheets of scrap paper, cut to the same size
- A timer
- Two or three helpers (family members)
- Ledger notebook and a pencil

Steps

1. Learn to fold a simple paper boat or paper hat with a parent. Break the folding into four or five steps, and write the steps in your ledger.
2. **Round 1: one worker.** Set the timer for 5 minutes. One person makes as many boats as possible, doing every step. Count the finished boats. Check each one: is it a good boat? Count only good ones.
3. **Round 2: the team.** Now sit in a row. Each person does only one or two steps and passes the paper to the next person. Set the timer for 5 minutes and count the good boats.
4. Divide each total by the number of workers to find boats per worker.
5. In your ledger, make a table: Round, Number of workers, Good boats, Boats per worker.
6. Make a bar graph comparing boats per worker in Round 1 and Round 2.
7. **Improve it.** Talk with your team: Was any step too slow? Did anyone wait with nothing to do? Change the plan and run Round 3. Did it help?
8. Write two sentences: What did you learn about dividing the work? What was the hardest part of working on a line?

Tips

- Practice the folds once before you start the timer, or the first boats will be messy.

- If one step takes much longer than the others, give that step to two people. Factories call this balancing the line.

Check your work

- ☐ I can tell how Adam Smith's pin factory worked.
- ☐ I counted and compared boats per worker for one worker and for a team.
- ☐ I can explain one good thing and one hard thing about dividing the work.

LEDGER NOTEBOOK

1. Draw a row of five stick-figure workers making a pin, and label what each one does: draw the wire, straighten, cut, sharpen, put on the head.
2. Copy your boat-contest table and bar graph neatly, with a title and the date.
3. Write a list of five things in your kitchen and guess how many workers helped make each one.

From history. Adam Smith was a professor at the University of Glasgow before he wrote *The Wealth of Nations*. From 2007 to 2022, his face appeared on the Bank of England's £20 note, beside a picture of pin-makers at work.

COMMON MISTAKES

- Thinking the team won only because there were more people. Compare boats per worker, not just total boats.
- Thinking Adam Smith invented the pin factory. He described factories that already existed and explained why they worked so well.
- Forgetting quality. Making many boats fast is no good if they fall apart; count only good ones.

Make it a game • Pin Factory Boats. Fold paper boats two ways. First, one person makes ten alone while the timer runs. Then divide the steps, such as folding, creasing and flattening, between two people and make ten more. Compare times. Explain division of labor to your parent in your own words and tell how Adam Smith's ten pin workers made thousands.

1.4 THE PHOENICIAN TRADERS AND THEIR PURPLE CLOTH

OBJECTIVES

- Tell how the Phoenicians of Tyre and Sidon became the great sea traders of the ancient world.
- Explain how purple dye from sea snails became one of the most precious goods on earth.
- Explain why both sides gain from a fair trade, using King Hiram and King Solomon as an example.

Warm-up. Find something in your house that came from far away: a banana, a box of tea, a shirt with a label from another country. Find the country on a map or globe. How do you think it got to your house?

WATCH

Who were the Phoenicians? Phoenician History.

Epimetheus · 3:57

<https://www.youtube.com/watch?v=jvzXRtAe0Mw>

WHEN TO WATCH

After the story, before the Trading Game.

Note: A short history channel video, mostly maps. It mentions wars between empires briefly.

BACKUP VIDEO

The secret origins of purple dye

Science Museum · 3:02

<https://www.youtube.com/watch?v=g7JCMxq7DU8>

KEY TERMS

trade

Giving something you have in exchange for something someone else has.

merchant

A person who buys and sells goods to earn a living.

export

A good sent out of a country to be sold somewhere else.

import

A good brought into a country from somewhere else.

luxury

A costly thing that people enjoy but do not need.

CORE IDEAS

The story. About three thousand years ago, a people called the Phoenicians lived in busy cities such as Tyre and Sidon on the coast of what is now Lebanon. Behind them were mountains covered with tall cedar trees; in front of them was the Mediterranean Sea. The Phoenicians became the greatest sailors and traders of their time. Their wooden ships carried cedar logs, glass, carved ivory, metal bowls and olive oil to ports all around the sea, and they started trading towns as far away as Carthage in North Africa and Cádiz in Spain.

How they figured it out. The Phoenicians' most famous good came from a small, spiny sea snail called the murex. Inside each snail was a tiny gland with a few drops of a liquid that slowly turned a deep purple when it was spread on cloth and left in the sun. It took thousands of snails to dye a single cloak, and the dye works smelled terrible! But the purple never faded, and nothing else made a color like it. Purple cloth became so costly that only kings, queens and the very rich could wear it. The name "Phoenician" may even come from an old Greek word for this reddish-purple color.

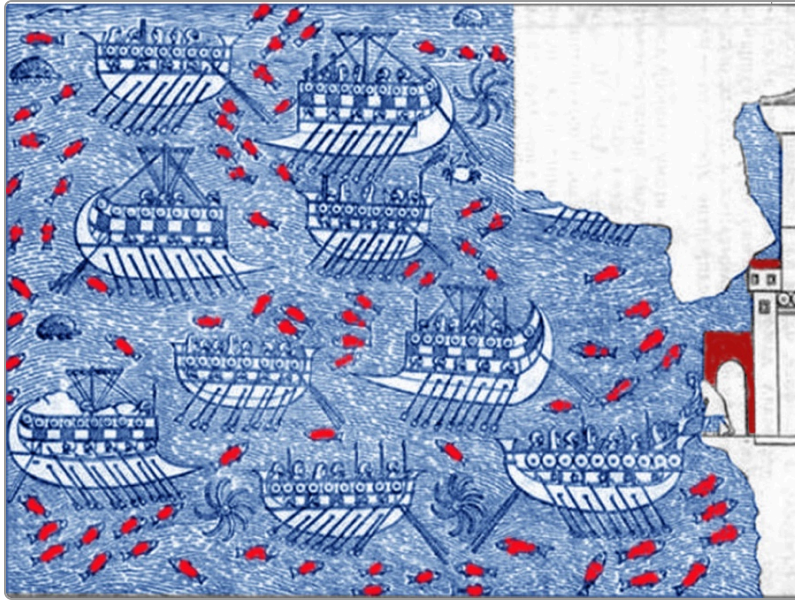
The big idea. People **trade** because each side has something the other wants. The Phoenicians had cedar and purple cloth but little farmland; other lands had grain, metals and farm goods. When King Hiram of Tyre sent cedar logs to King Solomon to build the temple in Jerusalem, Solomon sent back wheat and oil every year (1 Kings 5:10-11). Each king gave what he had plenty of and received what he needed. In a fair, free trade, **both sides gain**; otherwise, why would they agree to it?

Who gained? The **merchants** earned a living. The snail fishers, dyers, shipbuilders and sailors had work. Customers far away got goods they could never make at home. And the Phoenicians spread something even more useful than purple cloth: their alphabet. Merchants needed a quick way to keep records, so the Phoenicians used a

short set of letters for sounds. The Greeks borrowed it, the Romans borrowed it from the Greeks, and the letters you are reading now came down from it.

In business today. Countries still **export** what they make well and **import** what others make well. Huge container ships carry bananas, cars and phones across the oceans, just as Phoenician ships carried cedar and cloth. Purple is no longer a **luxury**: in 1856 a young English chemist named William Perkin found a way to make a purple dye cheaply, and soon ordinary people could wear purple too.

PICTURE STUDY



Phoenician Ships Leaving Tyre, Drawing after an Assyrian palace relief, first copied by Austen Henry Layard, Relief about 700 BC; drawing 1800s · Colored drawing of a stone relief from the palace of King Sennacherib at Nineveh · The relief came from Nineveh, in what is now Iraq

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

This drawing copies a carving from the palace of an Assyrian king at Nineveh, made about seven hundred years before Christ. It shows Phoenician ships leaving the city of Tyre, rowed by many oarsmen. These are the kinds of ships that carried Phoenician merchants and their goods all over the Mediterranean Sea.

Look closely

- Count the oars on one ship. How many rowers do you think one ship needed?
- Find the tower on the shore at the right. That is the city they are leaving.
- Look in the water. What did the artist draw swimming around the ships?
- Look at the fronts of the ships. Some are pointed and some are round. Why might ships be built in different shapes?

Talk about it

1. What goods might these ships be carrying? Where might they be going?
2. Why would a city by the sea become a city of traders?
3. Which workers did a Phoenician merchant need before his purple cloth could reach a king in another land?

PROJECT

The Trading Game

You will play a trading game with your family, keep a log of every trade, and find out whether trading makes everyone better off.

You will need

- A paper bag for each player with five small, different items (stickers, pencils, snacks, small toys, crayons)
- Ledger notebook and a pencil
- A timer

Steps

1. Each player looks in his or her bag and rates how happy each item makes you on a scale of 1 to 5. Add up your score and write it in your ledger as “Before trading.”
2. Make a trade log in your ledger with columns: Trade number, I gave, I got, Why I wanted it.
3. Set the timer for 10 minutes. Trade freely with anyone, one item for one item. Nobody has to trade, and nobody may grab or trick.
4. Record every trade in your log.
5. When time is up, rate your new items from 1 to 5 and add your new score as “After trading.”
6. Compare the before and after scores for every player. Did anyone end up worse off? Did most people gain?
7. Write two sentences: Why did people agree to trade? What would happen if one person cheated?

Tips

- A trade only happens when both people agree. If someone says no, that is fine; try someone else.
- Notice that the items did not change, only who had them. Trade can make people happier without making anything new.

Check your work

- ☐ I kept an honest log of every trade I made.
- ☐ I can explain why both sides can gain from a fair trade.
- ☐ I can tell how the Phoenicians made and traded purple cloth.

LEDGER NOTEBOOK

1. Trace or draw a map of the Mediterranean Sea. Mark Tyre, Sidon, Carthage, Cádiz and Jerusalem, and draw arrows for the goods that sailed between them.
2. Draw a murex snail and a purple cloak, and write how the dye was made in three steps.
3. Make a “King Hiram and King Solomon” trade chart: what each one gave and what each one got.

From history. The Phoenicians’ letters began as simple pictures: the first letter, *aleph*, meant “ox,” and the second, *beth*, meant “house.” The Greeks called them *alpha* and *beta*, which is where our word “alphabet” comes from.

COMMON MISTAKES

- Thinking that in every trade one side wins and the other loses. In a fair, willing trade, both sides gain.
- Thinking the Phoenicians only sold purple cloth. They traded wood, glass, metalwork, ivory, oil and much more.
- Thinking trade is only about money. The Phoenicians traded goods for goods long before coins were invented.

Make it a game • Purple Cloth Trade. Use scarves or paper in two colors, with purple as the precious one. Each player is a trader of Tyre or Sidon, with four goods and a ship. Take turns naming an export and an import, and bargain for a fair deal. Score points for each trade where both sides gain. Tell why purple was so costly.

Scripture. “So Hiram gave Solomon cedar trees and fir trees according to all his desire. And Solomon gave Hiram twenty thousand measures of wheat for food to his household, and twenty measures of pure oil: thus gave Solomon to Hiram year by year.” (1 Kings 5:10-11, KJV)

Hiram of Tyre had cedar forests, and Solomon had wheat fields and olive groves. Each gave what he had plenty of and received what he needed, and both kingdoms were better off.

UNIT 1

WORK AND TRADE

Why do people work, and why do they trade? In this unit you will learn that work is a good gift from God, given to Adam in the very first garden. You will learn that we cannot have everything we want, so every choice means giving something up, which is called **opportunity cost**. You will see how Adam Smith watched ten workers make thousands of pins a day by **dividing the work**, and you will sail with the Phoenicians, the great sea traders who carried purple cloth, cedar wood and glass all over the Mediterranean Sea.

Along the way you will keep a ledger notebook, a graph-paper book where you count and write down what you learn: a chart of jobs, a list of choices, the results of an assembly-line contest and a log of trades. By the end you will be able to explain why both sides can gain when people trade fairly.

PREREQUISITES

- Can add and subtract to 100
- Can tell time to the minute (for the timed contest in Lesson 1.3)
- Knows the names and values of pennies, nickels, dimes and quarters

MASTERY CHECKLIST

- ☐ I can explain why work is good and name goods and services that people in my town provide.
- ☐ I can explain scarcity and name the opportunity cost of a choice.
- ☐ I can tell how Adam Smith's pin factory shows the power of dividing the work.
- ☐ I can tell the story of the Phoenician traders and explain why both sides gain from a fair trade.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Ox-Cart Man, by Donald Hall, pictures by Barbara Cooney (Viking)**: A picture book about a New Hampshire farm family who make goods all year and sell them at the Portsmouth market. A lovely read-aloud for Lessons 1.1 and 1.4. Ages 4–9.
- **Farmer Boy, by Laura Ingalls Wilder (HarperCollins)**: Almanzo Wilder’s boyhood on a New York farm. The chapter “Independence Day” holds the half-dollar story in Lesson 1.2; the whole book is full of work, saving and fair trades. Ages 7–11. Look for it at your library or from the publisher, HarperCollins.

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: Work Is a Calling	2 sessions of 45 minutes
1.2	Choices and Opportunity Cost	2 sessions of 45 minutes
1.3	Adam Smith’s Pin Factory: Dividing the Work	2 sessions of 45 minutes
1.4	The Phoenician Traders and Their Purple Cloth	2 sessions of 45 minutes

UNIT 1 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**
What job did God give Adam in Genesis 2:15? Why does this show that work is good?
2. **5 pts**
Sort these into goods and services: a haircut, a loaf of bread, a piano lesson, a bicycle, a doctor’s checkup, a pair of shoes.
3. **5 pts**
What is scarcity? Give an example from your own life.

4. (5 pts)

Almanzo could buy lemonade or a little pig with his half-dollar. He chose the pig. What was his opportunity cost? Why was it a wise choice?

5. (5 pts)

You have \$8. A book costs \$5, a kite costs \$4 and a puzzle costs \$3. Which two things could you buy together? What would you give up?

6. (5 pts)

Adam Smith wrote that one man alone could hardly make 20 pins a day, but 10 workers dividing the work could make 48,000. How many pins is that for each of the 10 workers?

7. (5 pts)

Give two reasons dividing the work helps workers make more.

8. (5 pts)

What would happen if a pin factory divided the work but one step was much slower than all the others?

9. (5 pts)

How was Phoenician purple dye made, and why was it so costly?

10. (5 pts)

King Hiram gave Solomon cedar, and Solomon gave Hiram wheat and oil. Who gained from this trade? Explain.

ANSWER KEY

1. To dress and keep the garden of Eden. God gave it before anything went wrong in the world, so work is part of the good life God planned, not a punishment.
2. Goods: bread, bicycle, shoes. Services: haircut, piano lesson, doctor's checkup.
3. Not having enough of something for everyone to have all they want. Examples vary: not enough money for every toy, not enough time to do every activity.
4. The lemonade. The lemonade would be gone in minutes, but the pig would grow into a hog worth much more than a half-dollar.
5. Book and puzzle (\$8), or kite and puzzle (\$7, with \$1 left). Book and kite (\$9) is too much. The item not chosen is the opportunity cost.
6. $48,000 \div 10 = 4,800$ pins per worker, compared with fewer than 20 working alone.
7. Any two: each worker gets faster and better at one step; no time is wasted switching tasks; workers invent better tools for their step.
8. Pins would pile up waiting at that step and the other workers would have to wait, so the whole line would be slow. The factory should put more workers or a better tool on the slow step.
9. From the glands of murex sea snails; the liquid turned purple in sunlight. It took thousands of snails to dye one cloak, so it was rare and costly, and it never faded.
10. Both kings. Each gave what he had plenty of and got what he needed: Hiram got food, and Solomon got cedar for the temple.

PORTFOLIO PIECE: MY TRADE LOG AND WORK MAP

Make a two-page record of how work and trade reach your family. On the first page, draw a map from your home outward: your town, your state, your country and the world. Mark at least eight goods your family uses and where each one was made or grown, with an arrow to your home. On the second page, copy your trade log from the Trading Game with the before and after scores, and write a short paragraph explaining why both sides gain from a fair trade, using one example from your log and the story of the Phoenicians.

LOOK FOR	WHAT IT MEANS
Map	At least eight goods are shown with where they came from, found by reading labels or asking a parent.
Trade log	Every trade is recorded honestly with what was given, what was received and why.
Explanation	The paragraph clearly explains why both sides gain from a fair trade, with a real example.
Neatness	Pages are dated, titled, labeled and easy to read.

UNIT 2

THE STORY OF MONEY

What is money, and where did it come from? In this unit you will travel from the days when people traded goods for goods, called **barter**, to the shells, salt, cattle and beads that people used as the first money. You will visit Lydia, the kingdom where the first coins were stamped, and follow the gold trade to Mansa Musa of Mali. You will see how the goldsmiths of London began writing paper receipts for gold, and how those receipts grew into paper money. Last, you will look closely at the dollar bill in your own house and learn what the Federal Reserve does.

In your ledger notebook you will log barter trades, weigh coins on a kitchen scale, run a goldsmith's bank with paper receipts, and make a tally of dollar bills by the Federal Reserve Bank that sent them out. By the end you will be able to tell the story of money from barter to the dollar.

PREREQUISITES

- Knows the values of pennies, nickels, dimes, quarters and dollar bills (Unit 1)
- Can explain a fair trade (Lesson 1.4)
- Can read a kitchen scale in grams with help

MASTERY CHECKLIST

- ☐ I can explain why barter is hard and how commodity money made trading easier.
- ☐ I can tell how Lydia made the first coins and why gold has been prized as money.
- ☐ I can explain how goldsmiths' receipts became paper money and why paper money needs trust.
- ☐ I can find the Federal Reserve seal, the serial number and the words "legal tender" on a dollar bill and explain what the Federal Reserve does.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **U.S. Mint for Kids:** Free games (at usmint.gov, under “Learn”), coin facts and lesson pages from the United States Mint. Good for Lessons 2.2 and 2.4 and again in Lesson 5.4. Ages 6–12.
- **Money Factory: the Bureau of Engraving and Printing:** Free. The official site of the government office that prints U.S. paper money, with pictures of how bills are made and the security features to look for. Use with Lesson 2.4.
- **Federal Reserve Bank of St. Louis: Econ Lowdown:** Free lessons, videos and stories about money for children, from a Federal Reserve bank. A parent may make a free teacher account to find the elementary 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

2.1 From Barter to Commodity Money	2 sessions of 45 minutes
2.2 Lydia’s First Coins and the Gold Trade	2 sessions of 45 minutes
2.3 Goldsmiths and Paper Receipts	2 sessions of 45 minutes
2.4 The Dollar and the Federal Reserve	2 sessions of 45 minutes

UNIT 2 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. 5 pts

What is barter? Why is it hard?

2. 5 pts

Name three things people have used as commodity money.

3. 5 pts

In 1637, six white wampum beads were worth one penny. How many beads were worth 5 pennies?

4. 5 pts

What happened to the value of wampum when people began making beads quickly with iron drills? Why?

5. 5 pts

What were the first coins made of, and where were they made? How did King Croesus improve them?

6. 5 pts

Give two reasons gold has been prized as money.

7. 5 pts

How did a London goldsmith's receipt become a kind of money?

8. 5 pts

What would happen if a goldsmith lent out most of the gold and then everyone came to take their gold back on the same day?

9. 5 pts

What is the Federal Reserve, and why was it started in 1913?

10. 5 pts

A toy cost \$4 last year. Because of inflation, it costs \$5 this year. How much more does it cost? Does your dollar buy more or less than before?

ANSWER KEY

1. Trading goods for goods without money. It is hard because you must find someone who has what you want and also wants what you have (the double coincidence of wants).
2. Any three: salt, cowrie shells, cattle, wampum beads, weighed silver, gold.
3. $6 \times 5 = 30$ beads.
4. It lost value; each string bought less, because there was too much wampum.
5. Electrum, a natural mix of gold and silver, in Lydia about 600 BC. Croesus made separate coins of pure gold and pure silver, so each coin's value was certain.
6. Any two: it is rare; it never rusts or spoils; it can be divided into small pieces; it is beautiful and wanted.
7. Merchants left gold with the goldsmith and got a receipt. Instead of fetching the gold, they paid each other by handing over the receipts.
8. He could not pay them all; people would lose trust and the bank would fail.
9. The central bank of the United States, a bank for banks with twelve Federal Reserve Banks. It was started after bank panics like 1907 so banks could get help in a panic and the country's money would be steadier.
10. $\$5 - \$4 = \$1$ more. Each dollar buys less than before.

PORTFOLIO PIECE: MY MONEY TIMELINE

Make a long timeline on taped-together paper or a long strip of shelf paper showing the story of money from barter to today. Include at least eight events with dates or periods, such as barter, Abraham's weighed silver, the first Lydian coins, Croesus's gold coins, China's *jiaozi*, Mansa Musa's pilgrimage, wampum in Massachusetts, the London goldsmiths, the Bank of England, the Federal Reserve in 1913 and 1971. Draw a small picture for each, and under each one write one sentence about what problem it solved. Add your coin-weight table and your Federal Reserve tally chart at the end.

LOOK FOR	WHAT IT MEANS
Events	At least eight events are shown in the right order with correct dates or periods.
Problems solved	Each event has a sentence explaining what problem it solved or what it taught.
Records	The coin-weight table and Federal Reserve tally are copied correctly from the ledger.
Presentation	The timeline is neat and labeled, and the student can explain it aloud to the family.

2.1 FROM BARTER TO COMMODITY MONEY

OBJECTIVES

- Explain barter and the problem of finding someone who has what you want and wants what you have.
- Name things people have used as commodity money: salt, shells, cattle and wampum beads.
- Play a barter game and a money game, and compare how many trades each allowed.

Warm-up. Pretend there is no money. You want a new pencil, and all you have is a banana. List three people you could trade with. Would each of them want a banana? What would you do if nobody wanted your banana?

WATCH

What Makes Something Useful as Money? | Explore Economics (Grades 2-5).

Federal Reserve Bank of St. Louis • 2:56

<https://www.youtube.com/watch?v=9fyJ2BhUAPM>

WHEN TO WATCH

After the story of wampum, before the big idea.

BACKUP VIDEO

From Bartering to Money for Kids

Lauren Simpson • 5:40

<https://www.youtube.com/watch?v=Cn1Ki4OVhTU>

KEY TERMS

barter

Trading goods or services directly for other goods or services, without money.

double coincidence of wants

The lucky chance that two people each have what the other wants. Barter needs it; money does not.

money

Anything people agree to accept in exchange for goods and services.

commodity money

Money that is also a useful or valued thing in itself, like salt, shells, cattle or gold.

wampum

Beads made from white and purple seashells by Native Americans of the eastern woodlands, used as a record, a gift and, in colonial times, as money.

CORE IDEAS

The story. When English settlers came to Massachusetts in the 1620s and 1630s, there were very few coins in the colony. The settlers had to trade. They found that the Native peoples nearby prized **wampum**, small tube-shaped beads drilled from white whelk shells and purple quahog clam shells and strung on cords. Making a single bead took hours of grinding and drilling, so wampum was valuable. Settlers and Native traders began using strings of wampum to pay for furs, corn and tools. In 1637 the Massachusetts colony made wampum lawful money, with six white beads worth one English penny. Purple beads, which were harder to make, were worth more.

How they figured it out. Before money, people used **barter**: trading goods for goods. A farmer with eggs who wanted shoes had to find a shoemaker who wanted eggs, at the same time. Economists call this the **double coincidence of wants**, and it is hard to find! What if the shoemaker wanted wool, not eggs? So in many lands, people began using one thing that nearly everyone wanted and that kept well. In Africa and Asia people used cowrie shells. In many places they used salt, which kept food from spoiling. Some people used cattle, and the Latin word for money, *pecunia*, comes from the word for cattle. In the Bible, Abraham paid for a field by weighing out “four hundred shekels of silver, current money with the merchant” (Genesis 23:16).

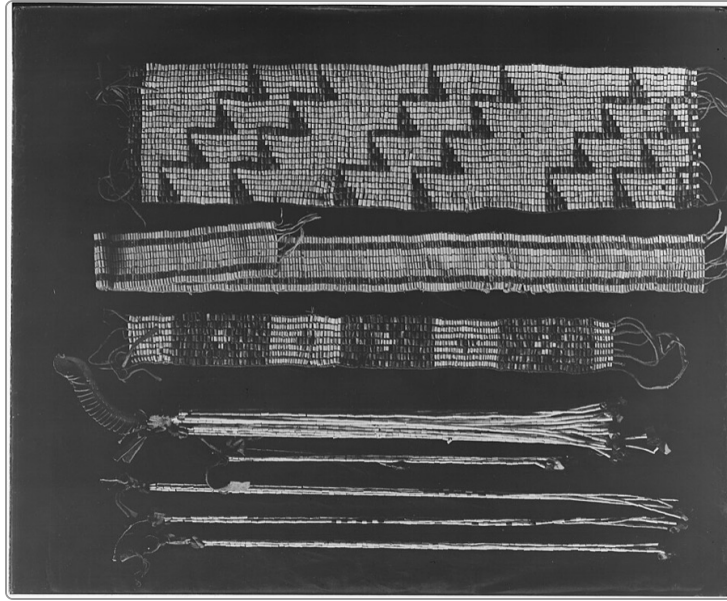
The big idea. Money is anything people agree to accept in trade. When money is also a useful thing in itself, like salt, shells, cattle or silver, it is called **commodity money**. Good money must be something people trust and want, something that lasts and does not spoil, something easy to carry, and something you can count or divide into

small amounts. Shells and beads were small and easy to count. Cattle were valuable, but you could not cut a cow in half to buy a loaf of bread!

Think it through. Wampum worked well as money until some people learned to make beads faster with iron drills, and some made poor, unfinished beads. Soon there was too much wampum, and each string bought less. In 1661 Massachusetts stopped accepting wampum as lawful money for paying debts. Money keeps its value only when there is not too much of it and when people trust that it is genuine.

In business today. We still use money because barter is so slow. A dentist does not have to find a grocer who needs a filling; she takes money for her work and spends it anywhere. Some people still barter for fun or with neighbors, such as trading garden vegetables for babysitting. But nearly all business today runs on money, because it saves everyone time.

PICTURE STUDY



Wampum Belts, U.S. government photographer, Photographed in the 1900s; belts made in earlier centuries · Photograph · National Archives, Washington, D.C.

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

These belts are woven from thousands of tiny shell beads. Native peoples of the eastern woodlands used wampum belts to record promises and treaties and as precious gifts, and strings of wampum beads were also used as money by colonists and Native traders in the 1600s.

Look closely

- Find the light beads and the dark beads. Which do you think were the purple ones?
- Look closely at one belt. Can you count how many beads are in one row?
- Look for patterns and shapes. What do you see?
- Think about how long it took to drill each bead by hand. How long might one belt take?

Talk about it

1. Why would beads that took hours to make be good to use as money?
2. What happened to the value of wampum when people made beads quickly with iron drills? Why?
3. Would wampum make good money today? Why or why not?

PROJECT

The Barter Market and the Bean Market

You will play two rounds of a market game, first with barter and then with beans as money, and count how many trades each round allowed.

You will need

- Index cards, one per player, each with a secret “I want” written on it (for example: I want a pencil)
- Small items to trade, three or four per player (pencils, crayons, stickers, erasers, snacks)
- A cup of dried beans
- A timer
- Ledger notebook and a pencil

Steps

1. Give each player three or four items and a secret “I want” card. Make sure the thing each player wants belongs to a different player.
2. In your ledger, draw a trade log: Round, I gave, I got, Did I get what I wanted?
3. **Round 1: barter.** Set the timer for 8 minutes. Trade item for item only. You may trade only if both people want the other’s item. Record every trade.
4. Count how many players got what they wanted, and how many trades happened in all.
5. **Round 2: bean money.** Start over with the same items. Now give each player 20 beans. Players may sell items for beans and buy items with beans. Each player sets his own prices.
6. Set the timer for 8 minutes again. Record every sale and every purchase.
7. Count again: how many players got what they wanted? How many trades happened?
8. Make a bar graph comparing Round 1 and Round 2. Write two sentences: Why did the beans help? What would happen if someone found a whole bag of extra beans?

Tips

- In Round 1, notice how often someone has what you want but does not want anything you have. That is the double coincidence of wants.
- Beans work as money only because everyone in the game agreed to accept them.

Check your work

- ☐ I can explain why barter is slow and hard.
- ☐ I can name four kinds of commodity money.
- ☐ I counted and compared the trades in a barter round and a money round.

LEDGER NOTEBOOK

1. Draw four kinds of commodity money: salt, cowrie shells, cattle and a string of wampum. Under each, write one good thing and one problem with it as money.
2. Make a chart called “Good money must be...” with four rows: trusted and wanted, lasting, easy to carry, easy to count or divide.
3. Copy your trade log and bar graph neatly, with the date.

From history. Some people say the word “salary” comes from the Latin word for salt, *sal*, because Roman soldiers were once paid with salt or with money to buy salt. Historians are not sure the story is true, but salt really was precious for keeping food from spoiling.

COMMON MISTAKES

- Thinking money has always been coins and paper. For most of history, people used things like shells, salt, cattle and beads.
- Thinking barter is unfair. It can be fair; it is just slow, because both people must want what the other has.
- Thinking more money always makes people richer. When there is too much wampum or too many beans, each one buys less.

Make it a game • Bean Market Contrast. Play two rounds. In the Barter Market, trade household items only with someone who wants yours. Count the matches in two minutes. Then play the Bean Market, where beans serve as money, and count again. Compare scores, then use the words double coincidence of wants to explain the difference.

Scripture. “And Abraham hearkened unto Ephron; and Abraham weighed to Ephron the silver, which he had named in the audience of the sons of Heth, four hundred shekels of silver, current money with the merchant.” (Genesis 23:16, KJV)

In Abraham’s day there were no coins. Silver was weighed out on a scale, and the Bible calls it “current money with the merchant,” the kind of money traders would accept. Abraham paid the full price honestly, in front of witnesses.

2.2 LYDIA'S FIRST COINS AND THE GOLD TRADE

OBJECTIVES

- Tell how the kingdom of Lydia made the first coins and how King Croesus improved them.
- Explain what a coin's stamp promises and why gold has been prized as money.
- Weigh real coins on a kitchen scale and check whether coins of the same kind match.

Warm-up. Look at a quarter through a magnifying glass if you have one. Find the year, the words and the pictures. Why do you think a coin has writing stamped on it? What would happen if coins had nothing on them at all?

WATCH

The Invention of Coinage: Lydia, 630 BCE

The Israel Museum, Jerusalem · 3:04

<https://www.youtube.com/watch?v=SkjrvsTf6ew>

WHEN TO WATCH

After the story of Lydia, before you weigh the coins.

Note: A short animated film from the Israel Museum about the first electrum coins.

BACKUP VIDEO

The FIRST Coin Ever Made

Classical Numismatics · 8:45

<https://www.youtube.com/watch?v=n5GKiWBERLc>

KEY TERMS

coin

A piece of metal of a set weight, stamped by a ruler or government to show its value.

electrum

A natural mix of gold and silver, found in rivers in ancient Lydia, used for the first coins.

mint

A place where coins are made; also, to make coins.

standard

A rule that makes every coin of the same kind the same weight and purity.

pilgrimage

A long journey to a holy place.

CORE IDEAS

The story. More than 2,600 years ago, the kingdom of Lydia lay in what is now western Turkey. A river called the Pactolus flowed past its capital city, Sardis, and in the river sand were flakes of **electrum**, a shiny natural mix of gold and silver. Around 600 BC, the Lydians began melting electrum into small lumps of a set weight and stamping them with the picture of a lion's head. These were the world's first **coins**. Before coins, traders had to weigh their silver on a scale every time they bought something, and they had to trust that it was pure.

How they figured it out. Electrum had a problem: some lumps had more gold and some had more silver, so two coins of the same size might not be worth the same. Lydia's famous king, Croesus, who ruled from about 560 to 546 BC, is remembered for solving it. His workers learned to separate the gold from the silver, and his **mint** made coins of pure gold and coins of pure silver, each with a lion and a bull stamped on it. Now a merchant could count coins instead of weighing them, and the stamp promised that each coin was the right weight and purity. Croesus became so rich that people still say someone is "as rich as Croesus."

The big idea. A coin is a promise stamped in metal: "This is the right weight. This is real gold or silver." That promise is called a **standard**. Gold has been prized as money for thousands of years because it is rare, it never rusts or spoils, it can be melted and divided into small pieces, and it is beautiful. The Bible reminds us where it all comes from: "The silver is mine, and the gold is mine, saith the LORD of hosts" (Haggai 2:8).

The gold trade. Gold traveled across the world. Ancient Egypt got much of its gold from Nubia to the south. Later, in West Africa, the empire of Mali grew rich from its gold mines. In 1324 its king, Mansa Musa, made a **pilgrimage** to Mecca with a caravan of thousands of people and camels carrying gold. When he passed through Cairo in Egypt, he spent and gave away so much gold that gold became more

common there and lost some of its value for years. Even gold is worth less when there is too much of it!

In business today. Coins today are not made of gold, but they still follow a careful standard: every quarter made by the U.S. Mint weighs the same and has the same size and edge, so that vending machines and banks can trust it. Gold is still bought and kept by banks, jewelers and families as something valuable that lasts.

PICTURE STUDY



A Gold Coin of King Croesus, Mint of King Croesus of Lydia, about 560–546 BC · Gold coin (a stater), photographed in a museum case · The British Museum, London

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

This little lump of gold is one of the coins made for King Croesus of Lydia more than 2,500 years ago. It is smaller than a dime but thicker. The stamp shows the front half of a lion facing the front half of a bull. The stamp was the king's promise that the coin was pure gold of the right weight.

Look closely

- Find the lion. Find the bull. Which way is each one facing?
- Look at the shape of the coin. Is it perfectly round and flat like a quarter?
- Look at the edges. Why might some of the picture be cut off?
- Look at the color. How can you tell this is gold and not electrum or silver?

Talk about it

1. Why would a merchant trust a coin with the king's stamp more than a plain lump of gold?
2. What would happen to the king's good name if his mint made coins that were too light?
3. How is this coin like the quarter in your pocket? How is it different?

PROJECT

Weigh the Coins: Testing the Standard

You will weigh real coins on a kitchen scale to find out whether the U.S. Mint keeps its standard, then make your own clay coins and see how hard it is to make them all match.

You will need

- A kitchen scale that reads in grams
- Ten pennies, ten nickels, ten dimes and ten quarters (borrowed from the family coin jar)
- Modeling clay or salt dough, a button or bottle cap for a stamp, and a table knife
- Ledger notebook and a pencil

Steps

1. Weigh 10 quarters together and write the weight in your ledger. Divide by 10 to find the weight of one quarter. Do the same for 10 nickels, 10 dimes and 10 pennies.
2. Make a table: Coin, Weight of 10 coins, Weight of 1 coin, Official weight. The U.S. Mint's official weights are: penny 2.5 grams, nickel 5.0 grams, dime 2.268 grams, quarter 5.67 grams. How close were you?
3. Find the oldest and newest penny in the jar. Do pennies from before 1982 weigh more? (Pennies were made of copper until 1982, then mostly of zinc with a thin copper coat.)
4. Now be a Lydian mint. Make 10 clay coins that should all be the same size. Stamp each one with your button or cap.
5. Weigh your 10 clay coins one at a time and record each weight. What is the heaviest? The lightest?
6. Try to improve: roll the clay to an even thickness and cut each coin with the same cap. Make and weigh 10 more. Did they match better?
7. Write two sentences: Why is a standard important for coins? Why did Croesus's pure gold coins help traders more than electrum lumps?

Tips

- A kitchen scale is not exact for one small coin. Weighing ten together and dividing gives a better answer.
- Return every coin to the family jar when you finish, and count them to be sure.

Check your work

- ☐ I weighed coins and compared them with the U.S. Mint's official weights.
- ☐ I can explain what a coin's stamp promises.
- ☐ I can tell the story of Lydia's first coins and Mansa Musa's gold.

LEDGER NOTEBOOK

1. Draw a Lydian electrum coin with a lion's head and a Croesus gold coin with a lion and a bull. Label which was electrum and which was pure gold.
2. Make a timeline: about 600 BC first coins in Lydia; about 560–546 BC Croesus's gold and silver coins; 1324 Mansa Musa's pilgrimage; today's U.S. coins.
3. Copy your coin-weight table and circle the coin that was closest to its official weight.

From history. Croesus lost his kingdom in 546 BC to Cyrus the Great of Persia, the same Cyrus who later let the Jewish exiles return to Jerusalem (Ezra 1:1-4). The Persians kept making coins like those of Lydia, and coins soon spread to the Greek cities and the whole ancient world.

COMMON MISTAKES

- Thinking the first coins were round and flat like ours. The first Lydian coins were small, thick lumps with a stamp on one side.
- Thinking gold is valuable only because it is shiny. It is also rare, lasting and easy to divide, which makes it good money.
- Thinking more gold always makes a place richer. When Mansa Musa brought so much gold to Cairo, each piece of gold bought less.

Make it a game • Weigh the Standard. Make eight clay coins, and let your parent secretly make two a little lighter. Weigh them on a hanger balance or kitchen scale to find the lighter ones. Say what a coin's stamp promises. Tell how Croesus improved the Lydian coins, and why gold was prized. Score one point per cheat caught.

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

Croesus thought his gold made him the happiest man alive, but all the gold in the world belongs to God. We use money as stewards, caring for what is really His.

2.3 GOLDSMITHS AND PAPER RECEIPTS

OBJECTIVES

- Tell how China's merchants and London's goldsmiths began using paper instead of heavy metal.
- Explain that paper money began as a written promise to pay, and that it works only when people trust it.
- Run a pretend goldsmith's bank with receipts and keep its records honestly.

Warm-up. Fill a sock or bag with 100 pennies and carry it around the house. Then hold a dollar bill. Both are worth one dollar. Which would you rather carry to the store? Why?

WATCH

Why did we start using paper money? - The History of Money (3/10).

OpenLearn from The Open University • 1:21

<https://www.youtube.com/watch?v=v2zIJWtk1jo>

WHEN TO WATCH

After the story of China's paper money, before the goldsmiths. Watch it twice; it is short.

Note: Only about a minute long; part 3 of a ten-part series from the Open University.

KEY TERMS

goldsmith

A craftsman who makes things out of gold and silver; in old London, goldsmiths also kept people's gold safe.

receipt

A written paper that proves someone paid or left something with you.

deposit

Money or gold left with a bank or goldsmith for safekeeping.

bank

A business that keeps people's money safe and lends money to others.

banknote

A paper promise from a bank to pay the person holding it; paper money.

CORE IDEAS

The story. About a thousand years ago, in the Sichuan region of China, people used coins made of iron. Iron coins were so heavy that buying a small bolt of silk took a big load of them. So merchants began leaving their coins with trusted shops and taking paper receipts instead. The receipts could be passed from hand to hand. In the 1020s the Chinese government took over printing these notes, called *jiaozi*, making them among the first government paper money in the world.

How they figured it out. In England, paper money grew up in a different way. In 1640, King Charles I seized the gold that London merchants had stored for safety in the Royal Mint at the Tower of London. He gave most of it back later, but the merchants no longer trusted the king with their gold. So they took it to the **goldsmiths** of London, craftsmen who had strong, locked rooms for their own gold and silver. The goldsmith gave each merchant a written **receipt**: “I have received 100 pounds of gold from Mr. Smith, to be paid back when he asks.” Soon merchants found it easier to pay each other by handing over the receipts instead of fetching the gold. The receipts became a kind of money.

Think it through. The goldsmiths noticed something. Most people left their gold in the strong room for a long time. Only a few came back for it each day. So a goldsmith could lend out some of the gold, or write extra receipts, and earn interest. This was the beginning of **banking**. But it was risky. If too many people came back for their gold at once and the goldsmith had lent too much, he could not pay them all, and the bank would fail.

The big idea. Paper money began as a written promise: “Bring this paper and you will be paid in gold or silver.” A **banknote** is only as good as the bank behind it. In 1694 a group of merchants started the Bank of England, which lent money to the government and printed its own banknotes, written out by hand at first. People trusted the Bank of England, so its notes were accepted everywhere. Paper money works because people trust it.

In business today. Banks still keep people's **deposits** safe, give them records of what they have, and lend some of the money to others. Your parents may use checks, cards or a phone app, which are all ways of passing along a record that says, "The bank owes this person money." Like the goldsmiths' receipts, they work only because people trust the bank and the records are kept honestly.

PICTURE STUDY



A Goldsmith in His Shop, Petrus Christus, 1449 · Oil on oak panel · The Metropolitan Museum of Art, New York

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

Petrus Christus painted this picture in Bruges, a great trading city in what is now Belgium. A goldsmith sits at his counter with a couple who have come to buy a wedding ring. Goldsmiths like him made and sold rings and cups, weighed gold and silver, and were trusted with valuable things, just as the London goldsmiths were trusted with gold two hundred years later.

Look closely

- Find the balance scale. What is the goldsmith weighing? Why must a goldsmith weigh carefully?
- Look at the shelves. List the precious things you can find.
- Find the round mirror on the counter. What does it show?
- Look at the goldsmith's face. Does he look careful or careless?

Talk about it

1. Why would people trust a goldsmith with their gold?
2. What would happen to a goldsmith's business if he cheated even one customer and people found out?
3. How is a goldsmith's receipt like a dollar bill?

PROJECT

The Goldsmith's Bank

You will run a goldsmith's bank for your family, keep their "gold" safe, write receipts, and find out what happens if everyone wants their gold back at once.

You will need

- About 50 yellow counters, buttons or pennies to be the gold
- A box with a lid for the strong room
- Slips of paper for receipts, and a special stamp or signature
- Ledger notebook and a pencil

Steps

1. Give each family member some "gold" pieces. You are the goldsmith. Make a ledger page: Date, Name, Gold deposited, Receipt number, Gold taken back.
2. Each person deposits his gold in your strong room. Count it carefully in front of them, record it, and write a signed receipt: "Received 10 pieces of gold from Dad. Receipt No. 1. Will be paid back on demand."
3. Now let the family buy and sell things around the house (a cookie, a chore, a book to borrow) by handing over receipts instead of gold. Notice that the gold never leaves the box.
4. At the end, count the gold in the box. Add up all the receipts still out. Do they match? They should!
5. **The risky part.** A neighbor asks to borrow 20 pieces of gold and promises to pay back 22. Lend it, and record the loan. Now count: how much gold is in the box, and how much do the receipts say you owe?
6. Have everyone come at once to take back all their gold. Can you pay them all? Write what happened.
7. Write two sentences: Why does a bank need people's trust? What should a wise goldsmith do so he can always pay people back?

Tips

- Make your receipts hard to copy with a special mark or signature. A fake receipt would be stealing.

- Keep the ledger as you go, not at the end. A goldsmith who forgets a deposit will lose his customers' trust.

Check your work

- ☐ I wrote signed receipts and kept an honest ledger of deposits.
- ☐ I can explain how goldsmiths' receipts became paper money.
- ☐ I can explain why a bank fails if it lends too much and everyone wants their money at once.

LEDGER NOTEBOOK

1. Copy one of your receipts and label its parts: date, name, amount, number, signature.
2. Draw a picture strip in four boxes: a merchant brings gold, the goldsmith writes a receipt, the merchant pays someone with the receipt, the new owner collects the gold.
3. Make a timeline: 1020s *jiaozi* in China; 1640 the king seizes the merchants' gold; 1694 the Bank of England.

From history. The Bank of England still exists and still prints Britain's banknotes. It has a free museum in London where visitors can see old handwritten notes and try to lift a real bar of gold, which weighs about 13 kilograms (nearly 30 pounds).

COMMON MISTAKES

- Thinking paper money was always worth something by itself. It began as a promise to pay in gold or silver.
- Thinking a bank keeps every dollar in its vault. Banks lend out much of what people deposit and keep only part on hand.
- Thinking a receipt is not important. A receipt is proof, and honest receipts are what make banking work.

Make it a game • Goldsmith Bank Run. You are the goldsmith. Your parent deposits ten beans of pretend gold and receives a paper receipt. Later the receipt is traded for a toy. Then your parent presents it and you pay out the gold. Talk about why people trusted the paper. Play two rounds with a different customer each time.

2.4 THE DOLLAR AND THE FEDERAL RESERVE

OBJECTIVES

- Tell how the Federal Reserve was started in 1913 to make the country's banks and money steadier.
- Find and explain the parts of a dollar bill: the Federal Reserve seal, the serial number, the Treasury seal and the words "legal tender."
- Explain simply why a dollar has value today and why printing too many dollars makes prices rise.

Warm-up. Look at a dollar bill with a parent. Count how many times you can find the number 1 or the word ONE on the front and back. What else do you notice? Write down three things you never noticed before.

WATCH

Field Trip to the Money Factory

USAGov · 2:30

<https://www.youtube.com/watch?v=-IBHbe-t-X4>

WHEN TO WATCH

After the story of the Federal Reserve, before the Dollar Detective project.

Note: From the U.S. government's kids' website: two workers at the Bureau of Engraving and Printing show how bills are designed and printed.

BACKUP VIDEO

What is the Federal Reserve?

Information Station · 2:19

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

KEY TERMS

dollar

The basic unit of money in the United States, made official by Congress in 1792.

Federal Reserve

The central bank of the United States, started in 1913; it is a bank for banks and helps keep the country's money steady.

Federal Reserve note

The official name for U.S. paper money, printed on the front of every bill.

legal tender

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

inflation

When prices in general rise, so each dollar buys less than before.

CORE IDEAS

The story. In the fall of 1907, people in New York grew afraid that their banks were in trouble. Crowds lined up to take out their money, and a few banks ran out of cash and closed. This was called the Panic of 1907. The famous banker J. P. Morgan called the leading bankers to his library in New York and kept them there through the night until they agreed to put together money to help the banks that were in danger. The panic ended, but people asked: should the whole country have to depend on one banker in a library?

How they figured it out. Leaders in Congress studied banks in other countries, like the Bank of England, which acted as a bank for other banks. In 1913 Congress passed the Federal Reserve Act, and President Woodrow Wilson signed it on December 23, 1913. It created the **Federal Reserve**, with twelve Federal Reserve Banks in different cities, from Boston to San Francisco. Ordinary banks keep some of their money at the Federal Reserve, and in a panic the Federal Reserve can lend them cash, so a frightened crowd does not have to bring down a good bank. The Federal Reserve also sends out the country's paper money, called **Federal Reserve notes**, which are printed by the Bureau of Engraving and Printing in Washington, D.C., and Fort Worth, Texas.

The big idea. For many years, a dollar was a promise that you could trade it for a set amount of gold or silver. That link with gold ended for good in 1971, when President Nixon closed the gold window. So why is a dollar worth anything today? Because the law makes it **legal tender**, which means it must be accepted to pay debts and taxes; because people trust it and accept it for work and goods; and because the Federal Reserve tries not to let too many dollars be made. If too many dollars were printed, each one would buy less, and prices would go up. That is called **inflation**.

In business today. Every store, bank and paycheck in the country counts in dollars. The Federal Reserve watches prices and jobs across the country and makes decisions to keep the dollar steady, so that a dollar you save today will still buy close to the same amount next year. Your part is to treat money honestly and wisely, whether it is a coin, a bill or a number in a bank's records.

PICTURE STUDY



A Ten-Dollar Federal Reserve Note of 1914, Bureau of Engraving and Printing, 1914 · Engraved and printed paper money · United States

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

This ten-dollar bill was one of the first Federal Reserve notes, printed in 1914, the year the twelve Federal Reserve Banks opened. Like today's bills, it was engraved by skilled craftsmen at the Bureau of Engraving and Printing, with tiny lines that are very hard to copy.

Look closely

- Find the words “Federal Reserve Note.” Where are they?
- Find the portrait. This is Andrew Jackson, the seventh president.
- Find the black seal on the left. It names the Federal Reserve Bank of Philadelphia, with the number 3 and the letter C.
- Turn to the back. What work do you see on the farm side? What do you see on the factory side?

Talk about it

1. How is this 1914 bill like a dollar bill in your house today? How is it different?
2. Why do you think the engravers put a farm and a factory on the back of the nation's money?

3. In 1914 this bill could be traded for gold. Today it cannot. Why do people still accept dollars?

PROJECT

The Dollar Detective

You will study real dollar bills like a detective, find the Federal Reserve Bank that sent each one out, and tally your findings in your ledger.

You will need

- Five to ten dollar bills from your family (borrowed, and counted back when you finish)
- A magnifying glass, if you have one
- Ledger notebook and a pencil

Steps

1. On one dollar bill, find and point to: the portrait of George Washington, the words “Federal Reserve Note,” the green Treasury seal, the serial number, and the words “This note is legal tender for all debts, public and private.” Write each one in your ledger.
2. Find the black seal on the left side of the front of the bill. It shows a letter and the name of the Federal Reserve Bank that sent the bill out.
3. Make a tally chart with the twelve banks: A Boston, B New York, C Philadelphia, D Cleveland, E Richmond, F Atlanta, G Chicago, H St. Louis, I Minneapolis, J Kansas City, K Dallas, L San Francisco.
4. Tally every bill you have by its letter. Which bank sent out the most bills in your stack?
5. Find each Federal Reserve city on a map of the United States. Which one is closest to your home?
6. Turn a bill over. Find the words “In God We Trust.” Talk with a parent about what those words mean.
7. **The inflation game.** Hold an auction for one cookie with each player having \$5 in play money. Record the winning price. Then give each player \$20 and auction a second, identical cookie. Record the price. Write two sentences: What happened to the price when everyone had more money? Why?

Tips

- Handle real bills with clean hands and give every one back. Count them before and after.
- The letter on the black seal also appears at the start of the serial number on most older bills, which can help you check.

Check your work

- ☐ I can find five important parts of a dollar bill.
- ☐ I can explain what the Federal Reserve does in one or two sentences.
- ☐ I can explain why printing too much money makes prices rise.

LEDGER NOTEBOOK

1. Draw a large dollar bill and label its parts: portrait, Federal Reserve seal, Treasury seal, serial number, “legal tender,” “In God We Trust.”
2. Copy your tally chart of Federal Reserve banks and make a bar graph from it.
3. Make a money timeline for the whole unit: barter, commodity money, the first coins, paper receipts, the Bank of England, the Federal Reserve.

From history. The words “In God We Trust” first appeared on a U.S. coin, the two-cent piece, in 1864, during the Civil War. They were added to paper money beginning in 1957, and today they are printed on every U.S. bill.

COMMON MISTAKES

- Thinking the Federal Reserve is one building. It is a system with a Board in Washington, D.C., and twelve Federal Reserve Banks around the country.
- Thinking the government can make everyone rich by printing more money. More money without more goods only makes prices rise.
- Thinking a dollar can still be traded for gold. That link ended in 1971.

Make it a game • Dollar Detective Dash. Study a dollar bill for sixty seconds, then hide it. Draw it from memory, labeling the Federal Reserve seal, serial number, portrait and other parts you can recall. Compare with the real bill and score a point per part right. Tell how the Federal Reserve started in 1913.

UNIT 2

THE STORY OF MONEY

What is money, and where did it come from? In this unit you will travel from the days when people traded goods for goods, called **barter**, to the shells, salt, cattle and beads that people used as the first money. You will visit Lydia, the kingdom where the first coins were stamped, and follow the gold trade to Mansa Musa of Mali. You will see how the goldsmiths of London began writing paper receipts for gold, and how those receipts grew into paper money. Last, you will look closely at the dollar bill in your own house and learn what the Federal Reserve does.

In your ledger notebook you will log barter trades, weigh coins on a kitchen scale, run a goldsmith's bank with paper receipts, and make a tally of dollar bills by the Federal Reserve Bank that sent them out. By the end you will be able to tell the story of money from barter to the dollar.

PREREQUISITES

- Knows the values of pennies, nickels, dimes, quarters and dollar bills (Unit 1)
- Can explain a fair trade (Lesson 1.4)
- Can read a kitchen scale in grams with help

MASTERY CHECKLIST

- ☐ I can explain why barter is hard and how commodity money made trading easier.
- ☐ I can tell how Lydia made the first coins and why gold has been prized as money.
- ☐ I can explain how goldsmiths' receipts became paper money and why paper money needs trust.
- ☐ I can find the Federal Reserve seal, the serial number and the words "legal tender" on a dollar bill and explain what the Federal Reserve does.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **U.S. Mint for Kids:** Free games (at usmint.gov, under “Learn”), coin facts and lesson pages from the United States Mint. Good for Lessons 2.2 and 2.4 and again in Lesson 5.4. Ages 6–12.
- **Money Factory: the Bureau of Engraving and Printing:** Free. The official site of the government office that prints U.S. paper money, with pictures of how bills are made and the security features to look for. Use with Lesson 2.4.
- **Federal Reserve Bank of St. Louis: Econ Lowdown:** Free lessons, videos and stories about money for children, from a Federal Reserve bank. A parent may make a free teacher account to find the elementary 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

2.1 From Barter to Commodity Money	2 sessions of 45 minutes
2.2 Lydia’s First Coins and the Gold Trade	2 sessions of 45 minutes
2.3 Goldsmiths and Paper Receipts	2 sessions of 45 minutes
2.4 The Dollar and the Federal Reserve	2 sessions of 45 minutes

UNIT 2 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. 5 pts

What is barter? Why is it hard?

2. 5 pts

Name three things people have used as commodity money.

3. 5 pts

In 1637, six white wampum beads were worth one penny. How many beads were worth 5 pennies?

4. 5 pts

What happened to the value of wampum when people began making beads quickly with iron drills? Why?

5. 5 pts

What were the first coins made of, and where were they made? How did King Croesus improve them?

6. 5 pts

Give two reasons gold has been prized as money.

7. 5 pts

How did a London goldsmith's receipt become a kind of money?

8. 5 pts

What would happen if a goldsmith lent out most of the gold and then everyone came to take their gold back on the same day?

9. 5 pts

What is the Federal Reserve, and why was it started in 1913?

10. 5 pts

A toy cost \$4 last year. Because of inflation, it costs \$5 this year. How much more does it cost? Does your dollar buy more or less than before?

ANSWER KEY

1. Trading goods for goods without money. It is hard because you must find someone who has what you want and also wants what you have (the double coincidence of wants).
2. Any three: salt, cowrie shells, cattle, wampum beads, weighed silver, gold.
3. $6 \times 5 = 30$ beads.
4. It lost value; each string bought less, because there was too much wampum.
5. Electrum, a natural mix of gold and silver, in Lydia about 600 BC. Croesus made separate coins of pure gold and pure silver, so each coin's value was certain.
6. Any two: it is rare; it never rusts or spoils; it can be divided into small pieces; it is beautiful and wanted.
7. Merchants left gold with the goldsmith and got a receipt. Instead of fetching the gold, they paid each other by handing over the receipts.
8. He could not pay them all; people would lose trust and the bank would fail.
9. The central bank of the United States, a bank for banks with twelve Federal Reserve Banks. It was started after bank panics like 1907 so banks could get help in a panic and the country's money would be steadier.
10. $\$5 - \$4 = \$1$ more. Each dollar buys less than before.

PORTFOLIO PIECE: MY MONEY TIMELINE

Make a long timeline on taped-together paper or a long strip of shelf paper showing the story of money from barter to today. Include at least eight events with dates or periods, such as barter, Abraham's weighed silver, the first Lydian coins, Croesus's gold coins, China's *jiaozi*, Mansa Musa's pilgrimage, wampum in Massachusetts, the London goldsmiths, the Bank of England, the Federal Reserve in 1913 and 1971.

Draw a small picture for each, and under each one write one sentence about what problem it solved. Add your coin-weight table and your Federal Reserve tally chart at the end.

LOOK FOR	WHAT IT MEANS
Events	At least eight events are shown in the right order with correct dates or periods.
Problems solved	Each event has a sentence explaining what problem it solved or what it taught.
Records	The coin-weight table and Federal Reserve tally are copied correctly from the ledger.
Presentation	The timeline is neat and labeled, and the student can explain it aloud to the family.

UNIT 3

MARKETS

A **market** is any place where buyers and sellers meet to trade: a farmers' market, a grocery store, a fair, or even a website. In this unit you will learn why prices go up and down, using the gold rush of 1849 and a simple chart of **supply and demand**. You will see how **competition** between the cereal makers of Battle Creek, Michigan, gave families better breakfasts at fair prices, and what happens when there is only one seller, called a **monopoly**. Last, you will travel back to the great fairs and craft guilds of the Middle Ages.

In your ledger notebook you will record the prices from a cookie auction, run two competing stands, play a monopoly game, and set a quality standard like a guild master. You will finish the unit with a real price survey of the same items at three stores.

PREREQUISITES

- Knows what money is and how it replaced barter (Unit 2)
- Can explain scarcity and opportunity cost (Lesson 1.2)
- Can make a simple bar graph

MASTERY CHECKLIST

- ☐ I can explain supply and demand and read a simple supply-and-demand chart.
- ☐ I can explain how competition helps customers with better quality and lower prices.
- ☐ I can explain what a monopoly is and why one seller may charge more and serve customers less well.
- ☐ I can tell about the medieval fairs and guilds and name one good thing and one problem with guilds.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Toothpaste Millionaire**, by Jean Merrill (Houghton Mifflin Harcourt): A funny novel about a boy who makes an honest, cheap toothpaste and beats the high-priced brands. Read aloud during Lessons 3.2 and 3.3. Ages 8–12. Look for it at your library.
- **Federal Reserve Bank of St. Louis: Econ Lowdown**: Free elementary lessons on markets, prices and competition from a Federal Reserve bank. A parent may make a free teacher account to find them.

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: The Gold Rush Prices	2 sessions of 45 minutes
3.2	Competition: The Cereal Makers of Battle Creek	2 sessions of 45 minutes
3.3	One Store in Town: What Is a Monopoly?	2 sessions of 45 minutes
3.4	Medieval Fairs and Guilds	2 sessions of 45 minutes

UNIT 3 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**

What is a market? Name two kinds of markets.

2. **5 pts**

Why were shovels, boots and food so costly during the California gold rush?

3. **5 pts**

What happened to prices in California when merchants shipped in more goods? Why?

4. (5 pts)

In your cookie auction, 2 cookies sold for 9 and 7 beans. Then 8 cookies sold for an average of 3 beans. What was the average price in the first round? Why was it higher?

5. (5 pts)

Name three things a business can do to win customers from a competitor.

6. (5 pts)

Why did W. K. Kellogg print his signature on every box of corn flakes?

7. (5 pts)

What is a monopoly? Why might a monopoly charge high prices?

8. (5 pts)

What would happen if the only store in a small town raised its prices very high?

9. (5 pts)

How did the Counts of Champagne make their fairs safe and trustworthy for merchants?

10. (5 pts)

Name one good thing guilds did and one problem with guilds.

ANSWER KEY

1. Any place where buyers and sellers meet to trade. Examples: a farmers' market, a grocery store, a fair, an online store.
2. Many miners wanted them (high demand) but there were few stores and goods had to come from far away (low supply).
3. Prices came down, because the supply grew.
4. $(9 + 7) \div 2 = 8$ beans. It was higher because there were fewer cookies (low supply) for the same number of buyers.
5. Any three: lower its price, make a better product, give friendlier service, keep things fresh, make a trustworthy brand.
6. So customers could tell the real Kellogg's cereal from imitations made by competitors.
7. A market with only one seller. Customers have nowhere else to buy, so the seller does not have to keep prices low to win them.
8. Customers would buy less, use substitutes or travel to other towns, and another seller would likely open a store nearby to win the customers.
9. They promised safe passage on the roads and appointed fair keepers who checked weights and measures, settled quarrels and punished people who broke their promises.
10. Good: trained apprentices, set quality rules, helped members' families. Problem: kept out newcomers and limited competition, so prices stayed high.

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 tube of toothpaste. Find the price of the same size of each item at three different stores, by visiting with a parent or by reading store flyers or the stores’ websites together. Make a table with the items down the side and the stores across the top, circle the lowest price for each item, and add up the total for all five items at each store. Write a short paragraph explaining which store was cheapest overall, why you think prices were different, and what besides price (quality, distance, service) might make a family choose one store over another.

LOOK FOR	WHAT IT MEANS
Research	Five items are priced at three stores, using the same size or brand at each store, with the date and stores named.
Table and totals	The table is neat and labeled, the lowest prices are circled and the totals are added correctly.
Explanation	The paragraph uses the words competition, supply or demand to explain the price differences.
Good judgment	The student names at least one reason besides price for choosing a store.

3.1 SUPPLY AND DEMAND: THE GOLD RUSH PRICES

OBJECTIVES

- Tell how prices in the California gold rush rose when many people wanted things that were scarce.
- Explain supply and demand in your own words.
- Run a cookie auction, record the prices, and draw a simple supply-and-demand chart.

Warm-up. Think of a time when everyone wanted the same thing: the last piece of birthday cake, the front seat in the car, a popular toy at Christmas. What happened? What would happen to the price of something if everyone wanted it and there was only a little of it?

WATCH

Supply and Demand - Learn How Goods and Services Work

Miacademy & MiaPrep Learning Channel · 4:28

<https://www.youtube.com/watch?v=J8MVVOjqhN4>

WHEN TO WATCH

After the gold-rush story, before the cookie auction.

KEY TERMS

market

Any place where buyers and sellers meet to trade.

demand

How much of something buyers want and are able to buy.

shortage

When buyers want more of something than sellers have.

supply

How much of something sellers have to sell.

price

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

CORE IDEAS

The story. On January 24, 1848, a carpenter named James Marshall was building a sawmill for John Sutter on the American River in California. In the water he saw some shiny flakes. They were gold! Word spread, and in 1849 tens of thousands of people rushed to California from all over the world to dig for gold. They were called the forty-niners. A storekeeper named Sam Brannan had already filled his store near Sutter's Fort with shovels, pans and picks. He walked through the streets of San Francisco holding up a bottle of gold dust and shouting about gold on the American River, and soon miners were lining up to buy his tools at very high prices.

How they figured it out. In the gold fields, thousands of miners needed food, boots, shovels, pans, tents and blankets, but there were only a few stores and the goods had to come by ship or wagon from far away. Prices shot up: eggs, flour, boots and shovels cost many times what they cost back east. Some miners found little gold and spent all they had. But many of the people who did well were the ones who sold things the miners needed. When merchants saw the high prices, they hurried to ship more goods to California, and more stores opened. As more goods arrived, prices began to come down.

The big idea. **Supply** is how much sellers have. **Demand** is how much buyers want and can pay for. When demand is high and supply is low, there is a **shortage**, and the **price** goes up. When supply is high and demand is low, sellers lower their prices to sell what they have. High prices are like a signal flag that says, "People need this here! Bring more!" That signal brought ships full of goods to California.

Try it. You can draw supply and demand as a simple chart. Make a line going down for demand: when the price is high, fewer people buy; when it is low, more people buy. Make a line going up for supply: when the price is high, sellers want to bring more. The place where the two lines cross is the price where the number people want to buy matches the number sellers want to sell.

In business today. Strawberries cost less in June, when farms are full of them, than in January, when they must be shipped from far away. Hotels charge more on holidays when many families travel. An honest seller may raise his price when something is scarce, but he never lies about what he is selling, and a kind neighbor remembers people in need.

PICTURE STUDY



California Gold Miners with a Long Tom, Unknown photographer, about 1852 · Hand-tinted daguerreotype (an early photograph on a silver-coated copper plate)

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

This is one of the earliest photographs of the gold rush. The miners are working a “long tom,” a long wooden trough. They shoveled dirt into the top, washed it with water, and the heavy gold sank and was caught in the bottom while the mud washed away. The men had to hold very still for the camera, which took many seconds to make a picture.

Look closely

- Count the miners. Find the ones holding shovels.
- Find the long wooden trough. Which end do you think the dirt went into?
- Look at their hats and clothes. Which men look like miners, and which might be visitors or owners?
- Look at the hillside. What has happened to the land?

Talk about it

1. Everything these men used, from boots to shovels to food, had to be bought. Why were those things so costly in the gold fields?
2. Who do you think made more money: the miners or the people selling them shovels? Why?

3. If you were a merchant in 1849, what would you have shipped to California, and why?

PROJECT

The Cookie Auction

You will hold two auctions at the dinner table, one with only a few cookies and one with many, record the prices, and draw a simple chart that shows supply and demand.

You will need

- 10 small cookies or crackers, all alike
- 20 dried beans or play coins for each bidder
- Three or more family members as bidders
- Ledger notebook, graph paper and a pencil

Steps

1. Give each bidder 20 beans. Explain that beans left over at the end can be traded back for a small treat later, so beans are worth keeping.
2. **Round 1: few cookies.** Put out just 2 cookies. Auction them one at a time: bidders call out prices in beans, and the highest bid wins. Record the winning price for each cookie.
3. **Round 2: many cookies.** Give back everyone's beans. Put out 8 cookies and auction them one at a time. Record each winning price.
4. Find the average price in each round: add the prices and divide by the number of cookies.
5. Make a table in your ledger: Round, Number of cookies (supply), Average price.
6. On graph paper, draw a simple chart with "Number of cookies" along the bottom and "Price in beans" up the side. Mark a dot for each round and connect them.
7. Write two sentences: What happened to the price when there were more cookies? How is this like the gold rush?

Tips

- Bid honestly. In a real market, people pay only what something is worth to them.

- If the family is small, add a stuffed animal bidder with beans and have a parent bid for it.

Check your work

- ☐ I recorded the prices in both rounds and found the averages.
- ☐ I can explain why the price changed when the supply changed.
- ☐ I can tell how the gold rush shows supply and demand.

LEDGER NOTEBOOK

1. Draw a simple supply-and-demand chart: a demand line going down, a supply line going up, and a star where they cross. Label each line.
2. Draw a gold-rush store with prices on its signs, and a ship arriving with more goods. Write what will happen to the prices.
3. Make a list of three things that cost more at some times of year than others, and explain why.

From history. California became a state in 1850, only two years after gold was found. San Francisco grew from a small town of about a thousand people to a busy city of many thousands in just a few years, and many of its first businesses were stores, hotels and banks that served the miners.

COMMON MISTAKES

- Thinking prices are set by a rule and never change. In a market, prices move up and down with supply and demand.
- Thinking high prices are always unfair. High prices are a signal that brings more sellers and more goods.
- Mixing up supply and demand. Supply is what sellers have; demand is what buyers want.

Make it a game • Gold Rush Cookie Auction. Give each player ten paper chips. Auction cookies, or crackers, one at a time, with three in the first round and one in the second. Notice how much the winning bid rises when there are fewer. Say the words supply, demand and shortage, and tell how gold rush prices rose in California.

3.2 COMPETITION: THE CEREAL MAKERS OF BATTLE CREEK

OBJECTIVES

- Tell how W. K. Kellogg, C. W. Post and many others competed to sell breakfast cereal in Battle Creek, Michigan.
- Explain how competition makes sellers improve quality, lower prices and treat customers well.
- Run two competing stands and record how customers choose.

Warm-up. Look at the breakfast cereal boxes in your kitchen or in a store flyer. How many different brands of corn flakes or oat cereal can you find? Why do you think there are so many?

WATCH

Introduction to Perfect Competition | Economics Explained

Federal Reserve Bank of St. Louis • 6:18

<https://www.youtube.com/watch?v=J9O09ISQnG8>

WHEN TO WATCH

After the story of Battle Creek; pause at the farmers' market stalls and count the sellers.

Note: From the Federal Reserve Bank of St. Louis. The graphs near the middle are a little advanced; a parent can explain that the lines show prices and amounts.

KEY TERMS

competition

When several sellers try to win the same customers.

competitor

Another business that sells the same kind of thing to the same customers.

brand

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

quality

How good something is: how well it is made, how well it works, how good it tastes.

imitation

A copy made to look like someone else's product.

CORE IDEAS

The story. In the 1890s, Battle Creek, Michigan, had a famous health center run by Dr. John Harvey Kellogg. His younger brother, Will Keith Kellogg, worked there as his manager. The brothers were looking for healthy foods that were easy to eat. One day they left a pot of cooked wheat sitting out, and when they rolled it later it broke into thin flakes. They toasted the flakes and served them to the patients, who loved them. Later they made flakes from corn. In 1906 W. K. Kellogg started his own company to sell toasted corn flakes to the whole country.

How they figured it out. Kellogg was not alone. A man named C. W. Post had visited the Kelloggs' health center, and he started his own company in Battle Creek, selling a grain drink called Postum and a cereal called Grape-Nuts. When people saw how well Kellogg and Post were doing, dozens of new cereal companies started up in Battle Creek, all trying to win the same customers. Some made poor cereal, and some copied the Kellogg box. So Kellogg printed his own signature on every box with the words "none genuine without this signature," so that customers would know they were getting the real thing. Kellogg and Post worked hard to keep their cereal fresh and good-tasting and the price low enough for ordinary families. Most of the other companies failed within a few years. The ones that made the best cereal at a fair price lasted.

The big idea. When several sellers try to win the same customers, it is called **competition**. To win, a seller must offer better **quality**, a lower price, or better service than his **competitors**. Customers are free to choose, so a seller who cheats or makes poor goods loses them. That is why competition usually makes things better and cheaper over time. A **brand**, like Kellogg's signature, is a promise of quality that customers learn to trust.

Think it through. Competition is good only when it is honest. Selling an **imitation** with someone else's name on it is a kind of lying, and so is telling customers false things about a competitor. Honest competitors win by serving customers better, not by tricking them.

In business today. Grocery stores, gas stations and pizza shops compete every day. When a new store opens across the street, the old store may lower its prices, clean up, stay open later or add new products. Kellogg's and Post still make breakfast cereals more than a hundred years later, and they still compete with each other and with many store brands.

PICTURE STUDY



“Why the Demand Keeps Up”: A Kellogg’s Corn Flakes Advertisement, Battle Creek Toasted Corn Flake Company, 1909 · Printed magazine advertisement · Battle Creek, Michigan

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

This advertisement was printed in 1909, three years after W. K. Kellogg started his company. It was written for the grocers who sold the cereal. It tells them that Kellogg’s sells well because of its flavor and that every store, big or small, is treated the same, a “square deal.” Notice Kellogg’s own signature at the bottom.

Look closely

- Read the big words at the top. What does “demand” mean here?
- Find the boy’s bowl. What is he asking for?
- Find W. K. Kellogg’s signature. Why would he sign his name on an advertisement and on every box?
- Find the words “A Good Product, A Square Deal.” What do you think a square deal is?

Talk about it

1. Why would a cereal company with many competitors want customers to know its name?
2. How does a signature help protect customers from imitations?

3. What would make you choose one cereal over another: price, taste, the box, or something else?

PROJECT

Two Stands on One Street

You and a family member will run two competing stands selling the same thing, and you will record how customers choose between you.

You will need

- Two small tables or spots in the room
- Something simple to “sell” at both stands, such as paper airplanes, bookmarks or small cups of water
- Play money: \$5 in small amounts for each customer
- Paper and markers for signs and price tags
- Ledger notebook and a pencil

Steps

1. Set up two stands that sell the same product. Each owner makes a sign and a price tag.
2. **Round 1.** Both stands charge the same price. Customers (other family members or stuffed-animal shoppers with a parent choosing for them) each buy one item. Tally how many each stand sold.
3. **Round 2.** Each owner may change one thing to win more customers: lower the price, make a better product, make a better sign, or offer friendlier service. Sell again and tally.
4. **Round 3.** Change one more thing and sell again.
5. In your ledger, make a table: Round, What my stand changed, What the other stand changed, My sales, Their sales, Money taken in.
6. Ask each customer why he chose the stand he did. Write down the reasons and tally them: price, quality, sign, service.
7. Write two sentences: How did competition change the stands? Were the customers better off in Round 3 than in Round 1?

Tips

- Compete honestly. You may make your stand better, but you may not say untrue things about the other stand.

- If you lower your price too far, check whether you still earn more than your product costs to make.

Check your work

- ☐ I recorded sales and changes for three rounds.
- ☐ I can explain how competition helped the customers.
- ☐ I can tell how Kellogg competed with many cereal makers in Battle Creek.

LEDGER NOTEBOOK

1. Design your own cereal box with a brand name, a promise of quality and your signature.
2. Copy your three-round sales table and make a bar graph of each stand's sales.
3. List three ways a business can compete honestly and two ways that would be dishonest.

From history. Battle Creek became known as “Cereal City.” Today it still holds a cereal festival with a very long breakfast table where visitors can eat cereal for free.

COMMON MISTAKES

- Thinking competition is only about the lowest price. Quality, freshness, service and honesty win customers too.
- Thinking competition is mean. Honest competition helps customers and pushes every seller to do better work.
- Thinking the first company always wins. Many early cereal makers failed; the ones that served customers best lasted.

Make it a game • Cereal Duel. Each player is a cereal maker in Battle Creek, either Kellogg or Post. Take turns pitching a better, cheaper or kinder-service cereal in thirty seconds. A third judge picks the winner of each round and says why. Score two points for a better idea. Explain how competition makes sellers improve.

3.3 ONE STORE IN TOWN: WHAT IS A MONOPOLY?

OBJECTIVES

- Explain what a monopoly is and why a seller with no competitors may charge more and serve customers less well.
- Tell how the East India Company was given the only right to sell tea to the American colonies in 1773, and what happened.
- Play a monopoly game and record how the price changes when a second seller arrives.

Warm-up. Imagine your town has only one grocery store, and it is far from the next town. The store owner doubles the price of milk. What can your family do? Now imagine there are three grocery stores. What would happen if one store doubled its price?

WATCH

What is a Monopoly? | Economics Explained

Federal Reserve Bank of St. Louis • 7:18

<https://www.youtube.com/watch?v=146O2tCFBWs>

WHEN TO WATCH

After the story of the tea monopoly, before the pencil game.

Note: From the Federal Reserve Bank of St. Louis. Watch the first five minutes; the rest is more advanced.

KEY TERMS

monopoly

A market with only one seller of a good or service that has no close substitute.

substitute

Something a buyer can use instead, like juice instead of milk or a bike instead of the bus.

general store

A store in a small town that sells many kinds of goods, from flour to nails.

regulate

To set rules for a business, such as limits on what it may charge.

CORE IDEAS

The story. In 1773, the British government passed a law called the Tea Act. It gave the British East India Company, a huge trading company, the only right to ship tea from Asia straight to the American colonies and sell it through a few chosen merchants. American merchants who had been buying and selling tea were now shut out. Many colonists also objected to a tax on the tea. In several ports, the colonists would not let the tea be unloaded. In Boston, on the night of December 16, 1773, a group of men climbed aboard three ships and dumped 342 chests of the company's tea into the harbor.

How they figured it out. The colonists understood something about one seller with no rivals. Today the tea might be cheap, but once the company was the only seller, what would stop it from raising its prices, or from selling poor tea? And if the government could give one company the only right to sell tea, could it do the same with other goods? A seller who has no **competitors** does not have to try very hard to please customers.

The big idea. A **monopoly** is a market with only one seller. A monopoly may charge high prices, give poor service or stop improving, because customers have nowhere else to go. Monopolies are weakest when customers have a **substitute**: if milk costs too much, a family can drink water or juice. They are strongest when there is no substitute. In a small frontier town, the only **general store** for miles could charge more than a city store, until a second store opened down the road.

Think it through. Some things work best with one seller, like the water pipes and power lines that run to every house. It would be wasteful to have three sets of water pipes under every street! For these, towns and states usually **regulate** the company: they let it be the only seller but set rules about its prices and service, like a fair referee.

In business today. Most stores today have many competitors, so they must keep their prices fair and their service good. Laws in many countries stop companies from secretly agreeing to raise prices or from unfairly pushing out rivals. You will learn more about these rules in Unit 5.

PICTURE STUDY



Inside a General Store in Moundville, Alabama, Walker Evans, for the U.S. Farm Security Administration, 1936 · Photograph · Library of Congress, Washington, D.C.

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

Walker Evans took this photograph for the U.S. government in 1936, in a small town in Alabama. A country general store like this one sold almost everything a farm family needed: flour, soap, lamps, dishes, nails and more. In many small towns it was the only store for miles.

Look closely

- Find the flour sacks. How many brand names of flour can you read?
- Find the oil lanterns on the top shelf. Why might farm families need lanterns in 1936?
- Find the calendar. What month and year is it?
- Make a list of everything you can see for sale. How many different kinds of goods did this one store sell?

Talk about it

1. If this was the only store for miles, what could the owner do with his prices? What would stop him from charging too much?
2. What would happen if a second store opened across the road?

3. Why would a store owner in a small town want to treat his customers fairly even with no competitor?

PROJECT

The Only Pencil Seller

You will play a market game in which one seller has all the pencils, then a second seller arrives, and you will record what happens to the price.

You will need

- 10 pencils (or other small items that everyone needs for a task)
- Play money: \$10 in \$1 slips for each buyer
- A simple drawing task that needs a pencil
- Ledger notebook and a pencil

Steps

1. One player is the only pencil seller and holds all 10 pencils. Everyone else is a buyer who needs a pencil to finish a drawing task for a prize.
2. **Round 1: monopoly.** The seller sets any price. Buyers may buy or go without. Record the price and how many pencils were sold.
3. **Round 2: a substitute.** Put out a few crayons that buyers may use instead of pencils. The seller sets a new price. Record what happened.
4. **Round 3: competition.** Take away the crayons. Give 5 of the pencils to a second seller. Both sellers set prices, and buyers choose. Record both prices and sales.
5. Make a table in your ledger: Round, Number of sellers, Substitute? (yes or no), Price of a pencil.
6. Make a bar graph of the pencil price in each round.
7. Write two sentences: When was the price highest? What brought it down?

Tips

- The seller should try to earn as much money as possible, just to see what a monopoly might do. In real life, an honest seller cares about his neighbors too.
- Buyers should decide honestly how much a pencil is worth to them.

Check your work

- ☐ I recorded the price of a pencil in all three rounds.
- ☐ I can explain why one seller can charge more than two sellers.
- ☐ I can explain what a substitute is and how it helps buyers.

LEDGER NOTEBOOK

1. Draw a small town with one store, then draw it again with two stores. Write the price of a loaf of bread you think each would charge.
2. Copy your pencil-price table and bar graph.
3. Make a list of three things in your house that come from one company only (like water or electricity) and three that come from many competing sellers.

From history. The East India Company ran its tea trade from London, and its ships sailed all the way around Africa to reach China, a voyage that took many months. Tea was so popular in Britain and the colonies that it became one of the company's most valuable goods.

COMMON MISTAKES

- Thinking a big company is always a monopoly. A monopoly means only one seller, not just a big seller.
- Thinking a monopoly can charge any price it likes. If the price is too high, buyers will use substitutes or go without.
- Thinking all monopolies are bad. Some things, like water pipes, work best with one company, but they need fair rules.

Make it a game • The Only Pencil Seller. Play two rounds of selling pencils. In round one only you sell, so you may name a high price and ignore complaints. In round two your parent also sells, so you must compete. Compare the prices. Explain what a monopoly is and how the East India Company's tea monopoly caused trouble.

3.4 MEDIEVAL FAIRS AND GUILDS

OBJECTIVES

- Tell how the great fairs of Champagne brought merchants from all over Europe to trade safely and honestly.
- Explain how a craft guild trained apprentices, set quality rules and protected its members.
- Name one good thing and one problem with guilds, and set a quality standard for something you make.

Warm-up. Have you been to a fair, a festival or a farmers' market? What was for sale? How did you know which sellers to trust? Make a list of things that help a buyer trust a seller he has never met.

WATCH

Guilds in the middle ages - Medieval Madness

Madnes64 • 4:05

<https://www.youtube.com/watch?v=o-ojG17MDFw>

WHEN TO WATCH

After the story of the fairs, before the guild project.

Note: A short cartoon-style history video with sketches of medieval craftsmen.

KEY TERMS

fair

A large market held at the same place at set times of the year, where merchants from far away came to trade.

apprentice

A young person who lives and works with a master craftsman for several years to learn a trade.

guild

A group of craftsmen or merchants in the same trade who made rules for their work, trained new workers and helped one another.

journeyman

A trained worker who has finished his apprenticeship and works for daily wages.

masterpiece

In a guild, the fine piece of work a journeyman made to prove he was ready to be a master.

CORE IDEAS

The story. Eight hundred years ago, in the region of Champagne in northern France, four towns took turns holding great **fairs**. Each fair lasted several weeks, and there were six in a year, so merchants could trade there almost all year round. Italian merchants brought silk, spices and pepper that had come from the East. Merchants from Flanders, in what is now Belgium, brought fine wool cloth. Others brought furs, leather and horses. The Counts of Champagne, who ruled the region, wanted the fairs to grow, because every sale brought them fees.

How they figured it out. Merchants would travel hundreds of miles only if they felt safe and could trust the people they traded with. So the Counts promised safe passage on the roads to the fairs. They appointed fair keepers who checked weights and measures, settled quarrels and made sure that people who broke their promises were punished. Money changers set up tables to trade one city's coins for another's. Merchants began writing promises to pay at the next fair instead of carrying chests of coins. Honesty and trust made the fairs work.

The big idea. In the towns, craftsmen formed **guilds**: the bakers' guild, the weavers' guild, the goldsmiths' guild. A boy who wanted to learn a trade became an **apprentice**, living with a master for several years. Then he became a **journeyman** and worked for wages. To become a master, he made a **masterpiece** to show the guild his skill. Guilds set rules for quality, checked their members' work, and helped members' families when someone was sick or died. But guilds also had a weakness: they often limited how many people could join and kept out newcomers and their new ideas, so prices stayed high and there was less competition.

In business today. Many trades still train young people through apprenticeships: electricians, plumbers and carpenters learn from experienced workers before they earn their license. Craft fairs, trade shows and farmers' markets still bring buyers and sellers together. And trust is still the heart of every market. "Seest thou a man diligent in his business? he shall stand before kings" (Proverbs 22:29).

PICTURE STUDY



A Market Fair, Unknown French illuminator, from *Le Chevalier errant* by Thomas III of Saluzzo, about 1400–1405 · Painted illustration in a handwritten book (manuscript) · Bibliothèque nationale de France, Paris

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

This painting comes from a handwritten book made in France around the year 1400. It shows a busy market fair in a walled town. Every seller had his place, and buyers walked from stall to stall comparing goods, just as you might at a farmers' market today.

Look closely

- Find the cloth seller. How is the cloth folded and stacked?
- Find the woman selling eggs and chickens. Where is she sitting?
- Find the animals. Which animals are being brought to market?
- Find the stone cross in the middle of the market. Many market places had one. Why might a market cross remind people to deal honestly?

Talk about it

1. Which goods in this picture were made by craftsmen, and which were grown on farms?
2. How could a buyer at this fair know the cloth was measured fairly?
3. Which of these sellers might belong to a guild? What rules might the guild have made?

PROJECT

The Guild Masterpiece

You will form a family guild, write a quality standard, make a product as an apprentice, and have the guild inspect your work before it can be “sold.”

You will need

- Supplies for a simple product: paper bookmarks, paper boats, beaded bracelets or folded cards
- A ruler
- Ledger notebook and a pencil

Steps

1. Choose your guild’s product and a name for your guild (for example, the Worshipful Guild of Bookmark Makers).
2. Write a quality standard of four or five rules in your ledger. For bookmarks: exactly 2 inches by 6 inches, straight edges, no smudges, a neat design, your maker’s mark on the back.
3. As an apprentice, make 6 of the product.
4. The guild master (a parent) inspects each one with the ruler and the rules. Record in a table: Item number, Passed or Failed, Reason.
5. Count how many passed. Write the pass rate: passed out of 6.
6. Fix what went wrong, then make your masterpiece: one perfect piece that meets every rule. If it passes, you are promoted to master!
7. Write two sentences: How did the quality standard help customers? How might a guild that refused to let new members join hurt customers?

Tips

- Good rules are clear enough that anyone can check them. “Pretty” is hard to check; “no smudges” is easy.
- Medieval craftsmen often put their own mark on their work so buyers would know who made it. Choose your own maker’s mark.

Check your work

- ☐ I wrote a clear quality standard and recorded which items passed.
- ☐ I can explain how apprentices became masters.
- ☐ I can name one good thing and one problem with guilds.

LEDGER NOTEBOOK

1. Draw the steps from apprentice to journeyman to master as a staircase, with what happens on each step.
2. Draw your maker's mark and explain what it stands for.
3. Draw a map of the Champagne fairs with arrows showing goods coming from Italy and Flanders.

From history. Some guilds still exist. In London, the old guilds, called livery companies, still meet. The Goldsmiths' Company has tested the purity of gold and silver since the Middle Ages and stamps it with a hallmark, a word that comes from Goldsmiths' Hall.

COMMON MISTAKES

- Thinking medieval markets had no rules. Fairs and guilds had many rules about weights, quality and honest dealing.
- Thinking guilds were only good or only bad. They protected quality and trained workers, but they also kept out competitors.
- Thinking an apprentice went to school. An apprentice learned by working beside his master, often living in his house.

Make it a game • Guild Masterpiece. Each player is an apprentice and must make a masterpiece, such as a paper airplane with straight edges. Your parent is the guild master who checks quality by the rules you both agree on first. Redo until it passes. Tell how guilds trained apprentices and how fairs in Champagne kept trade honest.

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)

A guild master's skill came from years of careful, diligent work. Skillful, honest work is noticed and honored, and it serves everyone who buys it.

UNIT 3

MARKETS

A **market** is any place where buyers and sellers meet to trade: a farmers' market, a grocery store, a fair, or even a website. In this unit you will learn why prices go up and down, using the gold rush of 1849 and a simple chart of **supply and demand**. You will see how **competition** between the cereal makers of Battle Creek, Michigan, gave families better breakfasts at fair prices, and what happens when there is only one seller, called a **monopoly**. Last, you will travel back to the great fairs and craft guilds of the Middle Ages.

In your ledger notebook you will record the prices from a cookie auction, run two competing stands, play a monopoly game, and set a quality standard like a guild master. You will finish the unit with a real price survey of the same items at three stores.

PREREQUISITES

- Knows what money is and how it replaced barter (Unit 2)
- Can explain scarcity and opportunity cost (Lesson 1.2)
- Can make a simple bar graph

MASTERY CHECKLIST

- ☐ I can explain supply and demand and read a simple supply-and-demand chart.
- ☐ I can explain how competition helps customers with better quality and lower prices.
- ☐ I can explain what a monopoly is and why one seller may charge more and serve customers less well.
- ☐ I can tell about the medieval fairs and guilds and name one good thing and one problem with guilds.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Toothpaste Millionaire**, by Jean Merrill (Houghton Mifflin Harcourt): A funny novel about a boy who makes an honest, cheap toothpaste and beats the high-priced brands. Read aloud during Lessons 3.2 and 3.3. Ages 8–12. Look for it at your library.
- **Federal Reserve Bank of St. Louis: Econ Lowdown**: Free elementary lessons on markets, prices and competition from a Federal Reserve bank. A parent may make a free teacher account to find them.

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: The Gold Rush Prices	2 sessions of 45 minutes
3.2	Competition: The Cereal Makers of Battle Creek	2 sessions of 45 minutes
3.3	One Store in Town: What Is a Monopoly?	2 sessions of 45 minutes
3.4	Medieval Fairs and Guilds	2 sessions of 45 minutes

UNIT 3 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**

What is a market? Name two kinds of markets.

2. **5 pts**

Why were shovels, boots and food so costly during the California gold rush?

3. **5 pts**

What happened to prices in California when merchants shipped in more goods? Why?

4. (5 pts)

In your cookie auction, 2 cookies sold for 9 and 7 beans. Then 8 cookies sold for an average of 3 beans. What was the average price in the first round? Why was it higher?

5. (5 pts)

Name three things a business can do to win customers from a competitor.

6. (5 pts)

Why did W. K. Kellogg print his signature on every box of corn flakes?

7. (5 pts)

What is a monopoly? Why might a monopoly charge high prices?

8. (5 pts)

What would happen if the only store in a small town raised its prices very high?

9. (5 pts)

How did the Counts of Champagne make their fairs safe and trustworthy for merchants?

10. (5 pts)

Name one good thing guilds did and one problem with guilds.

ANSWER KEY

1. Any place where buyers and sellers meet to trade. Examples: a farmers' market, a grocery store, a fair, an online store.
2. Many miners wanted them (high demand) but there were few stores and goods had to come from far away (low supply).
3. Prices came down, because the supply grew.
4. $(9 + 7) \div 2 = 8$ beans. It was higher because there were fewer cookies (low supply) for the same number of buyers.
5. Any three: lower its price, make a better product, give friendlier service, keep things fresh, make a trustworthy brand.
6. So customers could tell the real Kellogg's cereal from imitations made by competitors.
7. A market with only one seller. Customers have nowhere else to buy, so the seller does not have to keep prices low to win them.
8. Customers would buy less, use substitutes or travel to other towns, and another seller would likely open a store nearby to win the customers.
9. They promised safe passage on the roads and appointed fair keepers who checked weights and measures, settled quarrels and punished people who broke their promises.
10. Good: trained apprentices, set quality rules, helped members' families. Problem: kept out newcomers and limited competition, so prices stayed high.

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 tube of toothpaste. Find the price of the same size of each item at three different stores, by visiting with a parent or by reading store flyers or the stores’ websites together. Make a table with the items down the side and the stores across the top, circle the lowest price for each item, and add up the total for all five items at each store. Write a short paragraph explaining which store was cheapest overall, why you think prices were different, and what besides price (quality, distance, service) might make a family choose one store over another.

LOOK FOR	WHAT IT MEANS
Research	Five items are priced at three stores, using the same size or brand at each store, with the date and stores named.
Table and totals	The table is neat and labeled, the lowest prices are circled and the totals are added correctly.
Explanation	The paragraph uses the words competition, supply or demand to explain the price differences.
Good judgment	The student names at least one reason besides price for choosing a store.

GREAT BUSINESSES AND THEIR STAKEHOLDERS

What makes a business great? Not just being big or rich. In this unit you will learn to look at a business through the eyes of **six stakeholders**, the six groups of people who have something to gain or lose from it: the **financiers** who lend or invest the money, the **risk-takers** who start it and put their savings and good name on the line, the **builders** who design and make its products, the **workers** who earn wages there, the **customers** who buy from it, and the **community** around it. A business is great when it creates real value and serves all six for a long time.

You will try this out on four famous businesses: the Medici bankers of Florence, the Sears catalog that brought a whole store to farm families, Henry Ford's Model T, and the Cadbury brothers' chocolate factory and village of Bournville. Each did much good, and each fell short somewhere. You will learn to make a **stakeholder scorecard**, with a rating from 1 to 5 and a reason for each of the six, and finish by writing a stakeholder report on a business you choose.

PREREQUISITES

- Knows dividing the work, trade and competition (Units 1 and 3)
- Knows what a bank does (Lesson 2.3)
- Can add six numbers and divide by 6 with a calculator

MASTERY CHECKLIST

- ☐ I can name the six stakeholders of a business and give an example of each.
- ☐ I can tell the stories of the Medici Bank, Sears, Roebuck and Company, Ford's Model T and Cadbury's Bournville.
- ☐ I can make a stakeholder scorecard with a rating from 1 to 5 and a reason for each stakeholder.
- ☐ I can explain why a business may be big without being great.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Henry Ford museum: digital collections**: Free. Photographs of the Model T, Ford’s factories and early stores and catalogs. Search “Model T” for Lesson 4.3. Look with a parent.
- **Cadbury World (Bournville, England)**: The visitor center beside the Bournville factory, with the history of the Cadbury family and their village. Read the history pages together for Lesson 4.4.

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 Six Stakeholders and the Medici Bankers of Florence	2 sessions of 45 minutes
4.2 The Sears Catalog: A Store for Farm Families	2 sessions of 45 minutes
4.3 Henry Ford’s Model T: A Car for Everyone	2 sessions of 45 minutes
4.4 Cadbury’s Chocolate and the Village of Bournville	2 sessions of 45 minutes

UNIT 4 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**

Name the six stakeholders of a business.

2. **5 pts**

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

3. **5 pts**

How did a Medici letter of credit let a merchant pay someone in another city without carrying gold?

4. (5 pts)

Why did the Medici Bank fail?

5. (5 pts)

How did the Sears catalog help farm families? What did Sears promise to make them trust it?

6. (5 pts)

A Model T cost \$850 in 1908, and a worker earned about \$2 a day. How many days of work was that? In the mid-1920s it cost \$260 and a worker earned \$6 a day. About how many days then?

7. (5 pts)

Why did Henry Ford start the \$5 day? Give one good result.

8. (5 pts)

What would happen to a company that paid its owners well but cheated its customers?

9. (5 pts)

Name two ways the Cadbury brothers served their workers or their community.

10. (5 pts)

A stakeholder scorecard gives a business these ratings: 4, 5, 3, 4, 5, 3. What is the total? What is the average?

ANSWER KEY

1. Financiers, risk-takers, builders, workers, customers and the community.
2. A big business sells or earns a lot. A great business creates real value and serves all six stakeholders well for a long time.
3. He paid money to the Medici branch in his city and got a written letter. The person in the other city took the letter to the Medici branch there and was paid.
4. Later managers lent huge sums to kings and dukes who did not pay back, so branches lost their money and closed; in 1494 the whole bank fell.
5. Farm families far from stores could order thousands of goods by mail at fair prices and have them shipped by train. Sears promised “satisfaction guaranteed or your money back.”
6. $850 \div 2 = 425$ days. $260 \div 6 \approx 43$ days.
7. Many workers quit the fast, dull line. Doubling pay kept workers; they stayed, did better work and could buy Model T's themselves.
8. Customers would stop trusting it and stop buying, its good name would be lost, and in the end the owners would lose too. It would not be a great business.
9. Any two: good houses with gardens, parks and sports fields, schools and classes, half-day holidays, doctors, pensions, a village trust.
10. Total = 24. Average = $24 \div 6 = 4$.

PORTFOLIO PIECE: A STAKEHOLDER REPORT

Choose one business: your family's business, a store or farm in your town, or one of the businesses from this unit. Find out about it by visiting with a parent, asking the owner a few questions (with a parent present), or reading. Write a one-page report that tells how the business began and what problem it solves for its customers. Then make a stakeholder scorecard with a rating from 1 to 5 and a reason for each of the six stakeholders, find the average, and write one thing the business does very well and one thing it could do better. Add a drawing or photograph of the business.

LOOK FOR	WHAT IT MEANS
Research	The report uses real facts from a visit, an interview or reading, and names where they came from.
Story	The beginning of the business and the need it meets are clearly told.
Scorecard	All six stakeholders have a rating and an honest reason, and the average is correct.
Fairness and advice	The report shows strengths and weaknesses and gives kind, sensible advice.

4.1 THE SIX STAKEHOLDERS AND THE MEDICI BANKERS OF FLORENCE

OBJECTIVES

- Name the six stakeholders of a business and tell what each one puts in and hopes to get out.
- Tell how the Medici family built a great bank in Florence with branches and letters of credit, and why it failed.
- Make your first stakeholder scorecard.

Warm-up. Think of a store or business near your home: a bakery, a hardware store, a farm. If it closed tomorrow, who would be sad or lose something? Make a list of every kind of person you can think of.

WATCH

How did Medieval Banking Work? (Short Animated Documentary)

History Matters · 3:17

<https://www.youtube.com/watch?v=UE7nd36EpRU>

WHEN TO WATCH

After the story of the Medici, before the letters-of-credit project.

Note: A short, simple cartoon about how banks like the Medici Bank worked. Stop when the teaching ends.

BACKUP VIDEO

Who Were the Medici? A Nutshell History of Florence's Ruling Family

The Art of Being Human · 4:25

<https://www.youtube.com/watch?v=icuXh-9BkuE>

KEY TERMS

stakeholder

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

financier

A person or bank that lends or invests money in a business.

risk-taker

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

builder

An inventor, engineer, manager or craftsman who designs and makes the product or the way it is made.

branch

An office of a business in another city.

letter of credit

A written promise from a bank that a person will be paid a sum of money in another city.

CORE IDEAS

The story. In 1397 a banker named Giovanni de' Medici started a bank in Florence, a rich city in Italy famous for its wool cloth and its gold coin, the florin. His son Cosimo made it the greatest bank in Europe. The Medici Bank had **branches** in Rome, Venice, Geneva, Bruges, London and other cities. Its most important customer was the pope, the head of the church in Rome, and the bank helped collect and move church money from all over Europe.

How they figured it out. Carrying chests of gold coins over the Alps was slow and dangerous; robbers waited on the roads. So the Medici used **letters of credit** and bills of exchange. A wool merchant in London paid money to the Medici branch there and got a letter. He sent the letter to Florence, and his partner took it to the Medici bank in Florence and was paid in florins. Only paper and trust crossed the mountains. The branches kept careful books, so they could settle up with each other. Cosimo also gave each branch manager a share of the profits, so the managers had a good reason to work hard and be careful.

Think it through. After Cosimo died in 1464, the bank began to slip. Later managers lent huge sums to kings and dukes for their wars. The kings were powerful, but they often did not pay back. The London and Bruges branches lost so much that they closed, and in 1494 the whole bank fell. A bank is built on trust and careful lending, and the Medici forgot to be careful.

The big idea. Every business is a web of people. **Financiers** lend or invest money and hope to be paid back. **Risk-takers** start the business and put their savings and good name on the line. **Builders** design and make the product. **Workers** give their time and skill and hope for fair pay 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 serves all six for a long time.

Stakeholder scorecard: the Medici Bank. *Financiers:* 3. Rich profits for many years, then big losses at the end. *Risk-takers:* 4. The Medici family grew very rich and powerful, though the bank was lost. *Builders:* 4. Clever branches and careful bookkeeping. *Workers:* 3. Good training for clerks, but we know little about most of them. *Customers:* 4. Merchants could send money safely across Europe. *Community:* 4. Florence gained beautiful churches, art and one of the first public libraries, but the family also used its money to gain too much power over the city.

PICTURE STUDY



Cosimo de' Medici in the Procession of the Magi, Benozzo Gozzoli, 1459–1461 · Fresco (paint on wet plaster), detail · Magi Chapel, Palazzo Medici Riccardi, Florence

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

Cosimo de' Medici paid the painter Benozzo Gozzoli to cover the walls of the little chapel in the Medici family's palace with a painting of the Wise Men traveling to Bethlehem. Gozzoli painted members of the Medici family and their friends riding in the procession. The older man on the brown mule is Cosimo himself.

Look closely

- Find Cosimo. Is he riding a fine horse or a humble mule? Why might a rich banker choose to be painted on a mule?
- Look at the harness on the mule. What decorations can you see?
- Look at the people around him. How can you tell they are important?
- Find the young servant holding the reins. What job is he doing?

Talk about it

1. Which stakeholder was Cosimo: financier, risk-taker or builder? Could he be all three?
2. The Medici paid for beautiful art like this. Which stakeholder did that serve?

3. If you were a banker, what would you do differently from the later Medici managers?

PROJECT

My First Stakeholder Scorecard

You will learn the six stakeholders by sorting people into groups, send money with letters of credit between “branches” in your house, and then make an honest scorecard for a business you know.

You will need

- 14 index cards and a marker
- Play money and slips of paper for letters of credit
- Ledger notebook, pencil and colored pencils
- A parent to help you choose a local or family business

Steps

1. Write each stakeholder on its own card: Financiers, Risk-takers, Builders, Workers, Customers, Community.
2. On 8 more cards write: Cosimo de’ Medici, a London wool merchant, a bank clerk, a messenger on horseback, the pope, a painter paid to decorate a church, a king who borrowed money, the people of Florence. Sort each under the stakeholder it fits best. Some may fit two.
3. **Letters of credit.** Set up a “London” branch in one room and a “Florence” branch in another, each with \$20 in play money and a ledger: Received, Paid out, Balance. A merchant pays \$5 in London, gets a signed letter, and carries only the letter to Florence to be paid \$5. Record both sides. Do the books balance?
4. Choose a business you know: a family business, a store, a farm or a church bake sale.
5. In your ledger, draw a table with columns: Stakeholder, Who they are, Rating (1 to 5), Reason.
6. Fill in a row for each of the six. Ask a parent for facts you do not know. Use 5 for excellent and 1 for poor, and write a reason for every number.
7. Add up the six ratings and divide by 6 to find the average.

8. Write two sentences: Which stakeholder does this business serve best?
Which could it serve better?

Tips

- Be fair. If you do not know something, write “not sure” instead of guessing.
- One person can be more than one stakeholder. A shop owner is often both the risk-taker and a worker.

Check your work

- ☐ I can name the six stakeholders and give an example of each.
- ☐ My scorecard has a rating and a reason for each of the six.
- ☐ I can explain how a letter of credit moved money without moving coins.

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 hopes to get.
2. Draw a map of Europe with Florence in the middle and lines to the Medici branches: Rome, Venice, Geneva, Bruges and London.
3. Copy the Medici scorecard as a bar graph with six bars.

From history. Cosimo de' Medici paid for the rebuilding of the convent of San Marco in Florence. The monk Fra Angelico painted pictures of the life of Christ on the walls of the monks' small rooms there, and Cosimo gave the convent a library that scholars could use, one of the first public libraries in Europe in many centuries.

COMMON MISTAKES

- Thinking only the owners matter. A business that forgets its workers, customers or town will not stay great for long.
- Thinking a powerful borrower is a safe borrower. Kings and dukes often did not repay the Medici.
- Giving ratings without reasons. A scorecard is only as good as the facts behind it.

Make it a game • Six Stakeholders Quiz. Write the six stakeholders of a business on cards. Your parent names a role, such as the person who lends money, and you name the card and say what that stakeholder puts in and hopes to get out. Score one point per answer. Then tell how the Medici bank grew in Florence.

4.2 THE SEARS CATALOG: A STORE FOR FARM FAMILIES

OBJECTIVES

- Tell how Richard Sears and Alvah Roebuck built a giant mail-order business with a catalog.
- Explain how the catalog and the mail served customers who lived far from stores.
- Order from a pretend catalog with an order form, and make a stakeholder scorecard for Sears.

Warm-up. Imagine you live on a farm thirty miles from the nearest town, and the only way to get there is by horse and wagon. You need new shoes, a lamp and a hammer. How would you get them? How long would it take?

WATCH

The Sears Catalog: A Retail Revolution

Meghan Carter · 6:10

<https://www.youtube.com/watch?v=6bUbc32xxIU>

WHEN TO WATCH

After the story of Richard Sears, before the catalog project.

BACKUP VIDEO

Economic History: Miracle of the Mail Order Catalogue

Strange World of Econ · 6:48

https://www.youtube.com/watch?v=VNTN_LbEpW8

KEY TERMS

catalog

A book or list of goods for sale, with pictures, descriptions and prices.

mail order

Buying goods by sending an order through the mail and having them shipped to you.

guarantee

A promise that a product is good and that the seller will fix it or return your money if it is not.

middleman

A trader who buys from the maker and sells to the customer, adding to the price.

CORE IDEAS

The story. In 1886, a young man named Richard Sears was a railroad station agent in the little town of North Redwood, Minnesota. A box of pocket watches arrived for a local jeweler, who refused to take them. Sears bought the watches himself and sold them to other station agents up and down the railroad line, making a profit. Soon he started a watch company. He hired a watchmaker named Alvah Roebuck to repair the watches, and together they started Sears, Roebuck and Company in Chicago. Before long they were selling much more than watches.

How they figured it out. Most Americans then lived on farms, far from big stores. The small country store had few choices and high prices, because goods passed through many **middlemen**. Sears printed a thick **catalog** with pictures and prices of thousands of goods: shoes, stoves, sewing machines, plows, toys, even parlor organs. Farm families could order by **mail**, and the goods came by train. When the Post Office began delivering mail free to farms in 1896, more families could order easily. Because farmers could not see the goods before buying, Sears promised “satisfaction guaranteed or your money back.” This **guarantee** helped families trust a company they had never visited.

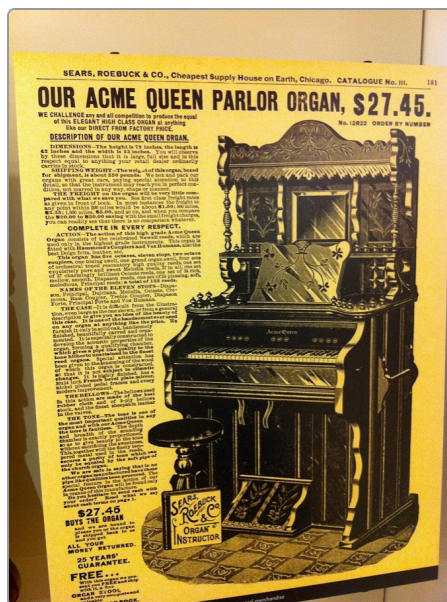
The big idea. Sears, Roebuck and Company served **customers** by bringing a big-city store to every farmhouse at fair prices. It served **workers** with thousands of jobs in its huge Chicago warehouse, where orders were filled by dividing the work. A partner named Julius Rosenwald helped run the business and later gave much of his fortune to help build nearly five thousand schools for children in the rural South who had no good schools. Sears also had faults: some early catalog ads promised more than the products could do, and the company had to learn to describe its goods more carefully.

Stakeholder scorecard: Sears, about 1910. *Financiers:* 5. Investors who bought shares were well rewarded. *Risk-takers:* 5. Sears and Roebuck started with little and built one of the largest stores in the world. *Builders:* 5. The Chicago warehouse filled thousands of orders a day with clever systems. *Workers:* 4. Many jobs and steady pay, though the

work was fast and strict. *Customers: 4.* Great choice, low prices and a money-back guarantee, though some early ads went too far. *Community: 4.* Goods reached faraway towns, and Rosenwald's gifts built schools; but some small-town stores lost customers.

In business today. When your family orders something online and it arrives in a box, you are using the idea Sears made famous: a catalog of goods, orders sent from far away, and delivery to your door. Online stores still offer guarantees and easy returns, because customers who cannot touch a product first need a reason to trust the seller.

PICTURE STUDY



A Page from the Sears, Roebuck and Company Catalog, Sears, Roebuck and Company, about 1902 · Printed catalog page (shown in a museum display) · Musical Instrument Museum, Phoenix, Arizona

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

This page comes from a Sears catalog of about 1902. A parlor organ was a musical instrument many families wanted for singing hymns and songs at home. A town music store might charge much more. Sears sold this one by mail for \$27.45 and shipped it by train.

Look closely

- Find the price. Write it in your ledger.
- Read the words at the very top of the page. What does Sears call itself?
- Find the words about money being returned and a guarantee. What does Sears promise?
- Look at the drawing. How did the catalog help a buyer imagine the organ in his home without seeing it?

Talk about it

1. Why would a farm family trust a company far away in Chicago?
2. How is this catalog page like a page in an online store today? How is it different?
3. Which stakeholders can you find on this page?

PROJECT

The Family Mail-Order Catalog

You will make a small catalog of goods from around your house, take orders on order forms, fill the orders like a warehouse, and keep a record of sales.

You will need

- Paper, a stapler and colored pencils
- 8 to 10 small household items to “sell” (borrowed and returned later)
- Play money
- Ledger notebook and a pencil

Steps

1. Choose 8 to 10 items. Give each an item number, a short honest description and a price. Draw each one on a catalog page.
2. Make an order form with lines for: customer name, item number, item, quantity, price, total.
3. Write your guarantee on the cover, for example: “Satisfaction guaranteed or your money back.”
4. Give your catalog to family members. Each fills out an order form and “mails” it to you with play money.
5. Fill each order: find the items, check the form, and “ship” them in a bag with a packing slip.
6. Keep a sales ledger: Date, Customer, Items, Total paid. Add up all your sales.
7. If a customer returns something, give back the money and record it. Then write two sentences: Why does a mail-order business need a guarantee? What was the hardest part of filling orders?

Tips

- Describe every item truthfully. If the pencil is short, say so!
- Check every order form twice. A wrong item shipped far away is costly to fix.

Check your work

- ☐ I made a catalog with item numbers, honest descriptions and prices.

- ☐ I filled orders correctly and kept a sales ledger.
- ☐ I can explain how Sears served farm families and make a scorecard for it.

LEDGER NOTEBOOK

1. Draw a farmhouse, a mailbox, a train and a big warehouse, with arrows showing an order going to Chicago and the goods coming back.
2. Copy one of your order forms and your sales ledger with totals.
3. Make your own six-row stakeholder scorecard for Sears, with ratings and reasons.

From history. From 1908 to 1940, Sears even sold whole houses by mail. A family chose a house from the catalog, and the railroad delivered thousands of numbered pieces of wood, nails, doors and windows, with instructions, so that the family and their neighbors could build it. Many of these houses are still standing.

COMMON MISTAKES

- Thinking the catalog was a small booklet. Sears catalogs often had many hundreds of pages and were nicknamed “the wish book.”
- Thinking mail order was only about low prices. Choice, trust and the guarantee mattered just as much.
- Forgetting the stakeholders who lost something. Some small-town stores lost customers to the catalog.

Make it a game • Catalog Order Race. Make a mini catalog with six items and prices from magazine cutouts or drawings. One player is a farm family far from town who writes an order. The other fills it, using a paper guarantee. Race to fill five orders correctly in three minutes. Explain how Sears and Roebuck served customers by mail.

4.3 HENRY FORD'S MODEL T: A CAR FOR EVERYONE

OBJECTIVES

- Tell how Henry Ford built the Model T and used a moving assembly line to make it cheaper.
- Explain how the \$5 day helped workers and the company.
- Calculate how many days of work a Model T cost, and make a stakeholder scorecard for Ford.

Warm-up. Ask a parent: how did people get to town before cars? Make a list of the ways people traveled long ago. Then guess: when cars were first made, who could afford to buy one?

WATCH

The Story of Henry Ford for Kids | American History Made Easy

Bedtime History • 8:10

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

WHEN TO WATCH

After the story of the Model T, before the days-of-work project.

Note: A gentle biography for children, made with photographs and stock film.

KEY TERMS

Model T

Henry Ford's simple, tough car, sold from 1908 to 1927.

mass production

Making very large numbers of the same product quickly and cheaply.

moving assembly line

A line that carries the product past workers, so each worker stays in one place and adds one part.

wage

Pay for work, usually by the hour or the day.

CORE IDEAS

The story. Henry Ford grew up on a farm near Detroit, Michigan, and loved fixing machines. In 1903, with money from a group of investors, he started the Ford Motor

Company. In those days most cars were costly toys for the rich. Ford wanted to build “a motor car for the great multitude,” a car ordinary farm and factory families could buy. In 1908 he brought out the **Model T**, a strong, simple car that could bump along muddy country roads and that owners could fix themselves. It cost \$850, cheaper than most cars but still more than many workers earned in a year.

How they figured it out. To lower the price, Ford and his engineers studied every step of building a car. They used parts made exactly alike, so any part fit any car. In 1913, at the Highland Park factory, they tried a **moving assembly line**: the car frame was pulled slowly along by a rope while each worker added one part as it passed, just like the pin factory Adam Smith described, but moving. The time to put together the main part of a car dropped from more than twelve hours to about an hour and a half. As Ford built cars faster, he lowered the price again and again, to about \$260 by the mid-1920s. More than 15 million Model T’s were built.

Think it through. The work on the line was fast and dull, and many workers quit. So in January 1914 Ford announced the **\$5 day**: he roughly doubled the usual pay and shortened the workday to eight hours. Thousands of men lined up for jobs. Workers stayed, did better work, and could afford to buy Model T’s themselves. But Ford also had faults: the work was tiring, the bosses were strict, and to get the full \$5 a worker’s home life was checked by company inspectors. Later Ford kept making the same Model T for too long, and other carmakers won his customers.

Stakeholder scorecard: Ford, about 1920. *Financiers*: 5. The first investors were paid back many times over. *Risk-takers*: 5. Ford’s bold ideas made him one of the richest men in the world. *Builders*: 5. The moving assembly line changed factories everywhere. *Workers*: 3. The \$5 day was a great step, but the work was hard and dull and the rules were strict. *Customers*: 5. A reliable car ordinary families could afford. *Community*: 4. Many jobs and a busy Detroit; cars changed towns and farms everywhere.

In business today. Factories still use assembly lines, now with robots as well as people, and companies still look for ways to make good things cheaper so more families can buy them. Good companies know that well-paid, well-trained workers make better products. Jesus said, “the labourer is worthy of his hire” (Luke 10:7).

PICTURE STUDY



A Family Drive in a Model T, Unknown photographer, about 1910–1915 · Photograph
Image: [Wikimedia Commons](#), public domain

Before the Model T, a car was something only rich people owned. Photographs like this one, of an ordinary family out for a drive on a country road, show how Ford's cheap, sturdy car changed daily life. Farmers could drive to town in an hour instead of half a day.

Look closely

- Count the people in the car. Who is driving?
- Look at the road. Is it paved? Why did a car for country families need to be tough?
- Find the headlamps, the big spoked wheels and the steering wheel.
- Look at the poles along the road. What do they carry? What else was new in this time?

Talk about it

1. Which stakeholder is this family?
2. How might a car change a farm family's life and work?
3. Why did lowering the price of the Model T help both Ford and his customers?

PROJECT

The Model T in Days of Work

You will figure out how many days a worker had to work to buy a Model T, and see how the assembly line and the \$5 day changed the answer.

You will need

- A calculator
- Ledger notebook, graph paper and colored pencils

Steps

1. **1908.** A Model T cost \$850. A factory worker earned about \$2 a day. Divide \$850 by \$2 to find how many days of work it took to earn a Model T.
2. **1914.** Ford's workers now earned \$5 a day, and the Model T cost about \$490. Divide to find how many days of work a car cost now.
3. **Mid-1920s.** A Model T cost about \$260 and Ford paid at least \$6 a day. How many days of work now? Round to the nearest day.
4. Make a table: Year, Price of a Model T, Pay per day, Days of work.
5. Make a bar graph of days of work for each year. Write one sentence explaining what made the bars shrink.
6. Make your own stakeholder scorecard for Ford with a rating and a reason for each of the six. You may disagree with the lesson's scorecard if you give reasons.
7. **Assembly-line check.** Ford cut the time to build the main part of a car from about 12 hours to about $1\frac{1}{2}$ hours. How many times faster is that? ($12 \div 1.5 = ?$)

Tips

- "Days of work" is a good way to compare prices from long ago, because pay and prices both change over the years.
- Use the calculator to divide, then round to the nearest whole day.

Check your work

- ☐ I calculated the days of work for a Model T in three different years.

- ☐ I can explain how the moving assembly line and the \$5 day helped workers and customers.
- ☐ I can name one way Ford fell short with his workers.

LEDGER NOTEBOOK

1. Draw a moving assembly line with five workers, and label the part each one adds to the car.
2. Copy your days-of-work table and bar graph.
3. Write a short diary entry from a Ford worker on the day the \$5 day was announced in January 1914.

From history. For years the Model T came only in black. Black paint dried fastest, which kept the assembly line moving. People nicknamed the Model T the “Tin Lizzie.”

COMMON MISTAKES

- Thinking Henry Ford invented the car. Others built cars first; Ford found a way to make them cheap enough for ordinary families.
- Thinking the \$5 day was only kindness. It was also a smart business choice that kept good workers.
- Thinking a lower price means a lower profit. Ford sold so many more cars that he earned more.

Make it a game • Model T Days of Work. Set a Model T price at 850 pretend dollars at first and later at 300. Use a worker's pay of 5 dollars a day to find how many days of work it takes to buy the car each time. Divide with pennies or beans. Explain the moving assembly line and what the five dollar day did for workers and the company.

Scripture. “for the labourer is worthy of his hire.” (Luke 10:7, KJV)

Jesus said these words when He sent out His disciples. Work deserves fair pay. Ford found that paying workers well was not only right; it also helped his business.

4.4 CADBURY'S CHOCOLATE AND THE VILLAGE OF BOURNVILLE

OBJECTIVES

- Tell how the Cadbury brothers made honest, pure cocoa and built a factory and village for their workers.
- Explain how a business can serve its workers and its community.
- Plan a “factory in a garden” and make a stakeholder scorecard for Cadbury.

Warm-up. Read the label on a chocolate bar or a box of cocoa. List the ingredients. Which ones come from a plant? Which might have been added later? Why would it matter to a customer what is really inside?

WATCH

How This Poor Boy Built the Cadbury Empire

YourFamilyTree • 8:32

<https://www.youtube.com/watch?v=6-CxJi9T83s>

WHEN TO WATCH

After the story of the Cadbury brothers, before the Bournville plan.

Note: A family-history channel's short documentary with old photographs of Bournville.

KEY TERMS

pure

Not mixed with cheaper or hidden things; exactly what the label says.

community

The town, neighbors and people around a business who are affected by it.

Quaker

A member of the Society of Friends, a Christian group known for plain living, honesty and fair dealing.

pension

Money paid to a worker after he or she is too old to work.

CORE IDEAS

The story. In 1824, John Cadbury opened a small shop in Birmingham, England, selling tea, coffee and drinking chocolate. The Cadburys were **Quakers**, Christians known for honesty and plain living. In 1861 his sons Richard and George took over the family chocolate business. It was losing money, and the brothers worked long days and spent their own savings to keep it alive. At that time many sellers mixed cheap things like flour and starch into cocoa and still called it cocoa.

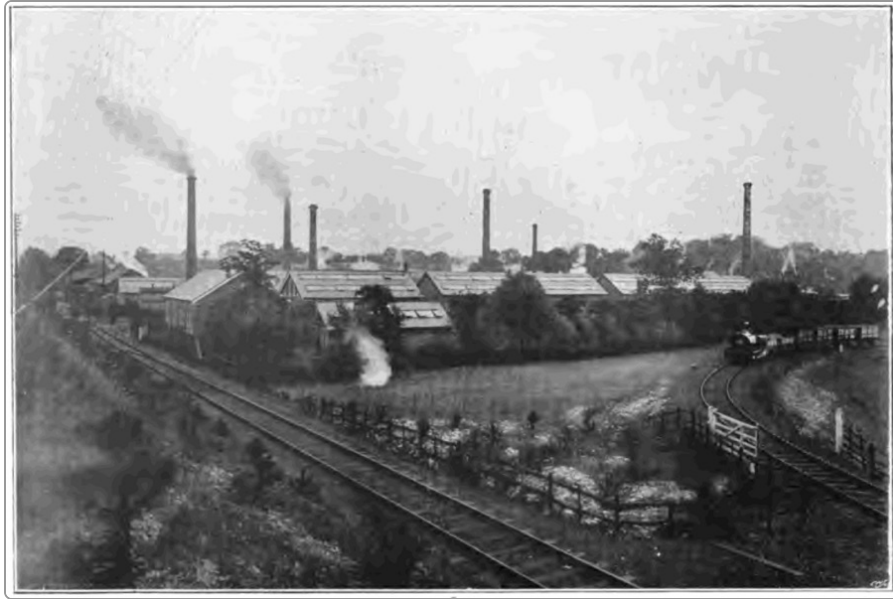
How they figured it out. In 1866 the brothers bought a new machine from Holland that pressed the fat out of cocoa beans, so they could make **pure** cocoa with nothing added. They sold it as “Absolutely Pure, Therefore Best.” Customers trusted it, and the business grew. In 1879 they moved the factory out of the crowded, smoky city to green fields in the countryside and called it Bournville, the “factory in a garden.” George Cadbury then built a village of good, roomy houses with gardens for workers and others, along with parks, sports fields, schools and a meeting house. The company gave workers half-day holidays, classes, doctors and later a **pension**.

The big idea. A business can serve its **community** as well as its customers. The Cadburys believed that their workers were people made by God, not just hands for the factory, and that a business should be honest in what it sells. Their pure cocoa served customers; their houses, parks and schools served workers and the town. But Bournville had rules too: the company made many choices about workers’ lives, and some workers would have liked more say in their own affairs.

Stakeholder scorecard: Cadbury, about 1910. *Financiers:* 4. The family firm grew steadily and was profitable. *Risk-takers:* 5. The brothers risked their own savings and saved the business. *Builders:* 5. New machines, pure products, and in 1905 the famous Dairy Milk bar. *Workers:* 5. Good homes, sports, schooling and pensions, though the company had many rules. *Customers:* 5. Honest, pure cocoa and chocolate. *Community:* 5. A beautiful village that still stands, run by a trust George Cadbury set up in 1900.

In business today. The Bournville factory still makes chocolate, and the village is still a pleasant place to live. Many companies today care for their workers with training, health care and retirement plans, and many give to their towns. The prophet Jeremiah told God’s people to “seek the peace of the city” where they lived (Jeremiah 29:7). A good business seeks the good of its town.

PICTURE STUDY



Bournville: The Factory in a Garden, Unknown photographer, from *The Food of the Gods* by Brandon Head, about 1903 · Photograph printed in a book · Bournville, near Birmingham, England
Image: [Wikimedia Commons](#), public domain

This photograph of the Cadbury works at Bournville was printed in a book about cocoa in the early 1900s. The Cadburys chose this place in the countryside so their workers could have fresh air and green fields, and so the railway could carry in cocoa beans and carry out chocolate.

Look closely

- Count the smokestacks. What do you think they were used for?
- Find the trees and fields around the factory. Why was it called a “factory in a garden”?
- Find the railway and the little train. What might it be carrying in and out?
- Compare this with a picture of a crowded city factory you have seen. What is different?

Talk about it

1. Why would workers want to work in a factory like this one?
2. How did the railway help the Cadburys’ business?
3. Which of the six stakeholders did Bournville serve best?

PROJECT

Plan a Factory in a Garden

You will plan your own “factory in a garden” for a pretend business, decide what it will give its workers and town, and work out a simple budget for it.

You will need

- Large paper or graph paper and colored pencils
- 50 dried beans (each bean stands for \$1,000)
- Ledger notebook and a pencil

Steps

1. Choose a product your factory will make (bread, shoes, bicycles, chocolate).
2. Draw a map of your factory and village on graph paper. Include the factory, a way to bring in materials and ship out goods (a road or railway), and at least four things for workers and the town: houses, a park, a school, a playing field, a clinic or a church.
3. Your company earned \$50,000 this year. Use the 50 beans to divide it: new machines, workers’ pay raises, houses and parks, the owners’ share, and savings for hard times.
4. Record your choices in a table: Use, Beans, Dollars, Why.
5. Make a bar graph of how you divided the money.
6. Write a six-row stakeholder scorecard for your own pretend factory. Which stakeholder did you serve best? Did you leave anyone out?
7. Write two sentences comparing your plan with Bournville.

Tips

- Remember the owners and financiers too. A company that spends everything on parks and nothing on machines may not earn a profit next year.
- There is no single right answer, but you should be able to explain every choice.

Check your work

- ☐ I drew a factory-and-village plan with at least four things for workers and the town.
- ☐ I divided the profit and recorded my reasons.
- ☐ I can explain how Cadbury served its workers, customers and community.

LEDGER NOTEBOOK

1. Draw a cocoa pod, a cocoa bean, a press and a cup of cocoa, and label each step from tree to cup.
2. Make a timeline: 1824 John Cadbury's shop; 1861 Richard and George take over; 1866 pure cocoa; 1879 Bournville factory; 1900 the village trust; 1905 Dairy Milk.
3. Copy your stakeholder scorecard for Cadbury and circle the highest score.

From history. George Cadbury taught a Bible class for working men early on Sunday mornings for about fifty years, even while he ran a large company. He believed that a businessman's faith should shape the way he treated every person he worked with.

COMMON MISTAKES

- Thinking a business that cares for workers cannot also make a profit. The Cadburys did both.
- Thinking honesty in business is only about money. The Cadburys were honest about what was inside their product.
- Thinking a company town is all good or all bad. It gave good homes and parks, but the company also had great power over people's lives.

Make it a game • Bournville Village Plan. Draw a small village around a factory with fifteen things a good business might give its workers: homes, gardens, a school, and fair pay. Pick your best five in sixty seconds. Your parent asks why for each. Tell how the Cadbury brothers made pure cocoa and built Bournville.

Scripture. "And seek the peace of the city whither I have caused you to be carried away captives, and pray unto the LORD for it: for in the peace thereof shall ye have peace." (Jeremiah 29:7, KJV)

God told His people in Babylon to work and pray for the good of the city where they lived. The Cadburys sought the good of their workers' town, and their business did well too.

GREAT BUSINESSES AND THEIR STAKEHOLDERS

What makes a business great? Not just being big or rich. In this unit you will learn to look at a business through the eyes of **six stakeholders**, the six groups of people who have something to gain or lose from it: the **financiers** who lend or invest the money, the **risk-takers** who start it and put their savings and good name on the line, the **builders** who design and make its products, the **workers** who earn wages there, the **customers** who buy from it, and the **community** around it. A business is great when it creates real value and serves all six for a long time.

You will try this out on four famous businesses: the Medici bankers of Florence, the Sears catalog that brought a whole store to farm families, Henry Ford's Model T, and the Cadbury brothers' chocolate factory and village of Bournville. Each did much good, and each fell short somewhere. You will learn to make a **stakeholder scorecard**, with a rating from 1 to 5 and a reason for each of the six, and finish by writing a stakeholder report on a business you choose.

PREREQUISITES

- Knows dividing the work, trade and competition (Units 1 and 3)
- Knows what a bank does (Lesson 2.3)
- Can add six numbers and divide by 6 with a calculator

MASTERY CHECKLIST

- ☐ I can name the six stakeholders of a business and give an example of each.
- ☐ I can tell the stories of the Medici Bank, Sears, Roebuck and Company, Ford's Model T and Cadbury's Bournville.
- ☐ I can make a stakeholder scorecard with a rating from 1 to 5 and a reason for each stakeholder.
- ☐ I can explain why a business may be big without being great.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Henry Ford museum: digital collections**: Free. Photographs of the Model T, Ford's factories and early stores and catalogs. Search "Model T" for Lesson 4.3. Look with a parent.
- **Cadbury World (Bournville, England)**: The visitor center beside the Bournville factory, with the history of the Cadbury family and their village. Read the history pages together for Lesson 4.4.

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 Six Stakeholders and the Medici Bankers of Florence	2 sessions of 45 minutes
4.2 The Sears Catalog: A Store for Farm Families	2 sessions of 45 minutes
4.3 Henry Ford's Model T: A Car for Everyone	2 sessions of 45 minutes
4.4 Cadbury's Chocolate and the Village of Bournville	2 sessions of 45 minutes

UNIT 4 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**
Name the six stakeholders of a business.
2. **5 pts**
What is the difference between a big business and a great business?
3. **5 pts**
How did a Medici letter of credit let a merchant pay someone in another city without carrying gold?

4. (5 pts)

Why did the Medici Bank fail?

5. (5 pts)

How did the Sears catalog help farm families? What did Sears promise to make them trust it?

6. (5 pts)

A Model T cost \$850 in 1908, and a worker earned about \$2 a day. How many days of work was that? In the mid-1920s it cost \$260 and a worker earned \$6 a day. About how many days then?

7. (5 pts)

Why did Henry Ford start the \$5 day? Give one good result.

8. (5 pts)

What would happen to a company that paid its owners well but cheated its customers?

9. (5 pts)

Name two ways the Cadbury brothers served their workers or their community.

10. (5 pts)

A stakeholder scorecard gives a business these ratings: 4, 5, 3, 4, 5, 3. What is the total? What is the average?

ANSWER KEY

1. Financiers, risk-takers, builders, workers, customers and the community.
2. A big business sells or earns a lot. A great business creates real value and serves all six stakeholders well for a long time.
3. He paid money to the Medici branch in his city and got a written letter. The person in the other city took the letter to the Medici branch there and was paid.
4. Later managers lent huge sums to kings and dukes who did not pay back, so branches lost their money and closed; in 1494 the whole bank fell.
5. Farm families far from stores could order thousands of goods by mail at fair prices and have them shipped by train. Sears promised “satisfaction guaranteed or your money back.”
6. $850 \div 2 = 425$ days. $260 \div 6 \approx 43$ days.
7. Many workers quit the fast, dull line. Doubling pay kept workers; they stayed, did better work and could buy Model T's themselves.
8. Customers would stop trusting it and stop buying, its good name would be lost, and in the end the owners would lose too. It would not be a great business.
9. Any two: good houses with gardens, parks and sports fields, schools and classes, half-day holidays, doctors, pensions, a village trust.
10. Total = 24. Average = $24 \div 6 = 4$.

PORTFOLIO PIECE: A STAKEHOLDER REPORT

Choose one business: your family’s business, a store or farm in your town, or one of the businesses from this unit. Find out about it by visiting with a parent, asking the owner a few questions (with a parent present), or reading. Write a one-page report that tells how the business began and what problem it solves for its customers. Then make a stakeholder scorecard with a rating from 1 to 5 and a reason for each of the six stakeholders, find the average, and write one thing the business does very well and one thing it could do better. Add a drawing or photograph of the business.

LOOK FOR	WHAT IT MEANS
Research	The report uses real facts from a visit, an interview or reading, and names where they came from.
Story	The beginning of the business and the need it meets are clearly told.
Scorecard	All six stakeholders have a rating and an honest reason, and the average is correct.
Fairness and advice	The report shows strengths and weaknesses and gives kind, sensible advice.

UNIT 5

WORKERS, OWNERS AND FAIR RULES

Every business needs two kinds of people: **owners**, who bring money, tools and buildings and take the risk, and **workers**, who bring their time, skill and hard work. They need each other. In this unit you will see how J. C. Penney shared his stores with his best workers, how Lord Shaftesbury helped pass laws that took little children out of long days in the mills, how the photographer Lewis Hine helped Americans see why children belong in school, and how the U.S. Mint was set up in 1792 to make honest coins.

You will learn that good rules work like a fair referee in a game: they keep the game honest and safe for everyone, and they keep any one side from bullying the other, while still letting people work, trade and build freely. You will also see an example of a rule that went wrong. In your ledger you will figure fair pay, write a timeline, sort mint marks and test a kitchen scale for honesty.

PREREQUISITES

- Knows the six stakeholders (Unit 4)
- Knows what a coin's stamp promises (Lesson 2.2)
- Can multiply small numbers

MASTERY CHECKLIST

- ☐ I can explain how owners and workers need each other, and what each one brings.
- ☐ I can tell how Lord Shaftesbury and the Factory Acts helped children in the mills.
- ☐ I can tell how Lewis Hine's photographs helped end most child labor in America.
- ☐ I can explain why honest coins and honest scales matter, and why good rules are like a fair referee.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **U.S. Mint for Kids:** Free, at usmint.gov. Coin facts, games and the story of the Mint from the United States Mint. Use with Lesson 5.4. Ages 6–12.
- **Library of Congress: National Child Labor Committee Collection (Lewis Hine):** Free. Search the Library of Congress site for “National Child Labor Committee” to find thousands of Lewis Hine’s photographs with his own notes. A parent should choose the pictures to look at together for Lesson 5.3, since some show hard scenes.

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	Owners and Workers Need Each Other	2 sessions of 45 minutes
5.2	Lord Shaftesbury and the Factory Acts	2 sessions of 45 minutes
5.3	Lewis Hine: Children Belong in School	2 sessions of 45 minutes
5.4	Honest Coins and the U.S. Mint	2 sessions of 45 minutes

UNIT 5 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. 5 pts

What does an owner bring to a business? What does a worker bring?

2. 5 pts

In the parable of the vineyard, why was the first worker not cheated?

3. 5 pts

How did J. C. Penney’s partnership plan help his workers and his business?

4. 5 pts

You agree to work for 10 cents for every 10 minutes. You work 60 minutes. How much should you be paid?

5. 5 pts

What did the Factory Act of 1833 do for children in British mills?

6. 5 pts

Why did the Factory Act need inspectors?

7. 5 pts

How did Lewis Hine help end most child labor in America?

8. 5 pts

Why did Congress set up the U.S. Mint in 1792?

9. 5 pts

A store scale says 3 pounds when you put on exactly 2 pounds of apples. If apples cost \$2 a pound, how much extra is the customer charged?

10. 5 pts

What happened when Emperor Diocletian made a law setting the highest prices for goods? What does this teach about rules?

ANSWER KEY

1. Owner: capital (money, tools, buildings) and the risk. Worker: labor (time, skill, effort).
2. He agreed to work for a penny a day and was paid exactly a penny, on time. The owner kept the contract and was free to be generous to others.
3. Managers who trained new managers could buy a one-third share in a new store, so the best workers became part-owners, shared the profit, worked hard, and the stores spread.
4. $60 \div 10 = 6$ groups; $6 \times 10\text{¢} = 60\text{¢}$.
5. No children under nine in the cotton and wool mills; children nine to thirteen could work no more than nine hours a day and had to get some schooling; inspectors checked the mills.
6. Without someone checking, some owners might break the rules. Inspectors made sure every mill followed the same law.
7. He photographed working children across the country and wrote honest captions with facts; his pictures showed people the truth and helped pass laws, ending with the Fair Labor Standards Act of 1938.
8. To give the new country its own honest coins of a set weight and purity, so people could trust what their money was worth.
9. The scale adds 1 pound, so the customer pays \$6 instead of \$4: \$2 extra.
10. Many sellers stopped bringing goods to market and food grew scarce, so the law was ignored. Rules that fight supply and demand can make things worse; good rules, like honest weights, help markets work.

PORTFOLIO PIECE: FAIR RULES POSTER AND REPORT

Make a poster titled “Good Rules Are a Fair Referee.” In the middle, draw a referee. Around it, show four fair rules from this unit: a fair contract and wages paid on time, the Factory Act, the end of most child labor, and honest coins and scales. For each one, draw a small picture and write two sentences: what problem it fixed, and who it helped. In one corner, show Diocletian’s price law as a rule that went wrong. Attach your contract and time sheet from Lesson 5.1 and your honest-scale table from Lesson 5.4.

LOOK FOR	WHAT IT MEANS
Content	Four good rules and one rule that went wrong are shown, each with the problem and who it helped or hurt.
Accuracy	Names, dates and facts (1792, 1833, 1938, Lord Shaftesbury, Lewis Hine) are correct.
Records	The contract, time sheet and honest-scale table are attached and correct.
Presentation	The poster is neat and the student can explain it aloud to the family.

5.1 OWNERS AND WORKERS NEED EACH OTHER

OBJECTIVES

- Explain what owners bring to a business (money, tools, risk) and what workers bring (time, skill, effort).
- Tell the parable of the workers in the vineyard and how J. C. Penney shared ownership with his store managers.
- Work out fair pay for a job and keep an honest record of hours worked.

Warm-up. Think about a lemonade stand. Make two lists: what you need to buy or own before you start (a pitcher, cups, a table, lemons) and what work must be done (squeezing, pouring, selling, cleaning up). Could you run the stand with only the first list? With only the second?

WATCH

[Human, Capital & Natural Resources for Kids | Types of Resources | Kids Academy](#)

[Kids Academy](#) • 4:05

<https://www.youtube.com/watch?v=b8uJQP08yq0>

WHEN TO WATCH

Before the story; it shows the kinds of resources a business needs.

BACKUP VIDEO

[Natural, Human and Capital resources economics for kids](#)

[Theteacherlab](#) • 2:11

<https://www.youtube.com/watch?v=zEcw8rgNrVs>

KEY TERMS

owner

The person who owns a business, puts in money and tools, takes the risk and keeps the profit or the loss.

worker

A person who works for a business in return for wages.

capital

The money, tools, machines and buildings used to make goods and services.

labor

The work people do with their hands and minds.

contract

A promise or agreement, spoken or written, about what each side will do.

partner

One of two or more people who own a business together and share its profit.

CORE IDEAS

The story. Jesus told a parable about a man who owned a vineyard. Early in the morning he went out and hired workers, and “he had agreed with the labourers for a penny a day.” Later he hired more workers, some of them only an hour before evening. When it was time to pay, he gave every worker a penny, the full day’s pay. The workers who came first grumbled, but the owner answered that he had paid them exactly what they agreed to (Matthew 20:1-15). The owner kept his word and paid on time, and he was free to be generous with his own money.

How they figured it out. In 1902, a young man named James Cash Penney opened a small dry-goods store in the mining town of Kemmerer, Wyoming. He named it the Golden Rule store, after Jesus’ words, “whatsoever ye would that men should do to you, do ye even so to them” (Matthew 7:12). Penney worked long hours, sold at fair prices and treated miners’ families honestly, and the store did well. He wanted to open more stores, but he could not be in every town at once. So he made a plan: when one of his store managers trained a new manager, that manager could become a **partner** and buy a one-third share in a new store. Now his best workers were also part-owners. They worked hard because they shared in the profit, and the J. C. Penney stores spread across the country.

The big idea. Every business needs **capital**, the money, tools and buildings, and **labor**, the work of people. Owners bring capital and take the risk: if the business fails, they lose their money. Workers bring their time, skill and effort and receive wages, whether the business makes a profit that week or not. Each needs the other. A fair **contract** says what each side will do. A good owner pays fair wages on time, keeps workers safe and treats them with respect. A good worker shows up, works carefully and honestly, and keeps his word.

In business today. Many companies still share ownership with their workers, so that workers gain when the company does well. And the Bible's rule still holds for every owner: "Masters, give unto your servants that which is just and equal; knowing that ye also have a Master in heaven" (Colossians 4:1).

PICTURE STUDY



Reapers, George Stubbs, 1785 · Oil on panel · Tate Britain, London

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

George Stubbs, the English painter famous for his horses, painted this harvest scene in 1785. The workers are reaping wheat with sickles and tying it into sheaves. The man on the horse is the farmer or his steward, who owns or manages the field and has come to see how the work is going.

Look closely

- Count the workers. What is each one doing?
- Find the man on the horse. How is he different from the workers? What might he be thinking?
- Find the sheaves of wheat. Which workers made them?
- Look at the faces and the way the people stand. Does the work look calm or rushed? Friendly or harsh?

Talk about it

1. What did the owner bring to this harvest? What did the workers bring?
2. What would happen to the wheat if the owner had no workers? What would happen to the workers if there were no field?
3. If you were the owner, how would you make sure your workers were treated fairly?

PROJECT

The Fair Pay Ledger

You will agree on a fair contract for a real job at home, keep a time sheet, and figure out the pay, like an honest owner and an honest worker.

You will need

- A real household job that takes several days (weeding, sorting the garage, washing the car, helping with laundry)
- A clock or timer
- Play money or real coins (if your parents choose)
- Ledger notebook and a pencil

Steps

1. With a parent, choose a job. The parent is the owner, and you are the worker.
2. Write a short contract in your ledger: the job, what “done well” means, the pay (for example, 10 cents for each 10 minutes), and when the pay will be given. Both of you sign it.
3. Make a time sheet: Date, Start time, Stop time, Minutes worked, Work done.
4. Do the job over several days. Fill in your time sheet honestly every day.
5. Add up the minutes. Figure your pay: how many groups of 10 minutes did you work? Multiply by the pay for each group.
6. The owner checks the work against the contract and pays on the agreed day. Record the payment.
7. Write two sentences: How did the contract help both of you? What would happen if the owner did not pay, or if the worker did sloppy work?

Tips

- An honest worker writes down only the minutes he really worked, even if no one is watching.
- An honest owner pays exactly what was promised, on time. “The wages of him that is hired shall not abide with thee all night until the morning” (Leviticus 19:13).

Check your work

- ☐ I wrote and signed a contract with clear terms.
- ☐ My time sheet is honest and my pay is figured correctly.
- ☐ I can explain what owners bring and what workers bring to a business.

LEDGER NOTEBOOK

1. Draw a balance scale. On one side write what owners bring (capital, risk); on the other, what workers bring (labor, skill, time). Write “Both are needed” under it.
2. Copy your contract and time sheet neatly.
3. Draw a J. C. Penney Golden Rule store and write the Golden Rule on its sign.

From history. J. C. Penney grew up in Missouri, the son of a Baptist preacher. When he was eight years old, his father told him he must start earning money for his own clothes, so he saved, raised pigs and sold watermelons. Years later, he named his first stores after the Golden Rule.

COMMON MISTAKES

- Thinking owners and workers are enemies. They need each other, and a good business serves both.
- Thinking a worker in the vineyard was cheated. He was paid exactly what he agreed to; the owner was simply generous to others.
- Thinking owners always grow rich. Owners take the risk, and many businesses lose money or fail.

Make it a game • Owner and Worker Roles. Run a pretend cookie company with a play dough batch. One of you is the owner, who brings money, tools and risk. The other is the worker, who brings time and effort. Agree on fair pay in chips first, then divide the work. Switch roles and say what each needs from the other.

Scripture. “Masters, give unto your servants that which is just and equal; knowing that ye also have a Master in heaven.” (Colossians 4:1, KJV)

Paul reminded owners and masters that they will answer to God for how they treat the people who work for them. Fair pay and honest dealing are part of serving Him.

5.2 LORD SHAFTESBURY AND THE FACTORY ACTS

OBJECTIVES

- Tell how children worked long hours in British mills in the early 1800s and why that was harmful.
- Tell how Lord Shaftesbury, a Christian member of Parliament, worked for the Factory Acts.
- Explain how a good law can act like a fair referee, and make a timeline of the reforms.

Warm-up. How many hours do you spend in school and schoolwork each day? How many hours do you sleep? Add them up. Now imagine working twelve hours a day in a noisy mill instead of going to school. How many hours would be left for sleep, play, family and learning?

WATCH

Lord Shaftesbury - Everyone A Child Should Know

10ofthose • 2:38

<https://www.youtube.com/watch?v=BOdceccw8ls>

WHEN TO WATCH

After the story of Lord Shaftesbury, before the day-in-the-mill charts.

Note: A Christian publisher's reading from a children's biography of Shaftesbury.

BACKUP VIDEO

History Hook: The Factory Act

The National Archives UK • 9:57

<https://www.youtube.com/watch?v=dDAwRL5x5BE>

Optional, for an older sibling or a second look: a real 1833 factory record.

KEY TERMS

mill

A factory with machines, often for spinning thread or weaving cloth.

Parliament

The group of lawmakers who make the laws of Great Britain.

reform

A change that makes something better or fairer.

inspector

A person whose job is to check that rules are being followed.

law

A rule made by a government that everyone must follow.

CORE IDEAS

The story. In the early 1800s, new cotton mills in England spun thread with great water- and steam-powered machines. Mill owners hired many children, some only six or seven years old, because they were small, quick and could be paid little. Children often worked twelve hours a day or more, six days a week, in hot, noisy rooms full of cotton dust. Many grew up tired, sick and unable to read. Poor families needed the children's wages, and many owners said they could not run their mills without them.

How they figured it out. Anthony Ashley Cooper, known as Lord Ashley and later as the Earl of Shaftesbury, was a member of **Parliament** and a devout Christian. He believed every child was made in God's image and deserved care. He visited mills, listened to workers and doctors, and spoke for the children in Parliament year after year. In 1833 Parliament passed a Factory Act for the cotton and wool mills: no children under nine could work in them, children aged nine to thirteen could work no more than nine hours a day, and they had to receive some schooling every day. The law also hired **inspectors** to visit the mills and make sure the rules were kept. In 1847 another law, the Ten Hours Act, limited the workday of women and young people in the mills to ten hours.

The big idea. A good **law** can work like a fair referee. One mill owner alone might have feared that if he stopped hiring children, his rivals would make cloth more cheaply and win his customers. When the law set the same rule for every mill, no owner had to choose between being kind and staying in business. The reforms had a cost: some families lost a child's wages, and owners had to change how they worked. But over time, machines got better, adults earned more, and children went to school instead.

In business today. Laws in most countries keep young children out of factories and limit how many hours teenagers may work, so that school comes first. Shaftesbury also helped start Ragged Schools, free schools for the poorest children of London. He is remembered as a man who used his position to “defend the poor and fatherless” (Psalm 82:3).

PICTURE STUDY



Anthony Ashley Cooper, 7th Earl of Shaftesbury, George Frederic Watts, about 1862 · Oil on canvas ·
National Portrait Gallery, London
Image: [Wikimedia Commons](#), public domain

George Frederic Watts painted many portraits of the most important people of his day. This is Lord Shaftesbury, who spent more than fifty years in Parliament working to make life better for children in mills and mines, for poor children in London and for people who had no one to speak for them.

Look closely

- Look at his face and eyes. What kind of person do you think he was?
- Look at his clothes. Are they showy or plain?
- Notice the dark background. Why might the painter want us to look only at his face?

Talk about it

1. Lord Shaftesbury was a rich nobleman. Why do you think he cared so much about poor children in the mills?
2. Which stakeholders did the Factory Acts help? Did anyone lose something?
3. Why do you think it took many years to pass these laws?

PROJECT

A Day in the Mill: Hours and Timelines

You will compare a mill child's day before and after the Factory Act with your own day, make a chart of the hours, and make a timeline of the reforms.

You will need

- Ledger notebook and colored pencils
- A ruler
- A long strip of paper for a timeline

Steps

1. Draw three long bars, each 24 squares long, one square for each hour of the day.
2. **Bar 1: a mill child before 1833.** Color 12 squares for work, 1 for walking to and from the mill, 9 for sleep, and the rest for eating and family.
3. **Bar 2: a mill child aged 9–13 after the 1833 Act.** Color 9 squares for work, 2 for school, 1 for walking, 9 for sleep, and the rest for eating, play and family.
4. **Bar 3: your own day.** Color your school, sleep, play, chores and family time.
5. Count and write the hours for each color on each bar. Which bar has the most time for learning and play?
6. Make a timeline: 1801 Lord Ashley is born; 1833 the Factory Act; 1842 the Mines Act takes women and young children out of the coal mines; 1844 Ragged School Union; 1847 the Ten Hours Act; 1885 Shaftesbury dies.
7. Write two sentences: How did the Factory Act work like a referee? Why did it need inspectors?

Tips

- Use a different color for each activity and make a key.
- Keep in mind that the 1833 Act was a first step. Later laws went further.

Check your work

- ☐ I made three day-charts and counted the hours in each.
- ☐ I can tell what the 1833 Factory Act did.

- I can explain why a law can help when every business follows the same rule.

LEDGER NOTEBOOK

1. Draw a referee between two teams. Label one team “Owners” and the other “Workers,” and write on the referee’s shirt “Fair rules.”
2. Copy your day-charts with a color key.
3. Write a short letter Lord Shaftesbury might have written to a mill owner, asking him to send the youngest children to school.

From history. When Lord Shaftesbury died in 1885, crowds of working people lined the streets of London for his funeral. Many of the poor people he had helped came to honor him.

COMMON MISTAKES

- Thinking all factory owners were cruel. Some cared for their workers; the law made the same rules for everyone.
- Thinking the Factory Act ended all child work at once. It was a first step; later laws went further.
- Thinking a rule without inspectors works. A rule must be checked, or some will break it.

Make it a game • Mill Day Timeline. Make a timeline on paper from five in the morning to eight at night. Mark when a child in an early British mill worked, when he ate and when he had any free time. Then mark a modern school day. Compare the lengths. Explain what Lord Shaftesbury and the Factory Acts did.

Scripture. “Defend the poor and fatherless: do justice to the afflicted and needy.” (Psalm 82:3, KJV)

Lord Shaftesbury read his Bible every day. He believed God calls the strong to protect the weak, and he spent his life speaking for children who could not speak for themselves.

5.3 LEWIS HINE: CHILDREN BELONG IN SCHOOL

OBJECTIVES

- Tell how Lewis Hine used his camera to show Americans that many children were working instead of going to school.
- Explain how his photographs led to new laws, and how the Fair Labor Standards Act of 1938 ended most child labor.
- Study a photograph carefully and write a caption with facts, as Hine did.

Warm-up. Look at a family photograph. Write three facts you can learn from it without anyone telling you: where it was taken, what season it was, what people were doing. A photograph can tell a true story.

WATCH

Child Labor Reform in the Progressive Era

[NBC News Learn](#) • 2:32

<https://www.youtube.com/watch?v=5vjdvDsEw0I>

WHEN TO WATCH

After the story of Lewis Hine, before the caption project.

Note: Shows real historic photographs of working children; a parent should watch first and sit with a sensitive child.

BACKUP VIDEO

Lewis Hine: Taking a Stand Against Child Labor

[noraweb](#) • 9:33

<https://www.youtube.com/watch?v=JqEBO3Fimek>

KEY TERMS

child labor

Children working long hours in jobs that keep them from school or harm their health.

photograph

A picture made with a camera, which records what was really in front of it.

caption

Words under a picture that tell who, what, where and when.

evidence

Facts that show something is true.

CORE IDEAS

The story. Lewis Hine was a schoolteacher in New York City who loved photography. In the early 1900s, nearly two million American children under sixteen worked in mills, mines, canneries, fields and city streets. Many never went to school. In 1908 Hine left teaching to take pictures for a group called the National Child Labor Committee, which was trying to change the laws. For about ten years he traveled across the country with his heavy camera.

How they figured it out. Some mill owners did not want visitors to see children at work. So Hine sometimes said he was a salesman or had come to photograph the machines. He measured how tall children were by comparing them with the buttons on his coat, and he wrote down their names, ages and hours in a notebook hidden in his pocket. Then he wrote careful **captions** for each photograph. His pictures and notes were printed in magazines, shown in lectures and given to lawmakers. People who had never been inside a mill could now see the children's faces for themselves. A **photograph** with honest facts was strong **evidence**.

The big idea. State after state passed laws requiring children to go to school and limiting the work they could do. In 1938 a national law, the Fair Labor Standards Act, ended most **child labor** in factories and mines across the country. The same law set a minimum hourly pay and a 40-hour work week, with extra pay for overtime. Telling the truth clearly and kindly helped the whole country do what was right.

In business today. Today children may do some kinds of work, such as delivering newspapers, helping on the family farm, babysitting or running a small business with their parents, but laws protect them from long hours, dangerous work and missing school. Good businesses check that the goods they buy were not made by children who should be in school.

PICTURE STUDY



Self-Portrait with Newsboy, Lewis Hine, 1908 · Photograph (gelatin silver print) · J. Paul Getty Museum, Los Angeles

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

Lewis Hine took this photograph of a young newsboy selling papers on a city street. Look carefully at the bottom of the picture: Hine's own shadow and the shadow of his camera on its tall legs are in the photograph too. That is why it is called a self-portrait. Newsboys like this one often sold papers early in the morning and late at night, many of them instead of going to school.

Look closely

- Find the newsboy. How old do you think he is? How tall is he compared with the grown-ups behind him?
- Find the shadows at the bottom. Which one is Lewis Hine? Which is his camera?
- Read the signs on the buildings. What kinds of businesses are on this street?
- Look at the time of day from the shadows. Is it morning, noon or evening?

Talk about it

1. Why do you think Hine included his own shadow in this picture?
2. If you were writing Hine's caption, what facts would you want to find out about this boy?

3. How could a photograph like this change what people thought about children working?

PROJECT

Write It Like Hine: Captions and Evidence

You will act as a careful reporter, as Lewis Hine did: photograph or draw three people at work in your own home or town (with permission), and write honest captions with facts.

You will need

- A camera or phone (used by a parent) or a sketchbook
- Ledger notebook and a pencil
- A tape measure

Steps

1. With a parent, choose three people doing work: a family member cooking, a neighbor gardening, a worker at a store (always ask permission first).
2. Have a parent take a photograph, or draw a careful sketch.
3. For each picture, write a caption in your ledger with five facts: Who (first name only), What work, Where, When (date and time), How long they do this work each day.
4. Measure your own height with the tape measure and write it down. Hine measured children against his coat buttons; use a doorframe or a parent instead and compare.
5. Make a table of your three subjects: Name, Work, Hours a day, Is it safe? Does it leave time for rest and learning?
6. Write a paragraph: How did Lewis Hine's honest captions help change the laws? Why is it important to write only true facts?

Tips

- A good caption is short and true. Do not guess; ask, or write "not sure."
- Never photograph strangers without permission, and never share pictures of other people online.

Check your work

- ☐ I wrote three captions with five true facts each.

- ☐ I can tell how Lewis Hine's photographs helped children.
- ☐ I can name the 1938 law that ended most child labor in America.

LEDGER NOTEBOOK

1. Draw a camera on a tripod and label its parts. Write one sentence about why Hine's camera was a tool for good.
2. Make a timeline: 1874 Lewis Hine born; 1908 begins photographing for the National Child Labor Committee; 1938 Fair Labor Standards Act; 1940 Hine dies.
3. Copy one of your captions in your neatest handwriting under a drawing of the person.

From history. Later in life, Lewis Hine photographed the workers who built the Empire State Building in New York in 1930 and 1931. He climbed high on the steel beams with them to show the skill and courage of their work.

COMMON MISTAKES

- Thinking all work is bad for children. Chores, helping on the farm and small family businesses teach good things; the problem was long, dangerous work that kept children out of school.
- Thinking one photograph changed the law overnight. It took many years of photographs, reports and patient work.
- Forgetting that a caption must be true. Hine's pictures were powerful because his facts were careful and honest.

Make it a game • Caption Like Hine. Pick a photo or draw a picture of a child doing something. Write a short, honest caption with who, what, when and where, and not what you wish. Swap with your parent and challenge each other to find one fact that is not proved by the picture. Tell how Lewis Hine's photographs led to child labor laws.

5.4 HONEST COINS AND THE U.S. MINT

OBJECTIVES

- Tell how Congress set up the U.S. Mint in 1792 to make honest coins of a set weight and purity.
- Explain why honest weights, honest coins and honest scales matter, and how one emperor's price rule went wrong.
- Sort coins by mint mark and test a kitchen scale for honesty.

Warm-up. Take a nickel and look at it closely. Find the year. Now look just under or beside the year for a tiny letter. That letter is a mint mark. Look at five more coins. What letters do you find?

WATCH

How Coins Are Made ... For Kids!

USMINT • 3:12

<https://www.youtube.com/watch?v=pTm18offyuw>

WHEN TO WATCH

After the story of the first Mint, before the mint-mark project.

Note: Made by the United States Mint for children.

KEY TERMS

U.S. Mint

The government office that makes America's coins.

debase

To make coins with less gold or silver than they are supposed to have, cheating everyone who uses them.

mint mark

A small letter on a coin that shows which mint made it: P Philadelphia, D Denver, S San Francisco, W West Point.

just weight

An honest weight or measure that gives the buyer exactly what he pays for.

price control

A rule that sets the highest price sellers are allowed to charge.

CORE IDEAS

The story. After the war for independence, the new United States had a jumble of money: Spanish silver dollars, English shillings, French coins and paper money from each state. People never knew what a coin was really worth. So on April 2, 1792, Congress passed the Coinage Act. It made the dollar the nation's money and set up the **U.S. Mint** in Philadelphia, then the nation's capital. The Mint was the first building the new government built under the Constitution. Its first director was the scientist and clockmaker David Rittenhouse.

How they figured it out. The Coinage Act said exactly how much silver or gold each coin must contain, so that every dollar would be worth the same. To keep the coins honest, the law said that any Mint officer who **debased** the coins, putting in less silver or gold than the law required and keeping the difference, could be punished by death. Congress was serious about honest money! Every year a group of inspectors, later called the Assay Commission, weighed and tested sample coins to make sure they were right.

The big idea. Honest money and honest measures are a kind of fair rule that helps everyone trade. The Bible says, "A false balance is abomination to the LORD: but a just weight is his delight" (Proverbs 11:1). When coins and scales are honest, buyers and sellers can trust each other without checking everything twice. But not every rule helps. In AD 301 the Roman emperor Diocletian made a **price control** law setting the highest price for more than a thousand goods, with harsh punishment for anyone who charged more. Many sellers simply stopped bringing goods to market, food grew scarce, and the law was soon ignored. Good rules, like honest weights, help markets work. Rules that fight against supply and demand often make things worse.

In business today. The U.S. Mint now has four places that make coins: Philadelphia, Denver, San Francisco and West Point, New York. Every grocery scale and gas pump is checked by state inspectors of weights and measures, and they put a seal on it when it is honest. Next time you buy gas or fruit sold by the pound, look for the inspection sticker.

PICTURE STUDY



"Ye Olde Mint": The First United States Mint Building, Unknown photographer, about 1908–1910 · Photograph · Seventh Street, Philadelphia, Pennsylvania
Image: [Wikimedia Commons](#), public domain

This plain brick building in Philadelphia was the first home of the United States Mint, where America's first coins were made beginning in 1792. Long after the Mint moved to larger buildings, the old building was used for shops, and someone painted "Ye Olde Mint" on the front. This photograph was taken shortly before the building was torn down in 1911.

Look closely

- Find the year painted on the building. How old was the building when this picture was taken?
- Count the floors and the windows. Does this look like a grand government building?
- Find the car at the right. About what year do you think this photograph was taken?
- Look at the shop windows. What do you think the building was used for by then?

Talk about it

1. Why did the new country need its own mint and its own coins?
2. Why would Congress make such a strict law against debasing coins?

3. Why do you think people wanted to remember this old building?

PROJECT

Mint Marks and the Honest Scale

You will sort coins by the mint that made them, and then use coins as test weights to check whether your kitchen scale is honest.

You will need

- 40 or more coins from the family coin jar (pennies, nickels, dimes and quarters)
- A magnifying glass, if you have one
- A kitchen scale that reads in grams
- Ledger notebook and a pencil

Steps

1. Make a tally chart with columns P (Philadelphia), D (Denver), S (San Francisco), W (West Point) and No mark.
2. Look at each coin for its mint mark near the year. (Pennies made in Philadelphia often have no mark.) Tally each coin.
3. Count the totals. Which mint made the most coins in your jar? Make a bar graph.
4. **The honest scale test.** A nickel made by the U.S. Mint weighs 5 grams. Put 1 nickel on the scale and record the reading. Then try 2, 4, 10 and 20 nickels.
5. Make a table: Number of nickels, Should weigh (number $\times$ 5 grams), Scale says, Difference.
6. Is your scale honest? Is it off by the same amount every time? Write what you found.
7. Write two sentences: Why does a grocer's scale need to be checked? How does an honest coin help you test an honest scale?

Tips

- Old, worn nickels may weigh a tiny bit less. Use newer, shiny ones for the scale test if you can.
- Count every coin back into the jar when you finish.

Check your work

- ☐ I sorted coins by mint mark and made a bar graph.
- ☐ I tested my kitchen scale with nickels and recorded the results.
- ☐ I can explain why honest coins and honest scales matter, and tell what went wrong with Diocletian's price law.

LEDGER NOTEBOOK

1. Draw a map of the United States and mark the four mints: Philadelphia, Denver, San Francisco and West Point.
2. Copy your mint-mark tally and your honest-scale table.
3. Draw a balance scale with Proverbs 11:1 written underneath.

From history. The first coins made for the U.S. Mint in 1792 were small silver half dismes, worth five cents. A well-known story says George Washington gave some of his own silverware to make them, though historians are not sure it is true. The word “disme” was later shortened to “dime.”

COMMON MISTAKES

- Thinking the mint mark is the coin's value. It shows only where the coin was made.
- Thinking every rule makes markets better. Rules for honest weights help; rules that force prices too low can empty the shelves.
- Thinking a little cheating on a scale does not matter. A small cheat on every sale adds up to a great deal.

Make it a game • Honest Coin Scale. Weigh five coins of the same kind on a kitchen scale and find how much they should weigh. Your parent secretly swaps one coin for a different one. Find the odd coin. Say why honest weights and coins matter, and what happened when an emperor tried to fix prices.

Scripture. “A false balance is abomination to the LORD: but a just weight is his delight.” (Proverbs 11:1, KJV)

God cares about honest scales and honest coins because cheating hurts our neighbor. Every fair weight is a small act of love and truth.

UNIT 5

WORKERS, OWNERS AND FAIR RULES

Every business needs two kinds of people: **owners**, who bring money, tools and buildings and take the risk, and **workers**, who bring their time, skill and hard work. They need each other. In this unit you will see how J. C. Penney shared his stores with his best workers, how Lord Shaftesbury helped pass laws that took little children out of long days in the mills, how the photographer Lewis Hine helped Americans see why children belong in school, and how the U.S. Mint was set up in 1792 to make honest coins.

You will learn that good rules work like a fair referee in a game: they keep the game honest and safe for everyone, and they keep any one side from bullying the other, while still letting people work, trade and build freely. You will also see an example of a rule that went wrong. In your ledger you will figure fair pay, write a timeline, sort mint marks and test a kitchen scale for honesty.

PREREQUISITES

- Knows the six stakeholders (Unit 4)
- Knows what a coin's stamp promises (Lesson 2.2)
- Can multiply small numbers

MASTERY CHECKLIST

- ☐ I can explain how owners and workers need each other, and what each one brings.
- ☐ I can tell how Lord Shaftesbury and the Factory Acts helped children in the mills.
- ☐ I can tell how Lewis Hine's photographs helped end most child labor in America.
- ☐ I can explain why honest coins and honest scales matter, and why good rules are like a fair referee.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **U.S. Mint for Kids:** Free, at usmint.gov. Coin facts, games and the story of the Mint from the United States Mint. Use with Lesson 5.4. Ages 6–12.
- **Library of Congress: National Child Labor Committee Collection (Lewis Hine):** Free. Search the Library of Congress site for “National Child Labor Committee” to find thousands of Lewis Hine’s photographs with his own notes. A parent should choose the pictures to look at together for Lesson 5.3, since some show hard scenes.

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	Owners and Workers Need Each Other	2 sessions of 45 minutes
5.2	Lord Shaftesbury and the Factory Acts	2 sessions of 45 minutes
5.3	Lewis Hine: Children Belong in School	2 sessions of 45 minutes
5.4	Honest Coins and the U.S. Mint	2 sessions of 45 minutes

UNIT 5 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. 5 pts

What does an owner bring to a business? What does a worker bring?

2. 5 pts

In the parable of the vineyard, why was the first worker not cheated?

3. 5 pts

How did J. C. Penney’s partnership plan help his workers and his business?

4. (5 pts)

You agree to work for 10 cents for every 10 minutes. You work 60 minutes. How much should you be paid?

5. (5 pts)

What did the Factory Act of 1833 do for children in British mills?

6. (5 pts)

Why did the Factory Act need inspectors?

7. (5 pts)

How did Lewis Hine help end most child labor in America?

8. (5 pts)

Why did Congress set up the U.S. Mint in 1792?

9. (5 pts)

A store scale says 3 pounds when you put on exactly 2 pounds of apples. If apples cost \$2 a pound, how much extra is the customer charged?

10. (5 pts)

What happened when Emperor Diocletian made a law setting the highest prices for goods? What does this teach about rules?

ANSWER KEY

1. Owner: capital (money, tools, buildings) and the risk. Worker: labor (time, skill, effort).
2. He agreed to work for a penny a day and was paid exactly a penny, on time. The owner kept the contract and was free to be generous to others.
3. Managers who trained new managers could buy a one-third share in a new store, so the best workers became part-owners, shared the profit, worked hard, and the stores spread.
4. $60 \div 10 = 6$ groups; $6 \times 10\text{¢} = 60\text{¢}$.
5. No children under nine in the cotton and wool mills; children nine to thirteen could work no more than nine hours a day and had to get some schooling; inspectors checked the mills.
6. Without someone checking, some owners might break the rules. Inspectors made sure every mill followed the same law.
7. He photographed working children across the country and wrote honest captions with facts; his pictures showed people the truth and helped pass laws, ending with the Fair Labor Standards Act of 1938.
8. To give the new country its own honest coins of a set weight and purity, so people could trust what their money was worth.
9. The scale adds 1 pound, so the customer pays \$6 instead of \$4: \$2 extra.
10. Many sellers stopped bringing goods to market and food grew scarce, so the law was ignored. Rules that fight supply and demand can make things worse; good rules, like honest weights, help markets work.

PORTFOLIO PIECE: FAIR RULES POSTER AND REPORT

Make a poster titled “Good Rules Are a Fair Referee.” In the middle, draw a referee. Around it, show four fair rules from this unit: a fair contract and wages paid on time, the Factory Act, the end of most child labor, and honest coins and scales. For each one, draw a small picture and write two sentences: what problem it fixed, and who it helped. In one corner, show Diocletian’s price law as a rule that went wrong. Attach your contract and time sheet from Lesson 5.1 and your honest-scale table from Lesson 5.4.

LOOK FOR	WHAT IT MEANS
Content	Four good rules and one rule that went wrong are shown, each with the problem and who it helped or hurt.
Accuracy	Names, dates and facts (1792, 1833, 1938, Lord Shaftesbury, Lewis Hine) are correct.
Records	The contract, time sheet and honest-scale table are attached and correct.
Presentation	The poster is neat and the student can explain it aloud to the family.

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. In this unit you will meet the Wright brothers, whose bicycle shop in Dayton, Ohio, paid for the world's first airplane; Earle Dickson, who invented the Band-Aid because his wife kept cutting her fingers in the kitchen; H. J. Heinz, who sold his horseradish in clear glass bottles so customers could see it was pure; and F. W. Woolworth, who built a giant business on one simple, honest price.

You will learn how to find a real need, test an idea, make an honest sales pitch and set a fair price. In your ledger you will survey your family's needs, make and test a prototype, write a truthful advertisement and figure out the cost, price and profit of a product. These lessons prepare you for the family market day in Unit 8 and the optional business in Unit 9.

PREREQUISITES

- Knows supply, demand and competition (Unit 3)
- Knows the six stakeholders (Unit 4)
- Can add and subtract money to \$20

MASTERY CHECKLIST

- ☐ I can tell how the Wright brothers' bicycle shop paid for their flying machine.
- ☐ I can find a real need by asking people questions and recording their answers.
- ☐ I can write an honest sales pitch and explain the difference between persuading and tricking.
- ☐ I can find the cost of a product and set a price that gives a fair profit.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Biz Kid\$ (public television series)**: Free videos and lessons made for public television in which young people start real businesses. Watch an episode about entrepreneurs with a parent during this unit. Ages 8–14.
- **Wright Brothers National Memorial (National Park Service)**: Free. The story of the Wright brothers' first flights at Kitty Hawk, with photographs and kids' pages. Good for Lesson 6.1.

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

6.1	The Wright Brothers' Bicycle Shop	2 sessions of 45 minutes
6.2	Finding a Need: Earle Dickson and the Band-Aid	2 sessions of 45 minutes
6.3	The Honest Sales Pitch: H. J. Heinz's Clear Glass Bottles	2 sessions of 45 minutes
6.4	Setting a Fair Price: Woolworth's Five-and-Ten	2 sessions of 45 minutes

UNIT 6 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**
What is an entrepreneur?
2. **5 pts**
How did the Wright brothers pay for their airplane experiments?
3. **5 pts**
What need did Earle Dickson see, and how did he meet it?
4. **5 pts**
What is a prototype, and why should you test it?

5. (5 pts)

Why did H. J. Heinz sell horseradish in clear glass bottles?

6. (5 pts)

What is the difference between persuading a customer and tricking a customer?

7. (5 pts)

A bookmark costs 15¢ to make and sells for 50¢. What is the profit per bookmark? What is the profit on 8 bookmarks?

8. (5 pts)

What would happen if you set your price below your cost?

9. (5 pts)

How could Woolworth sell things for five and ten cents and still earn a fortune?

10. (5 pts)

A pack of 20 cookies' worth of ingredients costs \$4.00. What is the cost per cookie? If you sell each cookie for 50¢, what is the profit per cookie?

ANSWER KEY

1. A person who sees a need, starts a business to meet it, and takes the risk.
2. With the profits from their bicycle shop (and earlier printing business), along with their own time and work.
3. His wife often cut her fingers and could not easily bandage herself. He made strips of tape with gauze already on them, covered until needed: the Band-Aid.
4. A first, simple model of a product. Testing it with real people shows what works and what needs to be fixed before you make many.
5. So customers could see that it was pure and not mixed with cheap fillers, which others hid in green or brown bottles.
6. Persuading gives true, good reasons to buy. Tricking hides facts, makes false promises or uses misleading labels.
7. $50¢ - 15¢ = 35¢$ each. $35¢ \times 8 = \$2.80$.
8. You would lose money on every item you sell, and the more you sold, the more you would lose.
9. He bought huge amounts straight from makers at low cost, made a small profit on each item, and sold a very large number of items.
10. $\$4.00 \div 20 = 20¢$ per cookie. $50¢ - 20¢ = 30¢$ profit per cookie.

PORTFOLIO PIECE: MY PRODUCT PLAN

Put together a three-page plan for one product you could really sell at the family market day. Page 1: the need, with your survey tally and the story of how you found it. Page 2: your prototype, with drawings of version 1 and version 2, the feedback you received and what you changed. Page 3: your cost table, your chosen price and profit per item, and your honest sales pitch written out in full. Add a sign you could put on your table.

LOOK FOR	WHAT IT MEANS
A real need	The plan shows a real need found by asking or watching people, with a survey tally.
Prototype and testing	The product was built, tested and improved, with feedback recorded.
Cost and price	The cost table is complete, the cost per item and profit per item are figured correctly, and the price is fair.
Honest pitch	The sales pitch is clear, persuasive and completely true.

6.1 THE WRIGHT BROTHERS' BICYCLE SHOP

OBJECTIVES

- Tell how Wilbur and Orville Wright ran a printing business and a bicycle shop before they built the first airplane.
- Explain what an entrepreneur is and how a small business can pay for big dreams.
- Make a list of your own skills and ideas for a small business, and estimate a simple start-up cost.

Warm-up. If you could invent anything at all, what would it be? Now think: how much money would you need to build it, and where would that money come from?

WATCH

Biography of the Wright Brothers for Children: Orville and Wilbur Wright for Kids - FreeSchool

Free School • 7:28

<https://www.youtube.com/watch?v=Qt3pry6cWJM>

WHEN TO WATCH

After the story of the bicycle shop, before the skills ledger.

BACKUP VIDEO

The Wright Brothers' Cycle Shop | The Henry Ford's Innovation Nation

The Henry Ford • 4:17

https://www.youtube.com/watch?v=_dxaU6izBLY

KEY TERMS

entrepreneur

A person who sees a need, starts a business to meet it, and takes the risk.

risk

The chance that you might lose your money, time or effort.

profit

The money left over after all the costs are paid.

start-up cost

The money needed to begin a business, such as tools, supplies and rent.

invest

To put money or time into something now, hoping it will bring a good return later.

CORE IDEAS

The story. Wilbur and Orville Wright grew up in Dayton, Ohio, the sons of a minister. Neither finished high school with a diploma, but both loved to read and build things. As young men they built their own printing press and printed a small neighborhood newspaper. Then, in the 1890s, America went wild for bicycles. In 1892 the brothers opened a bicycle shop where they sold, rented and repaired bicycles. A few years later they began building their own bicycles by hand, with models they named the Van Cleve and the St. Clair.

How they figured it out. The shop was busy in spring and summer and slow in winter, so the brothers had time in the cold months to read and think about flying. In 1899 Wilbur wrote to the Smithsonian Institution asking for everything it had on flight. The profits from the bicycle shop paid for their kites, gliders, trips to the windy sand dunes of Kitty Hawk, North Carolina, and later their engine and propellers. In the back of the shop they built a small wind tunnel to test wing shapes, and their mechanic, Charlie Taylor, built the light engine they needed. On December 17, 1903, Orville flew the first powered airplane for 12 seconds and about 120 feet. The brothers had paid for it themselves.

The big idea. An **entrepreneur** sees a need and takes the **risk** of starting a business to meet it. The Wrights saw that people wanted bicycles and good repairs, and they earned an honest **profit** by serving those customers well. Then they **invested** their profits, their time and their mechanic's skill in a much bigger idea. Their bicycle work also taught them useful lessons: how to balance a machine, how to build light, strong frames and how to keep careful records.

In business today. Many great businesses began as small ones that paid for a bigger dream. Before you start, list your **start-up costs**, the things you must buy before you can sell anything, and think about what could go wrong. "In all labour there is profit: but the talk of the lips tendeth only to penury" (Proverbs 14:23): ideas become real only through work.

PICTURE STUDY



The First Flight, John T. Daniels, December 17, 1903 · Photograph (glass-plate negative) · Near Kitty Hawk, North Carolina; Library of Congress

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

Orville Wright set up his camera before the flight and asked John T. Daniels, a lifesaving station worker who had come to help, to squeeze the shutter if the machine flew. Daniels had never taken a photograph before. He caught the very first moment of powered flight, one of the most famous photographs ever taken.

Look closely

- Find Orville. Where is he lying? Find Wilbur. He had just run beside the wing to steady it. What is he doing now?
- Look at the ground under the airplane. How high off the ground is it?
- Find the wooden rail the airplane started on.
- Look at the wings. What do you think they are made of? Why would the brothers want them light?

Talk about it

1. How did selling and fixing bicycles help the Wrights build this airplane?
2. What risks did the Wright brothers take?

3. Who are the stakeholders in this picture: the risk-takers, the builders, the helpers?

PROJECT

My Skills and Ideas Ledger

You will list your skills, think of small businesses that could use them, and figure out what it would cost to start one, as an entrepreneur does before taking a risk.

You will need

- Ledger notebook and a pencil
- A store flyer or a parent's help to look up prices
- A calculator

Steps

1. Make a list of ten things you are good at or like to do (drawing, baking, caring for pets, building, gardening, folding paper, singing).
2. Next to each one, write a business idea that could use that skill: drawing could become greeting cards; gardening could become selling seedlings.
3. Circle your three best ideas. For each, write: Who would buy this? What need does it meet?
4. Choose one idea. Make a start-up cost table: Item, Where to buy it, Cost. List everything you would need before your first sale.
5. Add up your start-up costs.
6. Write how you could pay for the start-up: savings, a small loan from a parent (to be paid back), or doing extra chores.
7. Write two sentences: What is the biggest risk for this business? What bigger dream could its profits help pay for one day?

Tips

- Start small. The Wrights began with repairs and rentals before they built bicycles of their own.
- Never borrow money from anyone but a parent, and write down any loan in your ledger.

Check your work

- ☐ I listed my skills and turned them into business ideas.
- ☐ I made a start-up cost table and added it up correctly.
- ☐ I can explain how the Wrights' bicycle shop paid for their airplane.

LEDGER NOTEBOOK

1. Draw the Wright Cycle Company shop with a bicycle in the window, and draw a dotted line from the shop to the airplane at Kitty Hawk.
2. Make a timeline: 1889 printing business; 1892 bicycle shop; 1896 their own bicycles; 1899 letter to the Smithsonian; 1901 wind tunnel; 1903 first flight.
3. Copy your start-up cost table neatly.

From history. In 1937, Henry Ford bought the Wright brothers' bicycle shop building and moved it from Dayton to his museum village in Dearborn, Michigan, where visitors can still walk inside it today.

COMMON MISTAKES

- Thinking the Wrights were rich inventors. They paid for their experiments with money from a small bicycle shop.
- Thinking an entrepreneur only has ideas. An entrepreneur also does the work and takes the risk.
- Forgetting start-up costs. You must spend money before you can earn any.

Make it a game • Wright Skills Ledger. In sixty seconds, list as many of your own skills and ideas as you can. Then match each to a small business that could earn money. Score a point for every match your parent agrees with. Tell how the Wright brothers' printing and bicycle shop paid for their airplane.

6.2 FINDING A NEED: EARLE DICKSON AND THE BAND-AID

OBJECTIVES

- Tell how Earle Dickson invented the Band-Aid to meet a need in his own kitchen.
- Explain how entrepreneurs find needs by watching and asking people.
- Survey your family about their needs, build a simple prototype and test it.

Warm-up. Walk around your house and look for little problems: a door that squeaks, shoes that are always lost, a drawer that is too messy. Write down three problems. Could anyone make something to fix them?

WATCH

How the Band-Aid was invented | Moments of Vision 3 - Jessica Oreck

TED-Ed · 1:45

<https://www.youtube.com/watch?v=98sFkESm0xg>

WHEN TO WATCH

After the story of Earle Dickson, before the survey.

Note: A short, wordless drawing that tells the Band-Aid story.

BACKUP VIDEO

The Band-Aid: Where did it come from? | Stuff of Genius

HowStuffWorks · 1:14

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

KEY TERMS

need

In business, a problem people have that they would pay to have solved.

survey

A set of questions asked to many people to find out what they think or need.

prototype

A first, simple model of a product, made to test an idea.

feedback

What customers or testers tell you about your product, both good and bad.

invention

A new product or way of doing something.

CORE IDEAS

The story. In 1920, Earle Dickson worked for Johnson & Johnson, a company in New Jersey that made cotton and gauze for hospitals. His young wife, Josephine, often cut or burned her fingers while cooking. Back then, bandages came in big pieces of gauze and rolls of tape, and it was hard to wrap your own finger with one hand. Earle wanted to help her.

How they figured it out. Earle laid out a long strip of sticky tape, placed small squares of gauze along the middle, and covered it with a stiff cloth so it would not stick until it was needed. When Josephine cut herself, she could snip off a piece and put it on by herself. Earle showed his idea to his bosses at Johnson & Johnson, and in 1921 the company began selling it as the Band-Aid. At first the bandages were made by hand and few people bought them. The company kept improving them, made them by machine, and gave free samples to Boy Scout troops so people could try them. Soon they were in homes everywhere, and Earle Dickson rose to become a leader of the company.

The big idea. Good businesses begin with a real **need**: a problem people have and would pay to have solved. Dickson found his need by watching someone he loved. Entrepreneurs find needs by watching, listening and asking questions, sometimes with a **survey**. Then they make a **prototype**, a simple first model, test it with real people, listen to their **feedback** and improve it. Most good **inventions** are improved many times.

In business today. Companies still watch how people use their products, ask customers what bothers them, and test new ideas on small groups before selling them to everyone. The best ideas often come from noticing the small troubles of

everyday life and caring enough to fix them. Loving your neighbor and serving customers go together.

PICTURE STUDY



The Kitchen Maid, Jean-Siméon Chardin, 1738 · Oil on canvas · National Gallery of Art, Washington, D.C.
Image: [Wikimedia Commons](#), public domain

The French painter Chardin loved to paint quiet scenes of ordinary work in the kitchen. This young maid has stopped peeling turnips for a moment, lost in thought. Every tool around her, from the knife to the cleaver to the copper pot, was once someone's invention, made to solve a problem in the kitchen.

Look closely

- Find the knife in her hand. What is she peeling?
- Find the chopping block and the cleaver. What were they used for?
- Count the vegetables on the floor. Which ones has she finished?
- Look at her face. What do you think she is thinking about?

Talk about it

1. What little problems might a cook in this kitchen have? Could you invent something to help?
2. How is this kitchen like Josephine Dickson's kitchen? How is it different from yours?
3. Which tool in this picture would you most like to improve? How?

PROJECT

Survey, Prototype, Test

You will survey your family to find a real need, build a simple prototype to meet it, test it, and record the feedback.

You will need

- Ledger notebook and a pencil
- Household craft supplies: cardboard, tape, string, paper, scissors, glue
- Three or more family members or friends to survey and test

Steps

1. Write a short survey of three questions, such as: What is one small problem you have every day? Where do things get lost or messy? What would make your morning easier?
2. Ask at least five people. Record every answer in a table: Person, Problem 1, Problem 2, Problem 3.
3. Tally the problems. Which one came up most often? That is your need.
4. Sketch three ideas to solve it. Choose the best one and build a simple prototype from household materials (a key holder, a pencil caddy, a shoe sorter, a recipe stand).
5. Let three people test your prototype. Ask: What works? What doesn't? Would you use it? Would you pay for it, and how much?
6. Record the feedback in a table: Tester, What worked, What to fix, Would pay.
7. Improve your prototype once, test it again, and write two sentences about what changed.

Tips

- Listen more than you talk. Good feedback, even when it stings, helps you make something better.
- Do not argue with testers. Write down what they say and think about it later.

Check your work

- ☐ I surveyed at least five people and tallied their answers.

- ☐ I built, tested and improved a prototype.
- ☐ I can tell how Earle Dickson found a need and made the Band-Aid.

LEDGER NOTEBOOK

1. Draw Earle Dickson's first bandage strip and label the tape, the gauze and the covering cloth.
2. Draw your prototype twice: version 1 and version 2. Label what you changed.
3. Copy your survey tally and circle the most common need.

From history. Johnson & Johnson was started in 1886 by three brothers, Robert, James and Edward Johnson. Their early products included sterile surgical dressings, made clean so that wounds would not become infected, a new idea in those days.

COMMON MISTAKES

- Starting with a product instead of a need. Ask first what people really need.
- Thinking the first try must be perfect. Prototypes are meant to be tested and improved.
- Asking only people who will say nice things. Honest feedback helps more than praise.

Make it a game · Survey and Prototype. Ask three family members what small problem bothers them. Pick one and build a prototype from paper or tape in five minutes. Test it with the person and listen to their feedback. Make one change. Tell how Earle Dickson noticed a need in his own kitchen.

6.3 THE HONEST SALES PITCH: H. J. HEINZ'S CLEAR GLASS BOTTLES

OBJECTIVES

- Tell how H. J. Heinz built trust by selling pure food in clear bottles and by paying back his debts after his first business failed.
- Explain the difference between honest persuasion and tricking customers.
- Write and give an honest sales pitch and check an advertisement for truthfulness.

Warm-up. Find two food packages in your kitchen. Read the front of each box: what does it promise? Then read the small print and the ingredients on the back. Do the front and back tell the same story?

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 Heinz story, before you check the advertisements.

Note: A PBS KIDS cartoon about how advertisements try to persuade.

KEY TERMS

advertisement

A message that tells people about a product and tries to get them to buy it.

sales pitch

A short talk that explains why a customer should buy a product.

persuade

To give someone good reasons to believe or do something.

label

The words on a package that tell what is inside.

reputation

What people think of you, based on how you have acted over time.

CORE IDEAS

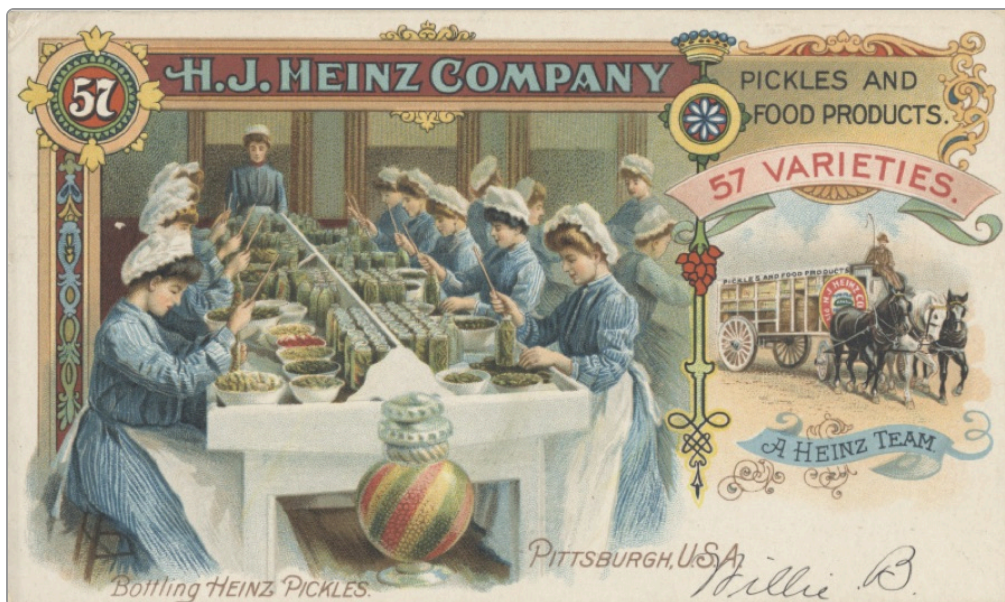
The story. Henry John Heinz grew up near Pittsburgh, Pennsylvania, in the 1840s and 1850s. As a boy he grew extra vegetables in his mother's garden and sold them to neighbors, first from a basket and later from a horse cart. In 1869, when he was 25, he started a business with a partner selling bottled horseradish, a spicy root that people grated to eat with meat. Many sellers in those days stretched their horseradish with cheap fillers such as turnip and hid them by using green or brown bottles. Heinz put his horseradish in clear glass bottles, so every customer could see that it was pure.

How they figured it out. In 1875, after hard times hit the whole country, Heinz's first company failed and he could not pay what he owed. The law no longer required him to pay those debts, but Heinz wrote the names of everyone he owed in a little notebook and, over the next years, paid them all back. He started again with his brother and cousin, selling ketchup, pickles and other foods. He opened his factory for visitors to tour, so they could see the clean kitchens, the workers in neat uniforms and the fresh ingredients. In the 1890s he began using the slogan "57 Varieties." Later Heinz supported the Pure Food and Drug Act of 1906, a law that required food makers to label their foods truthfully.

The big idea. A good sales **pitch** or **advertisement** tells customers what a product is, why it is good, and what it costs, and every word of it is true. It is right to **persuade** customers with good reasons. It is wrong to trick them by hiding facts, making false promises or using a misleading **label**. Heinz's clear bottles were a sales pitch that told the truth without a word. His honesty, even in failure, gave him a **reputation** that customers trusted for the rest of his life.

In business today. Laws now require food labels to list the ingredients, and false advertising is against the law. But the best protection is still an honest seller. "The lip of truth shall be established for ever: but a lying tongue is but for a moment" (Proverbs 12:19).

PICTURE STUDY



Bottling Heinz Pickles: An H. J. Heinz Company Trade Card, H. J. Heinz Company, about 1900 · Printed color trade card · Pittsburgh, Pennsylvania

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

Companies once handed out small, colorful trade cards to customers, who often collected them. This Heinz card shows workers bottling pickles in a clean, bright room. Heinz wanted every customer to know that his food was made carefully, in clear jars, by workers in clean uniforms.

Look closely

- Find the glass jars. Can you see the pickles inside? Why does that matter?
- Look at the workers' clothes and caps. Why would a food company want workers dressed this way?
- Find the delivery wagon. How many horses pull it?
- Find the number 57. Where does it appear?

Talk about it

1. What is this card trying to persuade customers to believe? Is it a good reason?
2. How is this card like an advertisement today? How is it different?
3. If you wanted customers to trust your product, what would you show them?

PROJECT

Write an Honest Sales Pitch

You will check real advertisements for truthfulness, then write and give an honest sales pitch for something you make or own.

You will need

- Two or three advertisements from a magazine, flyer or cereal box
- Ledger notebook and a pencil
- A product to pitch: your prototype from Lesson 6.2, a cookie you baked, or a book you loved

Steps

1. Read each advertisement with a parent. In your ledger, make a table: Ad, What it promises, Is it a fact I could check?, Is anything left out?
2. Mark each promise F (a fact you could check, like “12 ounces”) or O (an opinion or feeling, like “the best ever”).
3. Choose your product. Write a 30-second sales pitch with four parts: what it is, what need it meets, one true fact about why it is good, and the price.
4. Read your pitch aloud to a parent. The parent asks: “Is every word true?” Cross out anything that is not.
5. Make a small poster or sign with your honest pitch.
6. Give your pitch to three family members. Record in a tally how many would buy it, and why or why not.
7. Write two sentences: What is the difference between persuading and tricking? How did Heinz’s clear bottles persuade customers?

Tips

- Show, don’t just say. Heinz showed his pure horseradish through clear glass. Can you let customers see or try your product?
- If your product has a weakness, it is honest to say so. Customers will trust you more.

Check your work

- ☐ I checked advertisements for facts and opinions.
- ☐ My sales pitch is short, clear and completely true.
- ☐ I can tell how H. J. Heinz built a good reputation.

LEDGER NOTEBOOK

1. Draw two horseradish bottles, one green and one clear. Write under them why Heinz chose the clear one.
2. Copy your honest sales pitch and your sign.
3. Make a list of five honest words and five tricky words sellers sometimes use (for example, honest: “ingredients,” “weight”; tricky: “miracle,” “secret”).

From history. Heinz said there were 57 varieties even though his company already made more than 60 products when the slogan began. He simply liked the number. Today the number 57 is still printed on Heinz ketchup bottles.

COMMON MISTAKES

- Thinking advertising is always bad. Honest advertising helps customers find what they need.
- Thinking a small exaggeration does not matter. Customers who find out stop trusting you.
- Thinking a failed business means the owner is dishonest. Heinz failed once but stayed honest and paid everyone back.

Make it a game • Honest or Tricky Pitch. Take turns giving thirty-second sales pitches for a household item. Your parent holds up a card: honest or tricky. Honest pitches say true things a customer can check. Tricky ones hide something. Score points for the other player's correct call. Explain how clear glass bottles built trust for Heinz.

Scripture. “The lip of truth shall be established for ever: but a lying tongue is but for a moment.” (Proverbs 12:19, KJV)

A trick may make one sale, but it is soon found out. Heinz’s honest bottles and honest payments built a name that lasted more than a century.

6.4 SETTING A FAIR PRICE: WOOLWORTH'S FIVE-AND-TEN

OBJECTIVES

- Tell how F. W. Woolworth built a giant business by selling goods at five and ten cents.
- Explain cost, price and profit, and how to set a fair price.
- Find the cost of a homemade product, set a price and figure the profit per item.

Warm-up. Pick a snack or small toy your family bought. Guess: how much did it cost the store to buy it? How much did the store sell it for? Why would a store charge more than it paid?

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

After the Woolworth story, before the price test.

BACKUP VIDEO

The History of Woolworth - The Rise and Decline of the F.W. Woolworth Company

Retail Rewind • 9:28

<https://www.youtube.com/watch?v=W7AeKol8h3w>

KEY TERMS

cost

What the seller pays to make or buy a product.

profit per item

Price minus cost: what the seller earns on each one sold.

volume

The number of items sold.

price

What the customer pays for the product.

fixed price

A price set ahead of time and marked on a tag, the same for every customer.

CORE IDEAS

The story. Frank Woolworth grew up on a farm in northern New York and went to work as a clerk in a dry-goods store in Watertown. In 1878 the store set up a table of small items, such as pins, buttons and thimbles, all priced at five cents. Customers loved being able to buy without asking prices or bargaining, and the table quickly sold out. Woolworth thought: what if a whole store sold everything for five cents?

How they figured it out. In 1879 Woolworth borrowed \$300 worth of goods from his boss and opened his “Great Five Cent Store” in Utica, New York. Few customers came, and after a few months he closed it. That was his first failure. He tried again in Lancaster, Pennsylvania, in a busier spot, and this time it worked. He added goods for ten cents, and the five-and-ten store was born. Woolworth learned to buy huge amounts directly from the makers, which lowered his **cost**, so he could keep his **prices** low and still make a profit. By the time he died in 1919, there were more than a thousand Woolworth stores.

The big idea. To set a fair price, start with your **cost**: what you pay to make or buy each item. Your **price** must be higher than your cost, or you lose money on every sale. **Profit per item** = price – cost. If your price is too high, few customers will buy. If it is too low, you may sell a lot but earn little or nothing. Woolworth chose a low price with a small profit on each item, but he sold so many items, a large **volume**, that his profits added up. His **fixed prices**, the same for everyone, also made shopping simple and honest.

In business today. Dollar stores and many large stores still follow Woolworth’s idea: buy in huge amounts, keep prices low and sell a great many items. Other businesses sell fewer items at higher prices because their products are rare or handmade. Either way, a good seller knows his costs and charges a price that is fair to the customer and to himself.

PICTURE STUDY



F. W. Woolworth's 5 and 10 Cent Store by Night, Unknown photographer (picture postcard), 1910s ·
Photograph printed as a postcard · New Albany, Indiana
Image: [Wikimedia Commons](#), public domain

This postcard shows the inside of a Woolworth five-and-ten store decorated for Christmas. Customers walked along the counters and could see and pick up the goods, each marked with a price of five or ten cents. Many children spent their first coins in stores like this one.

Look closely

- Find the long counters. What do you think is inside them?
- Look at the ceiling. What decorations can you find?
- Look for signs or price cards. How would a customer know what things cost?
- Imagine you had a dime to spend. Where would you go first?

Talk about it

1. Why would customers like shopping where every price was clear and the same for everyone?
2. How could Woolworth sell things so cheaply and still make a profit?
3. Why would a store decorate like this at Christmastime?

PROJECT

The Price Is Fair: Cost, Price and Profit

You will find the real cost of a simple product, test different prices with family “customers,” and choose a fair price that earns a profit.

You will need

- Supplies for a simple product, such as bookmarks (cardstock, markers, ribbon) or a snack (crackers, peanut butter, bags)
- Receipts or price tags for the supplies
- Play money for customers
- Ledger notebook and a calculator

Steps

1. Make a cost table: Supply, What we paid, How many items it makes, Cost per item. Example: a pack of 10 cardstock sheets costs \$2.00 and makes 40 bookmarks, so each bookmark uses $\$2.00 \div 40 = 5\text{¢}$ of cardstock.
2. Add up the cost per item for all supplies. This is your cost.
3. Make 6 items.
4. Choose three possible prices: one low (just above cost), one medium, one high.
5. Offer the items to family customers at each price on different days, or ask each customer which price they would pay. Record: Price, How many sold, Money taken in.
6. For each price, figure: Profit per item = price – cost. Total profit = profit per item $\times$ number sold.
7. Make a table and circle the price that earned the most total profit while still being fair. Write two sentences explaining your choice.

Tips

- Do not forget the small costs: ribbon, bags, tape and labels all count.
- A fair price is good for both sides: the customer gets value, and you earn something for your work.

Check your work

- ☐ I found the cost per item for my product.
- ☐ I tested three prices and calculated the profit for each.
- ☐ I can tell how Woolworth earned a profit with very low prices.

LEDGER NOTEBOOK

1. Write the profit formula large and clear: Profit per item = Price – Cost. Then solve three examples of your own.
2. Draw a five-and-ten store counter with price cards on at least six items.
3. Copy your price-test table and circle your chosen price.

From history. In 1913 Woolworth opened the Woolworth Building in New York City, which was the tallest building in the world for many years. He paid for it with cash, built with the profits of millions of five- and ten-cent sales.

COMMON MISTAKES

- Thinking price and profit are the same. Profit is what is left after you subtract the cost.
- Thinking the highest price is always best. If no one buys, there is no profit.
- Forgetting small costs. Many small costs add up and can turn a profit into a loss.

Make it a game • Fair Price Duel. Pick three items you could sell and write the cost of each on a card, such as 20 cents. Set a price that is fair and still makes a profit. Your parent plays the customer and haggles. Calculate profit per item for each sale. Highest total profit without unfair prices wins.

Scripture. “In all labour there is profit: but the talk of the lips tendeth only to penury.” (Proverbs 14:23, KJV)

Woolworth failed once, worked hard and tried again. Profit comes from real work that serves people, not from talk alone.

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. In this unit you will meet the Wright brothers, whose bicycle shop in Dayton, Ohio, paid for the world's first airplane; Earle Dickson, who invented the Band-Aid because his wife kept cutting her fingers in the kitchen; H. J. Heinz, who sold his horseradish in clear glass bottles so customers could see it was pure; and F. W. Woolworth, who built a giant business on one simple, honest price.

You will learn how to find a real need, test an idea, make an honest sales pitch and set a fair price. In your ledger you will survey your family's needs, make and test a prototype, write a truthful advertisement and figure out the cost, price and profit of a product. These lessons prepare you for the family market day in Unit 8 and the optional business in Unit 9.

PREREQUISITES

- Knows supply, demand and competition (Unit 3)
- Knows the six stakeholders (Unit 4)
- Can add and subtract money to \$20

MASTERY CHECKLIST

- ☐ I can tell how the Wright brothers' bicycle shop paid for their flying machine.
- ☐ I can find a real need by asking people questions and recording their answers.
- ☐ I can write an honest sales pitch and explain the difference between persuading and tricking.
- ☐ I can find the cost of a product and set a price that gives a fair profit.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Biz Kid\$ (public television series)**: Free videos and lessons made for public television in which young people start real businesses. Watch an episode about entrepreneurs with a parent during this unit. Ages 8–14.
- **Wright Brothers National Memorial (National Park Service)**: Free. The story of the Wright brothers' first flights at Kitty Hawk, with photographs and kids' pages. Good for Lesson 6.1.

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

6.1	The Wright Brothers' Bicycle Shop	2 sessions of 45 minutes
6.2	Finding a Need: Earle Dickson and the Band-Aid	2 sessions of 45 minutes
6.3	The Honest Sales Pitch: H. J. Heinz's Clear Glass Bottles	2 sessions of 45 minutes
6.4	Setting a Fair Price: Woolworth's Five-and-Ten	2 sessions of 45 minutes

UNIT 6 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**
What is an entrepreneur?
2. **5 pts**
How did the Wright brothers pay for their airplane experiments?
3. **5 pts**
What need did Earle Dickson see, and how did he meet it?
4. **5 pts**
What is a prototype, and why should you test it?

5. (5 pts)

Why did H. J. Heinz sell horseradish in clear glass bottles?

6. (5 pts)

What is the difference between persuading a customer and tricking a customer?

7. (5 pts)

A bookmark costs 15¢ to make and sells for 50¢. What is the profit per bookmark? What is the profit on 8 bookmarks?

8. (5 pts)

What would happen if you set your price below your cost?

9. (5 pts)

How could Woolworth sell things for five and ten cents and still earn a fortune?

10. (5 pts)

A pack of 20 cookies' worth of ingredients costs \$4.00. What is the cost per cookie? If you sell each cookie for 50¢, what is the profit per cookie?

ANSWER KEY

1. A person who sees a need, starts a business to meet it, and takes the risk.
2. With the profits from their bicycle shop (and earlier printing business), along with their own time and work.
3. His wife often cut her fingers and could not easily bandage herself. He made strips of tape with gauze already on them, covered until needed: the Band-Aid.
4. A first, simple model of a product. Testing it with real people shows what works and what needs to be fixed before you make many.
5. So customers could see that it was pure and not mixed with cheap fillers, which others hid in green or brown bottles.
6. Persuading gives true, good reasons to buy. Tricking hides facts, makes false promises or uses misleading labels.
7. $50¢ - 15¢ = 35¢$ each. $35¢ \times 8 = \$2.80$.
8. You would lose money on every item you sell, and the more you sold, the more you would lose.
9. He bought huge amounts straight from makers at low cost, made a small profit on each item, and sold a very large number of items.
10. $\$4.00 \div 20 = 20¢$ per cookie. $50¢ - 20¢ = 30¢$ profit per cookie.

PORTFOLIO PIECE: MY PRODUCT PLAN

Put together a three-page plan for one product you could really sell at the family market day. Page 1: the need, with your survey tally and the story of how you found it. Page 2: your prototype, with drawings of version 1 and version 2, the feedback you received and what you changed. Page 3: your cost table, your chosen price and profit per item, and your honest sales pitch written out in full. Add a sign you could put on your table.

LOOK FOR	WHAT IT MEANS
A real need	The plan shows a real need found by asking or watching people, with a survey tally.
Prototype and testing	The product was built, tested and improved, with feedback recorded.
Cost and price	The cost table is complete, the cost per item and profit per item are figured correctly, and the price is fair.
Honest pitch	The sales pitch is clear, persuasive and completely true.

BOOKKEEPING

Bookkeeping means keeping an honest written record of money: what comes in, what goes out and what is left. It sounds simple, but it is one of the most important skills in business. In this unit you will meet a sixteen-year-old bookkeeper named John D. Rockefeller and his little notebook called Ledger A, George Washington and the careful account books he kept for his whole life, Milton Hershey and the candy shop that lost money before his later success, and Luca Pacioli, the friar who wrote down how the merchants of Venice kept their books.

You will learn to keep a ledger with a running balance, to tell a profit from a loss, and to check that your books balance. By the end of the unit you will have kept a full month of ledger pages for your own money, and you will know why a wise person “be diligent to know the state of thy flocks” (Proverbs 27:23).

PREREQUISITES

- Can add and subtract money to \$20 and beyond
- Knows cost, price and profit per item (Lesson 6.4)
- Has kept simple tables in the ledger notebook all year

MASTERY CHECKLIST

- ☐ I can sort money into money in (income) and money out (expenses).
- ☐ I can keep a ledger with dates, descriptions and a running balance.
- ☐ I can find profit or loss: money in – money out.
- ☐ I can tell how Luca Pacioli and the merchants of Venice kept their books, and why honest records matter.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Next Gen Personal Finance (NGPF):** Free money lessons and activities written for teachers and families, including simple activities on tracking money. A parent can adapt the elementary ideas for this unit.
- **George Washington’s Mount Vernon:** Free, at mountvernon.org. The home of George Washington, with articles about his farms, mill and business records. Search “ledger” or “account book” for Lesson 7.2.

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

7.1	Money In and Money Out: Rockefeller’s Ledger A	2 sessions of 45 minutes
7.2	The Ledger: George Washington’s Account Books	2 sessions of 45 minutes
7.3	Profit and Loss: Milton Hershey’s First Candy Shop	2 sessions of 45 minutes
7.4	Luca Pacioli and the Merchants of Venice	2 sessions of 45 minutes

UNIT 7 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**
What is bookkeeping?
2. **5 pts**
Sort these into income or expenses: allowance, buying a book, selling cookies, paying for seeds, a birthday gift of money.
3. **5 pts**
What did young John D. Rockefeller write in his Ledger A?

4. **5 pts**

Why did George Washington keep exact accounts of his expenses during the war?

5. **5 pts**

A ledger starts with \$10.00. Then: money in \$4.50, money out \$2.25, money in \$3.00. What is the running balance after each line?

6. **5 pts**

A candy shop had revenue of \$90 and expenses of \$65. Profit or loss? How much?

7. **5 pts**

Another shop had revenue of \$50 and expenses of \$70. Profit or loss? How much? Name one thing it could do.

8. **5 pts**

What would happen to a business that never kept a ledger?

9. **5 pts**

Who was Luca Pacioli, and what did he do in 1494?

10. **5 pts**

In double-entry bookkeeping, why is every amount written twice?

ANSWER KEY

1. Keeping an honest written record of money that comes in and goes out.
2. Income: allowance, selling cookies, birthday gift. Expenses: buying a book, paying for seeds.
3. Every cent he earned, spent and gave, including his pay, his living costs and his gifts to church and the poor.
4. He took no pay, only his real expenses, and he wanted the government to be able to check every amount so he would be honest with the people's money.
5. \$14.50, then \$12.25, then \$15.25.
6. Profit of $\$90 - \$65 = \$25$.
7. Loss of $\$70 - \$50 = \$20$. It could sell more, raise prices or cut costs.
8. It would not know how much money it had, whether it made a profit, or where money was lost or stolen, and it could run out of money without knowing why.
9. A Franciscan friar and math teacher who published the Summa de arithmetica in Venice, explaining how merchants kept their books with double-entry bookkeeping.
10. Because every trade changes two things (one goes down, one goes up). Writing both lets the two sides balance, which shows the books have no mistakes.

PORTFOLIO PIECE: A MONTH OF LEDGER PAGES

Keep your own ledger for one whole month (four weeks). Every line needs a date, a description, money in or money out, and a running balance. At the end of each week, count your real money and check it against your balance, writing “checked” and the date. At the end of the month, write a one-page profit-and-loss report for your month: total money in, total money out, and what is left, with a bar graph and three sentences about what you learned and what you will change next month.

LOOK FOR	WHAT IT MEANS
Complete records	Every day of the month is recorded, with dates and clear descriptions.
Correct balances	Running balances are correct and checked against real money each week.
Report	The month’s profit-and-loss report is correct, with a bar graph.
Honesty and reflection	Mistakes are corrected openly, not hidden, and the reflection is thoughtful.

7.1 MONEY IN AND MONEY OUT: ROCKEFELLER'S LEDGER A

OBJECTIVES

- Tell how young John D. Rockefeller recorded every cent he earned, spent and gave in his notebook, Ledger A.
- Sort money into income (money in) and expenses (money out).
- Keep a two-week record of your own money in and money out.

Warm-up. Think back over the last week. Did any money come to you (allowance, a gift, a payment for a chore)? Did you spend or give any? Try to remember every amount. How sure are you? What would help you remember?

WATCH

Financial Literacy for Kids | Learn the basics of finance and budgeting

Learn Bright · 6:14

<https://www.youtube.com/watch?v=0iRbD5rM5qc>

WHEN TO WATCH

After the story of Ledger A, before you start your own.

KEY TERMS

bookkeeping

Keeping an honest written record of money that comes in and goes out.

bookkeeper

A person whose job is to keep a business's money records.

income

Money that comes in, such as pay, sales or gifts.

expense

Money that goes out, to pay for things you buy or use.

record

A written note of what happened, kept so you can look back at it.

CORE IDEAS

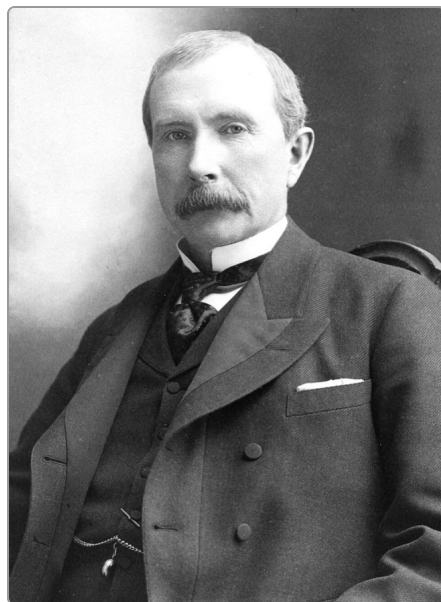
The story. In September 1855, a sixteen-year-old boy named John D. Rockefeller walked the streets of Cleveland, Ohio, looking for work. After many days he was hired as an assistant **bookkeeper** for Hewitt and Tuttle, a company that bought and shipped farm goods. His job was to check bills, write letters and record every payment in the company's books. For his first three months of work he was paid about \$50.

How they figured it out. Rockefeller kept a small notebook of his own, which he called Ledger A. In it he wrote every cent that came in and every cent that went out: his pay, his rent and food, a pair of gloves, a newspaper, and his gifts to his church, to missions and to the poor. Even as a teenager, he gave part of his small pay every week. He did not guess; he wrote it down. Rockefeller kept Ledger A for the rest of his life. Years later he built a giant oil company and became one of the richest men in the world, and he always said that keeping careful books had taught him to know exactly where his money went.

The big idea. All the money in a business or a family belongs in two groups. **Income** is money in: pay, sales, gifts. **Expenses** are money out: things you buy, bills you pay, money you give. **Bookkeeping** means writing down every bit of income and every expense, with the date and what it was for, as soon as it happens. A **record** written at the time is far more trustworthy than a memory.

In business today. Every business, from a lemonade stand to a giant company, keeps track of its income and expenses, often with computer programs. Families keep records too, so they know whether they are spending more than they earn. The habit begins small: "He that is faithful in that which is least is faithful also in much" (Luke 16:10).

PICTURE STUDY



John D. Rockefeller, Unknown photographer, about 1885 · Photograph · United States

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

This photograph shows John D. Rockefeller about thirty years after he started as a teenage bookkeeper. By then he led the largest oil company in America. Under his coat, he still had the habits he learned with Ledger A: write down every cent, check every bill, and give part of what you earn.

Look closely

- Look at his clothes. Are they flashy or neat and plain?
- Look at his face and eyes. What kind of person does he seem to be?
- Find the watch chain on his vest. Why might a busy businessman need a watch?

Talk about it

1. How might keeping careful records as a teenager have helped Rockefeller as a businessman?
2. Rockefeller wrote down his gifts as well as his spending. Why might that be a good habit?
3. What would you write in the first page of your own Ledger A?

PROJECT

My Ledger A

You will start your own Ledger A and record every bit of money that comes in and goes out for two weeks, just as young Rockefeller did.

You will need

- Ledger notebook and a pencil
- A small envelope or jar for your money
- Any receipts from things you buy

Steps

1. Write “Ledger A” and your name on a fresh page. Count the money you have now and write it at the top: “Starting money: \$____.”
2. Make two tables side by side: Money In (Date, From, Amount) and Money Out (Date, For, Amount).
3. For two weeks, write down every amount the same day it happens: allowance, gifts, money earned, things bought, money given at church.
4. If you have no money coming or going on some days, write the date and “none.” Bookkeepers record quiet days too.
5. At the end of two weeks, add up the Money In column and the Money Out column.
6. Figure: Starting money + Money in – Money out = what you should have now. Count your real money. Do they match?
7. Write two sentences: What surprised you? What did you spend the most on?

Tips

- Write it down right away. Memories fade fast, even after one day.
- If the numbers do not match, do not change them to make them fit. Look for the mistake, and write down what you find.

Check your work

- ☐ I recorded every bit of money in and money out for two weeks.
- ☐ I added my columns and checked them against my real money.

- ☐ I can explain the difference between income and expenses.

LEDGER NOTEBOOK

1. Draw two baskets, one labeled Money In and one labeled Money Out. Draw or write five examples in each.
2. Copy the first page of your Ledger A neatly, with the date and your starting money.
3. Write one sentence about why Rockefeller kept Ledger A all his life.

From history. Rockefeller remembered September 26, 1855, the day he got his first job, for the rest of his life. He called it his “job day” and celebrated it every year, as some people celebrate a birthday.

COMMON MISTAKES

- Waiting until the end of the week to write things down. Record each amount the same day.
- Leaving out small amounts. Small amounts add up; Rockefeller recorded every cent.
- Changing numbers to make them match. An honest ledger shows what really happened.

Make it a game • Ledger A Daily Habit. Write down every cent you earned, spent or gave away last week, like young Rockefeller's Ledger A. Your parent calls out events from the week and you sort each into income or expense in thirty seconds. Score one point per right sort. Tell why recording every cent is a good habit.

7.2 THE LEDGER: GEORGE WASHINGTON'S ACCOUNT BOOKS

OBJECTIVES

- Tell how George Washington kept careful account books for his farms and for his expenses as commander of the army.
- Keep a ledger with date, description, money in, money out and a running balance.
- Check a ledger for mistakes by adding and subtracting carefully.

Warm-up. Your piggy bank has \$5. You earn \$2, spend \$1, then get \$3 for your birthday. How much do you have now? Work it out step by step, writing the amount after each change. That list of amounts is a running balance.

WATCH

Kids Korner - Keeping a Ledger

Financial Planning Kids Korner • 4:26

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

WHEN TO WATCH

After the story of Washington's accounts, before the garden-stand ledger.

Note: A small channel; a teacher shows a simple ledger on a board.

KEY TERMS

ledger

A book or table where money records are kept in order, with columns.

entry

One line in a ledger, recording one amount of money in or out.

balance

The amount of money you have after adding what came in and subtracting what went out.

running balance

A balance figured again after every entry, so you always know how much you have.

account

A record of money for one person, business or purpose.

CORE IDEAS

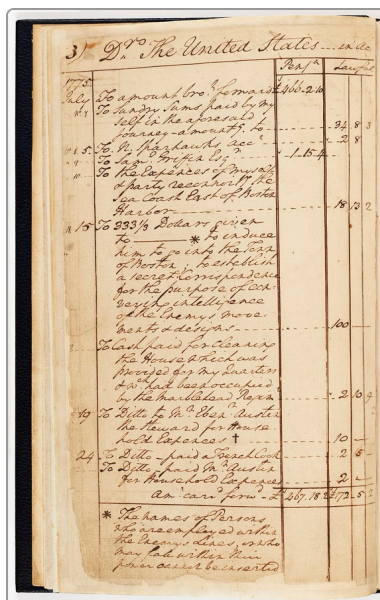
The story. George Washington was a surveyor, a farmer, a soldier and the first president of the United States. He was also a careful bookkeeper. From the time he was a young man, he kept **ledgers** for his money and his farms at Mount Vernon, his home in Virginia. He wrote down what his wheat and flour sold for, what he paid for tools and seed, what he lent and what was owed to him.

How they figured it out. In 1775, Congress asked Washington to lead the American army in the war for independence. He said he would not take any pay for the job. He asked only that Congress pay back his real expenses, and he promised to keep an exact **account**. For eight years he wrote down, in his own hand, what he spent on travel, food, horses and messengers. When the war ended in 1783, he gave his account books to the government so that anyone could check every **entry**. Government clerks went over them carefully and found them honestly and carefully kept.

The big idea. A **ledger** puts every money record in order, one line for each entry. Each line has a date, a description, money in or money out, and a **balance**. A **running balance** is figured after every line: $\text{last balance} + \text{money in} - \text{money out} = \text{new balance}$. With a running balance, you always know how much you have, and if something goes wrong, you can find the very line where the mistake happened.

In business today. Banks keep a running balance for every account and send statements showing every entry. Businesses use ledgers, now often on computers, to know how much money they have each day. Washington's honest accounts are a good example for anyone who handles other people's money: keep exact records and let others check them.

PICTURE STUDY



A Page from George Washington's Accounts with the United States, George Washington, July 1775 · Ink on paper (handwritten account book) · National Archives, Washington, D.C.

Image: Wikimedia Commons, public domain

This page was written by George Washington in July 1775, his first weeks as commander of the American army near Boston. He recorded what he spent for the army: his travel, the cleaning of the house used as his headquarters, a cook, household expenses and more. The money was counted in pounds, shillings and pence, the money of the colonies at the time.

Look closely

- Find the dates down the left side. What month and year are they?
- Find the columns of numbers on the right. Why do you think there is more than one column?
- Find the total at the bottom of the page. Why would a bookkeeper write a total?
- Read some of the descriptions with a parent. What kinds of things did Washington pay for?

Talk about it

1. Why did Washington write every expense in his own hand?
2. Why would he want government clerks to check his books?

3. How is this page like your own ledger? How is it different?

PROJECT

A Week in the Family Ledger

You will keep a ledger with a running balance for a pretend family business, find a planted mistake, and then start the same kind of ledger for your own money.

You will need

- Ledger notebook, a ruler and a pencil
- A calculator to check your work
- A parent to act as the auditor

Steps

1. Rule a ledger with five columns: Date, Description, Money In, Money Out, Balance.
2. Your pretend business, a garden stand, starts with \$20.00. Write it on the first line as “Starting balance.”
3. Record these entries and figure the running balance after each: Mon. sold tomatoes \$6.50; Tue. bought seeds \$3.25; Wed. sold flowers \$8.00; Thu. paid for baskets \$4.75; Fri. sold herbs \$5.50; Sat. gave to church \$2.00.
4. Check: your final balance should be \$30.00. If it is not, find the line where the mistake began.
5. **Find the mistake.** A parent writes a short ledger of five lines with one wrong balance on purpose. Find the mistake and circle it.
6. Now set up the same ledger for your own money, carrying over your balance from Ledger A. Keep it going for the rest of the unit.
7. Write two sentences: How does a running balance help you find mistakes? Why did Washington want others to check his accounts?

Tips

- Line up the decimal points in every column so the cents stay in the right place.
- Check each balance before going to the next line. One mistake carries down into every line after it.

Check your work

- ☐ My ledger has a date, description and running balance on every line.
- ☐ My final balance for the garden stand is correct.
- ☐ I found the planted mistake and can explain how I found it.

LEDGER NOTEBOOK

1. Copy the five ledger column headings and write what goes in each one.
2. Draw Mount Vernon with a wheat field and a mill, and write three things Washington might have recorded in his farm ledger.
3. Copy your garden-stand ledger with the correct balance circled.

From history. George Washington ran a large gristmill at Mount Vernon that ground wheat into flour. He kept careful records of his flour sales, and barrels of his flour were shipped as far as the West Indies.

COMMON MISTAKES

- Forgetting to carry the balance down to the next line.
- Putting money out in the Money In column. Check every entry.
- Not lining up the decimal points, so cents get added to dollars.

Make it a game • Running Balance Race. Draw a ledger with date, description, money in, money out and balance. Start with 20 chips. Your parent calls out ten transactions. Race to write each entry and keep the balance correct. Then check against the chips on the table. Whoever has the right balance first wins.

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 every day so he knows at once if one is missing. A ledger does the same for money: it helps you know the state of your flock.

7.3 PROFIT AND LOSS: MILTON HERSHEY'S FIRST CANDY SHOP

OBJECTIVES

- Tell how Milton Hershey's first candy shops lost money and how he finally succeeded.
- Figure profit or loss: money in – money out.
- Make a simple profit-and-loss report for a pretend business and for your own month.

Warm-up. A girl spends \$4 on lemons and sugar and sells lemonade for \$10. Did she make money or lose money? How much? Now she spends \$12 and sells only \$9. What happened this time?

WATCH

What is Profit?

Morgan Gumbert · 2:27

<https://www.youtube.com/watch?v=q0tlgyRqpCE>

WHEN TO WATCH

After the Hershey story, before the two candy shops.

Note: A small channel with a clear lemonade example of income – expenses = profit.

KEY TERMS

revenue

All the money a business takes in from sales.

profit

What is left when revenue is bigger than expenses: revenue – expenses.

expenses

All the money a business spends to make and sell its goods.

loss

What happens when expenses are bigger than revenue.

profit-and-loss report

A short report that lists revenue and expenses for a period of time and shows the profit or loss.

CORE IDEAS

The story. Milton Hershey was apprenticed to a candy maker in Lancaster, Pennsylvania, when he was a teenager. In 1876, at the age of eighteen, he opened his own candy shop in Philadelphia. He worked very hard, often making candy at night and selling it by day. But the shop kept losing money. Sugar was costly, he owed money for his supplies, and his sales did not cover his costs. After about six years of struggle and poor health, the shop closed. He tried again in Chicago, in New Orleans and in New York, and each time the business failed.

How they figured it out. In 1886 Hershey went back to Lancaster with almost nothing. He started making caramels made with fresh milk, which tasted better and kept longer than other caramels. A large order from a candy importer in England, along with a loan he got with the help of a friend, gave him the money to grow. This time his sales were bigger than his costs, month after month. His Lancaster Caramel Company made a profit and grew into a large factory. Years later he sold it and used the money to start the Hershey Chocolate Company.

The big idea. Revenue is all the money a business takes in from sales. Expenses are all the money it spends: ingredients, rent, tools, wages. When revenue is bigger than expenses, the business has a **profit**. When expenses are bigger than revenue, it has a **loss**. Profit = revenue – expenses. A business that has a loss month after month will run out of money and close, just as Hershey's first shops did. A **profit-and-loss report** shows the owner, in a few lines, whether the business is working.

In business today. Every business owner watches profit and loss closely. If expenses grow, the owner must sell more, raise prices or cut costs. Hershey's story also teaches that a loss is not the end: a wise owner looks honestly at the numbers, learns what went wrong, and tries again with a better plan.

PICTURE STUDY



Milton Hershey as a Young Candy Maker's Apprentice, Unknown photographer, 1870s · Photograph · Lancaster, Pennsylvania

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

This is Milton Hershey as a teenager, when he was learning to make candy as an apprentice in Lancaster. He stands proudly in his candy maker's apron. He did not yet know that his first shops would fail, or that one day he would build one of the most famous chocolate companies in the world.

Look closely

- Look at his apron and rolled-up sleeves. What do they tell you about his work?
- Look at how he stands. Does he look shy or confident?
- How old do you think he is in this picture?

Talk about it

1. What do you think Hershey learned as an apprentice that helped him later?
2. Why might a hard worker still have a business that loses money?
3. What would you say to young Milton Hershey after his first shop closed?

PROJECT

Profit or Loss? Two Candy Shops

You will make profit-and-loss reports for two pretend candy shops, find out which one made a profit, and then make one for your own money this month.

You will need

- Ledger notebook and a pencil
- A calculator to check your work
- Your ledger from Lesson 7.2

Steps

1. **Shop A** sold candy for \$85 this month. Its expenses were: sugar \$30, milk and butter \$15, rent \$25, boxes \$5. Add the expenses. Then figure revenue – expenses. Is it a profit or a loss?
2. **Shop B** sold candy for \$60. Its expenses were: sugar \$35, milk and butter \$10, rent \$25, boxes \$5. Figure the total expenses and the profit or loss.
3. Make a profit-and-loss report for each shop in your ledger with these lines: Revenue, Expenses (each one listed), Total expenses, Profit or loss.
4. For the shop with a loss, list three ways it could become profitable: sell more, raise prices, or cut costs. Figure how much it would need to change to break even.
5. Now make a profit-and-loss report for your own money this month, using your ledger: Money in, Money out, and what is left.
6. Make a bar graph comparing revenue and total expenses for Shop A, Shop B and you.
7. Write two sentences: What is the difference between a profit and a loss? What did Hershey do differently the second time?

Tips

- Always add up all the expenses before you subtract. Forgetting one expense can turn a loss into a pretend profit.
- Write a loss with the word “loss” beside it, so no one mistakes it for a profit.

Check your work

- ☐ I figured the profit or loss for both shops correctly.
- ☐ I made a profit-and-loss report for my own month.
- ☐ I can tell how Milton Hershey failed, learned and succeeded.

LEDGER NOTEBOOK

1. Write the formula large: Profit = Revenue – Expenses. Draw a happy face for a profit and a sad face for a loss with an example of each.
2. Make a timeline of Hershey's shops: 1876 Philadelphia; Chicago, New Orleans and New York; 1886 Lancaster caramels; the chocolate company.
3. Copy your two profit-and-loss reports neatly.

From history. Milton Hershey left school after the fourth grade. He learned business mostly by doing it, by failing, and by trying again. Later he and his wife Catherine used his fortune to start a school for children who needed a home, which still exists today.

COMMON MISTAKES

- Thinking revenue is profit. Revenue is all the money taken in; profit is what is left after expenses.
- Forgetting expenses like rent or boxes because they are not part of the candy itself.
- Thinking a loss means you are a failure. A loss is information: it shows what must change.

Make it a game • Two Candy Shops. Set up two pretend candy shops with different costs and sales written on cards. Figure out the revenue, expenses and profit or loss for each. Predict which shop will succeed, then compare. Tell why Hershey's first shops lost money and what he changed when he tried again.

7.4 LUCA PACIOLI AND THE MERCHANTS OF VENICE

OBJECTIVES

- Tell how Luca Pacioli, a Franciscan friar and teacher, wrote down the Venetian way of keeping books in 1494.
- Explain the three books of a Venetian merchant and the idea that every amount is written twice.
- Keep a simple two-column record showing where money came from and where it went, and check that the books balance.

Warm-up. When you give your friend a dollar, two things change: your money goes down by a dollar and your friend's goes up by a dollar. Think of three more trades or payments. For each one, say what goes down and what goes up.

WATCH

Luca Pacioli, Father of Double-entry Accounting

Franciscan Voice • 1:37

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

WHEN TO WATCH

After the story of Pacioli, before the Venetian merchant project.

Note: A Franciscan friar tells about his fellow Franciscan, Luca Pacioli.

BACKUP VIDEO

How did Venice Become a Trade Empire? | Animated History

The Armchair Historian • 7:42

<https://www.youtube.com/watch?v=FNZa9qazTvc>

KEY TERMS

merchant

A person who buys and sells goods to earn a living.

journal

A book where a merchant writes each day's business in order, as it happens.

double-entry bookkeeping

A way of keeping books in which every amount is written twice: once where it came from and once where it went.

inventory

A list of everything a business owns, counted and written down.

balance (books)

When the two sides of the books add up to the same total, showing no mistakes.

CORE IDEAS

The story. Five hundred years ago, Venice was one of the richest trading cities in the world. Its ships carried spices, silk, glass and cloth across the sea, and its **merchants** met every day near the Rialto bridge to buy, sell and borrow. Luca Pacioli was a Franciscan friar and a teacher of mathematics. As a young man he lived in Venice and taught the sons of a merchant, and he learned how Venetian merchants kept their books. He was also a friend of the painter Leonardo da Vinci. In 1494, in Venice, Pacioli published a big book of mathematics, the *Summa de arithmetica*. One part of it explained how to keep a merchant's books.

How they figured it out. Pacioli wrote down the method the best merchants already used. First, make an **inventory**: count and list everything you own and everything you owe. Then keep three books. In the memorandum, write quick notes of each day's business. In the **journal**, write each piece of business neatly, in order, by date. In the ledger, give each person and each kind of goods its own page. Every amount is written twice: once to show where it came from and once to show where it went. This is called **double-entry bookkeeping**. When you add up both sides, they must come out equal. If they do not, there is a mistake somewhere, and you must find it.

The big idea. Double entry gives a merchant a built-in check. If you sell cloth for 10 gold coins, your cloth goes down by 10 and your cash goes up by 10. Both changes are written down, so the two sides **balance**. Pacioli also told merchants to begin their books in the name of God and to keep them honestly, because a merchant's books show whether he deals fairly with his neighbors. It is often said that he advised a merchant not to go to sleep at night until his books balanced.

In business today. More than five hundred years later, businesses all over the world still use double-entry bookkeeping, now mostly on computers. Accountants, banks and companies everywhere use the method Pacioli wrote down. You will learn more about it in later grades.

PICTURE STUDY



The Miracle of the Relic of the Cross at the Rialto Bridge, Vittore Carpaccio, about 1496 · Oil on canvas ·
Gallerie dell'Accademia, Venice

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

Vittore Carpaccio painted this picture just two years after Pacioli's book was printed. It shows a religious event at the Rialto, but it also gives us a true picture of Venice in Pacioli's day: the old wooden Rialto bridge, the busy canal and the merchants in their long robes. The Rialto was the heart of Venice's trade, where merchants met, bankers kept their tables and books were checked.

Look closely

- Find the wooden bridge. How many people can you count on it?
- Find the gondolas. How many boatmen can you see working?
- Look at the chimneys on the houses. What shape are they?
- Find the men in long red and black robes on the shore. Some of them may be merchants of Venice.

Talk about it

1. Why would a city full of ships and merchants need good bookkeeping?
2. How is this busy place like a market or a bank today?
3. If you were a Venetian merchant, what goods might you buy and sell here?

PROJECT

Keep the Books like a Venetian Merchant

You will be a Venetian merchant for a week: make an inventory, record each trade in a journal, write every amount twice, and check that your books balance.

You will need

- Ledger notebook and a pencil
- Small items to be your “goods” (10 buttons for spices, 10 paper squares for cloth, 10 beads for glass)
- 20 pennies or play coins for “gold”
- A family member to trade with

Steps

1. **Inventory.** At the top of a page write “In the name of God” as Pacioli advised, and the date. List everything you own: 20 gold, 10 spices, 10 cloth, 10 glass.
2. **Journal.** Each day for five days, make one or two trades with a family member (sell 2 cloth for 4 gold, buy 3 spices for 3 gold). Write each trade in your journal: date, what happened.
3. **Twice.** For every trade, write two lines: what went down and what went up. Example: Cloth -2; Gold +4.
4. **Ledger.** Give each kind of thing its own small table (Gold, Spices, Cloth, Glass) and record every change, with a running total.
5. At the end of the week, count your real gold and goods. Do they match your ledger totals?
6. If anything does not match, go back through your journal to find the mistake. Write what you found.
7. Write two sentences: Why did writing each trade twice help you catch mistakes? Why did Pacioli tell merchants to keep their books honestly?

Tips

- Write in your journal right after each trade, not later.

- If your books balance on the first try, ask a parent to secretly change one item and see if you can find it.

Check your work

- ☐ I made an inventory and kept a journal and a ledger for a week.
- ☐ I wrote every trade twice and my ledger matches my real goods.
- ☐ I can tell who Luca Pacioli was and what he wrote down in 1494.

LEDGER NOTEBOOK

1. Draw three books and label them: Memorandum (quick notes), Journal (each day in order), Ledger (a page for each thing).
2. Draw a balance scale with “where it came from” on one side and “where it went” on the other.
3. Make a timeline: about 1447 Pacioli born; 1494 the *Summa* printed in Venice; today, double-entry bookkeeping is used around the world.

From history. Pacioli’s book was one of the first math books printed with the new printing press, so copies spread quickly across Europe. Within a few years merchants in many countries were learning the “Venetian method” from it.

COMMON MISTAKES

- Thinking Pacioli invented double-entry bookkeeping. Merchants already used it; Pacioli explained it clearly in a printed book so many more people could learn it.
- Writing only one side of a trade. Every trade changes two things.
- Thinking the books balance means you made a profit. Balanced books mean the records are correct, not that you made money.

Make it a game • Venetian Books Match. Make cards for the three books of a Venetian merchant: inventory, journal and ledger. Make another set with what each one holds. Mix them and race to match all pairs in under one minute. Then explain the idea that every amount is written twice, as Luca Pacioli taught.

BOOKKEEPING

Bookkeeping means keeping an honest written record of money: what comes in, what goes out and what is left. It sounds simple, but it is one of the most important skills in business. In this unit you will meet a sixteen-year-old bookkeeper named John D. Rockefeller and his little notebook called Ledger A, George Washington and the careful account books he kept for his whole life, Milton Hershey and the candy shop that lost money before his later success, and Luca Pacioli, the friar who wrote down how the merchants of Venice kept their books.

You will learn to keep a ledger with a running balance, to tell a profit from a loss, and to check that your books balance. By the end of the unit you will have kept a full month of ledger pages for your own money, and you will know why a wise person “be diligent to know the state of thy flocks” (Proverbs 27:23).

PREREQUISITES

- Can add and subtract money to \$20 and beyond
- Knows cost, price and profit per item (Lesson 6.4)
- Has kept simple tables in the ledger notebook all year

MASTERY CHECKLIST

- ☐ I can sort money into money in (income) and money out (expenses).
- ☐ I can keep a ledger with dates, descriptions and a running balance.
- ☐ I can find profit or loss: money in – money out.
- ☐ I can tell how Luca Pacioli and the merchants of Venice kept their books, and why honest records matter.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Next Gen Personal Finance (NGPF)**: Free money lessons and activities written for teachers and families, including simple activities on tracking money. A parent can adapt the elementary ideas for this unit.
- **George Washington's Mount Vernon**: Free, at mountvernon.org. The home of George Washington, with articles about his farms, mill and business records. Search "ledger" or "account book" for Lesson 7.2.

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

7.1 Money In and Money Out: Rockefeller's Ledger A	2 sessions of 45 minutes
7.2 The Ledger: George Washington's Account Books	2 sessions of 45 minutes
7.3 Profit and Loss: Milton Hershey's First Candy Shop	2 sessions of 45 minutes
7.4 Luca Pacioli and the Merchants of Venice	2 sessions of 45 minutes

UNIT 7 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**
What is bookkeeping?
2. **5 pts**
Sort these into income or expenses: allowance, buying a book, selling cookies, paying for seeds, a birthday gift of money.
3. **5 pts**
What did young John D. Rockefeller write in his Ledger A?

4. (5 pts)

Why did George Washington keep exact accounts of his expenses during the war?

5. (5 pts)

A ledger starts with \$10.00. Then: money in \$4.50, money out \$2.25, money in \$3.00. What is the running balance after each line?

6. (5 pts)

A candy shop had revenue of \$90 and expenses of \$65. Profit or loss? How much?

7. (5 pts)

Another shop had revenue of \$50 and expenses of \$70. Profit or loss? How much? Name one thing it could do.

8. (5 pts)

What would happen to a business that never kept a ledger?

9. (5 pts)

Who was Luca Pacioli, and what did he do in 1494?

10. (5 pts)

In double-entry bookkeeping, why is every amount written twice?

ANSWER KEY

1. Keeping an honest written record of money that comes in and goes out.
2. Income: allowance, selling cookies, birthday gift. Expenses: buying a book, paying for seeds.
3. Every cent he earned, spent and gave, including his pay, his living costs and his gifts to church and the poor.
4. He took no pay, only his real expenses, and he wanted the government to be able to check every amount so he would be honest with the people's money.
5. \$14.50, then \$12.25, then \$15.25.
6. Profit of $\$90 - \$65 = \$25$.
7. Loss of $\$70 - \$50 = \$20$. It could sell more, raise prices or cut costs.
8. It would not know how much money it had, whether it made a profit, or where money was lost or stolen, and it could run out of money without knowing why.
9. A Franciscan friar and math teacher who published the Summa de arithmetica in Venice, explaining how merchants kept their books with double-entry bookkeeping.
10. Because every trade changes two things (one goes down, one goes up). Writing both lets the two sides balance, which shows the books have no mistakes.

PORTFOLIO PIECE: A MONTH OF LEDGER PAGES

Keep your own ledger for one whole month (four weeks). Every line needs a date, a description, money in or money out, and a running balance. At the end of each week, count your real money and check it against your balance, writing “checked” and the date. At the end of the month, write a one-page profit-and-loss report for your month: total money in, total money out, and what is left, with a bar graph and three sentences about what you learned and what you will change next month.

LOOK FOR	WHAT IT MEANS
Complete records	Every day of the month is recorded, with dates and clear descriptions.
Correct balances	Running balances are correct and checked against real money each week.
Report	The month’s profit-and-loss report is correct, with a bar graph.
Honesty and reflection	Mistakes are corrected openly, not hidden, and the reflection is thoughtful.

SAVING, INVESTING AND GIVING

What should you do with the money you earn? In this last unit you will learn three wise things to do with it: **save** it for a goal, let it **grow** through interest and by owning a share of a business, and **give** part of it cheerfully. You will meet young Benjamin Franklin, who paid far too much for a whistle and learned to think before spending; Franklin again as an old man, whose gift of money to two cities grew for two hundred years; the merchants of Amsterdam, who bought the first shares in a company in 1602; and John Wesley, who taught, “Gain all you can, save all you can, give all you can.”

In your ledger you will make a savings plan, a growth chart for interest, a record of a pretend share in a family business and a Give-Save-Spend plan. The unit ends with the **family market day**, when you set up a table with your best work from the year and sell or show something you made.

PREREQUISITES

- Can keep a ledger with a running balance (Unit 7)
- Knows profit and loss (Lesson 7.3)
- Can multiply and use a calculator

MASTERY CHECKLIST

- ☐ I can set a savings goal and make a plan to reach it.
- ☐ I can explain interest and show with a table how money can grow when interest is added again and again.
- ☐ I can explain what it means to own a share of a business and why it has risk.
- ☐ I can make a Give-Save-Spend plan and explain why Christians give cheerfully.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Way to Wealth, by Benjamin Franklin (1758)**: Free at Project Gutenberg. Franklin's best sayings from Poor Richard about work and thrift, gathered into one short speech. Read a few aloud in Lessons 8.1 and 8.2. Ages 9 and up with a parent.
- **One Grain of Rice, by Demi (Scholastic)**: A picture-book folktale from India in which a clever girl asks for one grain of rice, doubled every day for thirty days. A wonderful way to see how fast doubling grows, for Lesson 8.2. Search the title on the publisher's site. Ages 5–10.
- **Federal Reserve Bank of St. Louis: Econ Lowdown**: Free lessons on saving, interest and banks for children, from a Federal Reserve bank. A parent may make a free teacher account to find them.

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	Saving for a Goal: Franklin and the Whistle	2 sessions of 45 minutes
8.2	Interest Grows: Franklin's 200-Year Gift	2 sessions of 45 minutes
8.3	Owning a Share: The First Shares in Amsterdam	2 sessions of 45 minutes
8.4	Giving Cheerfully and the Family Market Day	2 sessions of 45 minutes

UNIT 8 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**

What did Benjamin Franklin learn from the whistle?

2. **5 pts**

A bicycle costs \$60. You have \$15 saved and can save \$5 a week. How many weeks will it take?

3. 5 pts

What is interest?

4. 5 pts

You put \$100 in a bank that adds 10% interest each year, and you leave the interest in. How much will you have after 1 year? After 2 years?

5. 5 pts

What did Benjamin Franklin leave to Boston and Philadelphia, and what was it for?

6. 5 pts

What is a share of stock? What is a dividend?

7. 5 pts

Why did the Dutch East India Company sell shares to many people instead of one rich merchant paying for everything?

8. 5 pts

What could happen if someone put all his savings into one company and it failed?

9. 5 pts

What were John Wesley's three rules for the use of money?

10. 5 pts

You earned \$20 profit at market day. You give 10%, save 30% and spend the rest. How much goes to each?

ANSWER KEY

1. Not to pay too much for something he did not really need; to think before spending. “Don’t give too much for the whistle.”
2. $\$60 - \$15 = \$45$ more. $\$45 \div \$5 = 9$ weeks.
3. Money paid for the use of someone else’s money: a bank pays it on savings, and a borrower pays it on a loan.
4. $\$100 + \$10 = \$110$. $\$110 + \$11 = \$121$.
5. 1,000 pounds to each city, to be lent with interest to young craftsmen so they could start their shops; the fund grew for 200 years and then was used for schools and scholarships.
6. A share is a small piece of ownership in a company. A dividend is part of the company’s profit paid to shareholders.
7. Voyages cost too much and were risky. Many shareholders together could pay for many ships, and if one ship sank each person lost only a little.
8. He could lose all his savings. Spreading money among many companies lowers the risk (Ecclesiastes 11:2).
9. Gain all you can, save all you can, give all you can.
10. Give \$2, Save \$6, Spend \$12.

PORTFOLIO PIECE: MY MARKET DAY AND GIVE-SAVE-SPEND PLAN

Make a two-page record of your family market day. On the first page, draw or photograph your table, list what you showed and sold, and copy your sales ledger with the total money taken in, your costs and your profit. On the second page, show your Give-Save-Spend plan with the percent and dollar amount for each jar, tell where your gift went and why, and update your savings thermometer from Lesson 8.1. End with a short paragraph about the most important thing you learned about money this year.

LOOK FOR	WHAT IT MEANS
Market day	The table showed work from every unit, and the student explained it clearly to guests.
Records	The sales ledger, costs and profit are complete and correct.
Give-Save-Spend	The plan is figured correctly and the gift was really given.
Reflection	The closing paragraph is thoughtful and connects money to work, honesty and generosity.

8.1 SAVING FOR A GOAL: FRANKLIN AND THE WHISTLE

OBJECTIVES

- Tell Benjamin Franklin's story of the whistle and what he learned from it.
- Explain why people save and how a savings goal helps.
- Make a savings plan with a goal, a weekly amount and a chart to track it.

Warm-up. Think of something you would really like to have that costs more than you have right now. Write down its price. How many weeks would it take to save for it if you saved \$1 a week? \$2 a week?

WATCH

Saving and Savings Goals | Explore Economics Sing-along (Grades 2-5)

Federal Reserve Bank of St. Louis · 4:22

<https://www.youtube.com/watch?v=9SwOi0nfsu0>

WHEN TO WATCH

After the whistle story, before your savings plan.

Note: A sing-along from the Federal Reserve Bank of St. Louis for grades 2–5.

BACKUP VIDEO

Benjamin Franklin for Kids | Inventor, Scientist, & Founding Father

Homeschool Pop · 2:07

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

KEY TERMS

save

To keep money now so you can use it later.

savings goal

Something you are saving for, with its price and a date you hope to reach it.

impulse buy

Buying something suddenly, without thinking or planning.

patience

Being willing to wait calmly for something good.

thrift

Using money and things carefully,
without waste.

CORE IDEAS

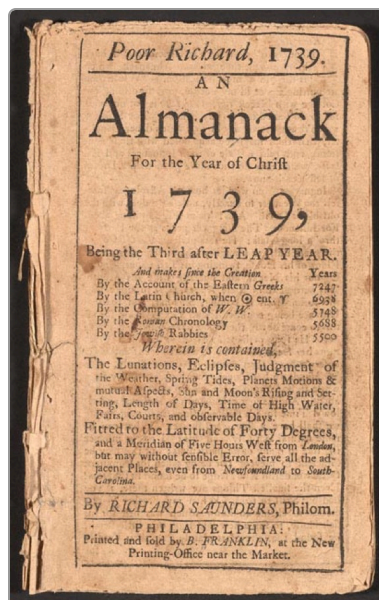
The story. When Benjamin Franklin was seven years old, his family gave him some coins on a holiday. He ran toward a shop that sold toys, but on the way he met a boy blowing a whistle. Franklin loved the sound so much that he offered all his coins for it, and the boy took them. Franklin went home and whistled all over the house, very pleased, until his brothers, sisters and cousins told him he had paid four times what the whistle was worth. They teased him about all the good things he could have bought with the rest of his money. He cried more over that, he said, than the whistle had given him pleasure.

How they figured it out. Many years later, Franklin wrote that the lesson stayed with him all his life. Whenever he was tempted to buy something he did not need, he said to himself, “Don’t give too much for the whistle,” and he saved his money. Franklin became a printer, and for twenty-five years he printed a yearly book called *Poor Richard’s Almanack*, full of weather, calendars and short wise sayings about work and **thrift**, such as “A penny saved is twopence clear.” He saved, worked hard and became one of the most successful businessmen in the American colonies.

The big idea. To **save** means to keep money now so you can use it later for something better. A **savings goal** helps: you know what you are saving for, how much it costs, and how long it will take. An **impulse buy**, like Franklin’s whistle, uses up money that could have gone toward a goal. Saving takes **patience**, but it lets you buy things that matter more, be ready for emergencies, and have something to give. The Bible points to the ant, which “provideth her meat in the summer, and gathereth her food in the harvest” (Proverbs 6:8).

In business today. Families save for homes, cars, schooling and emergencies. Businesses save part of their profits to buy new machines or get through hard times. Many people keep their savings in a bank, where it is safe and can earn interest, as you will learn in the next lesson.

PICTURE STUDY



Poor Richard, 1739: An Almanack, Benjamin Franklin, printer, 1738 (for the year 1739) · Printed title page
· Philadelphia

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

Every year Benjamin Franklin printed and sold *Poor Richard's Almanack*. Families bought it for its calendar, weather guesses and the times of sunrise and the tides, and they loved its short, funny sayings about hard work and saving. It was pretended to be written by “Richard Saunders,” but Franklin wrote it himself.

Look closely

- Find the year. How many years ago was this printed?
- Find the name of the printer at the bottom. Where was his shop?
- Read the list of things the almanack contained. Which would a farmer find most useful?
- Find the name “Richard Saunders.” Who really wrote the almanack?

Talk about it

1. Why would families buy a new almanack every year?
2. How did printing the almanack help Franklin save and grow his business?
3. Make up your own short saying about saving, the way Poor Richard would.

PROJECT

My Savings Plan

You will choose a real savings goal, make a plan to reach it, and track your saving on a chart for the rest of the unit.

You will need

- A jar or envelope labeled with your goal
- Ledger notebook, graph paper and colored pencils
- A store flyer or a parent's help to find the price of your goal

Steps

1. Choose a goal you really want, with a parent's approval. Find its real price and write it down.
2. Write how much money you already have saved.
3. Figure how much more you need: price – saved now.
4. Decide how much you can save each week from allowance, chores or gifts. Divide to find how many weeks it will take.
5. Draw a savings thermometer on graph paper, with the goal at the top and lines for each dollar.
6. Each week, put your savings in the jar, record it in your ledger, and color the thermometer up to your new total.
7. Write a “whistle list”: three things you might be tempted to buy on impulse instead. Next to each, write how many weeks it would delay your goal.

Tips

- Make your goal real but reachable. A goal that takes a few weeks or months is easier to stick with than one that takes years.
- Keep your savings jar somewhere you do not see it every day, so it is not easy to spend.

Check your work

- ☐ I chose a goal and figured how many weeks it will take to save for it.
- ☐ I am tracking my saving in my ledger and on a thermometer chart.

- I can tell the story of Franklin's whistle and what it taught him.

LEDGER NOTEBOOK

1. Draw young Benjamin Franklin with his whistle, and write "Don't give too much for the whistle" underneath.
2. Copy three sayings from Poor Richard or write three of your own about saving.
3. Copy your savings plan and thermometer chart.

From history. Franklin told the story of the whistle in a letter he wrote in 1779, when he was over seventy and living in France. He wrote that when he saw people giving up too much for things they wanted, he would say they had paid "too much for their whistle."

COMMON MISTAKES

- Thinking saving means never spending. Saving means spending wisely later on something that matters more.
- Setting a goal without a plan. Write down how much and how often you will save.
- Thinking small amounts are not worth saving. Small amounts saved every week add up.

Make it a game • Whistle Regrets. Give each player ten chips. Your parent offers a shiny whistle-like toy for all ten chips and a book for six. Decide, then explain what Franklin would say. Play three rounds with different offers and a savings goal in mind. Score a point whenever you save wisely and name the thing you gave up.

Scripture. "Go to the ant, thou sluggard; consider her ways, and be wise: Which having no guide, overseer, or ruler, Provideth her meat in the summer, and gathereth her food in the harvest." (Proverbs 6:6-8, KJV)

No one tells the ant to save, yet it gathers food in summer for the winter ahead. A wise saver plans ahead too, setting aside a little at a time.

8.2 INTEREST GROWS: FRANKLIN'S 200-YEAR GIFT

OBJECTIVES

- Explain interest: money a bank or borrower pays for the use of your money.
- Tell how Benjamin Franklin's gift to Boston and Philadelphia grew for two hundred years.
- Make a table showing how money grows when interest is added again and again.

Warm-up. Plant a bean in a cup of soil, or remember a seed you have planted. A small seed can grow into a plant with many more seeds. How is saved money like a seed?

WATCH

What is Compound Interest? A Simple Explanation for Kids and Beginners

Easy Peasy Finance • 3:03

<https://www.youtube.com/watch?v=ZonuaS7jUdM>

WHEN TO WATCH

After the story of Franklin's gift, before the interest table.

KEY TERMS

interest

Money paid for the use of someone else's money. A bank pays you interest on savings; a borrower pays interest on a loan.

deposit

Money you put into a bank account.

interest rate

How much interest is paid each year for every \$100, written as a percent, like 5%.

compound interest

Interest earned on your money and also on the interest you already earned, so it grows faster and faster.

loan

Money borrowed that must be paid back, usually with interest.

CORE IDEAS

The story. When Benjamin Franklin was a young man, a few kind people lent him money to start his printing business. He never forgot it. When he died in 1790, his will left 1,000 pounds to the city of Boston, where he was born, and 1,000 pounds to Philadelphia, where he had lived and worked. The money was to be lent to young married craftsmen, such as blacksmiths and printers, to help them start their own shops. They would pay it back with a small amount of **interest**, so the money could be lent again and again.

How they figured it out. Franklin did the arithmetic. He wrote that if the loans were repaid with interest, the money would keep growing. After 100 years, part of it could be spent on things that would help the city, and the rest would keep growing for another 100 years. Not everything went as he planned: some borrowers did not repay, and over time fewer craftsmen needed such loans. But the money did grow. After one hundred years, Boston used part of its fund to build a school for training young people in trades, which still exists. After two hundred years, in 1990, each city's gift had grown from 1,000 pounds into millions of dollars, and the cities used it for schools and scholarships.

The big idea. **Interest** is money paid for the use of money. When you **deposit** money in a bank, the bank lends some of it to others and pays you interest. If you leave the interest in the bank, next year you earn interest on your money and on last year's interest too. That is **compound interest**, and it makes money grow faster and faster the longer you wait. For example, \$100 earning 10% a year grows to \$110 after one year, \$121 after two years, and about \$259 after ten years. Interest works the other way on a **loan**: a borrower must pay back more than he borrowed.

In business today. Banks pay interest on savings accounts and charge interest on loans for houses, cars and businesses. People who save early and wait patiently let compound interest do much of the work. Jesus told a parable of servants who were given talents of money: the faithful ones put the money to work and it grew, and their master said, "Well done, thou good and faithful servant" (Matthew 25:21).

PICTURE STUDY



Benjamin Franklin, David Martin, 1767 · Oil on canvas · The White House, Washington, D.C.

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

The Scottish painter David Martin painted Franklin in London in 1767, when Franklin was about sixty and famous as a printer, scientist and writer. He is reading carefully, as he did all his life. The bust beside him is of Isaac Newton, the great scientist Franklin admired.

Look closely

- Find Franklin's spectacles. Franklin later invented bifocals, glasses for seeing both near and far.
- Look at how he holds his chin. What does that tell you about what he is doing?
- Look at his clothes and the room. Does he look like a hard-working printer or a gentleman? Could he be both?

Talk about it

1. Franklin was helped by loans when he was young. Why do you think he wanted to help young craftsmen in the same way?
2. What does it mean to plan two hundred years ahead? Who were the stakeholders in Franklin's gift?
3. What is something you could start now that might grow for a long time?

PROJECT

Watch It Grow: An Interest Table

You will make tables to see how money grows with simple interest and with compound interest, and play the doubling game from *One Grain of Rice*.

You will need

- A calculator
- Ledger notebook and graph paper
- A bag of dried beans or rice

Steps

1. **Simple interest.** Pretend you put \$100 in a bank that pays \$10 every year, and you take the \$10 out each time. Make a table for 5 years: Year, Money in bank, Interest taken out, Total interest so far.
2. **Compound interest.** Now leave the interest in the bank. Each year, multiply the money by 1.1 (that adds 10%). Make a table for 10 years: Year, Money at start, Interest ($\times 0.1$), Money at end. Round to the nearest cent.
3. Compare after 5 years: how much more did you have with compound interest?
4. Make a line graph with both kinds of interest for 10 years. Which line curves upward faster?
5. **The doubling game.** Put 1 bean on day 1, 2 on day 2, 4 on day 3, doubling each day. Use beans for as many days as you can, then keep doubling on paper. On which day do you pass 1,000? 1,000,000?
6. Write two sentences: Why does compound interest grow faster and faster? Why does waiting matter?

Tips

- Use the calculator, but write every step in your table so you can check it.
- Real banks today usually pay much less than 10%. We use 10% because it is easy to figure.

Check your work

- ☐ I made correct tables for simple and compound interest.

- ☐ I can explain why compound interest grows faster.
- ☐ I can tell the story of Franklin's gift to Boston and Philadelphia.

LEDGER NOTEBOOK

1. Draw a seed, a small plant and a big tree, and label them Year 1, Year 10, Year 30 with growing dollar amounts.
2. Copy your compound-interest table and line graph.
3. Write the words of Matthew 25:21 and one sentence about how they connect to saving.

From history. Benjamin Franklin did not finish school past the age of ten. He started work in his father's candle and soap shop, then learned printing as an apprentice to his older brother. He taught himself by reading every book he could borrow.

COMMON MISTAKES

- Thinking interest is free money. The bank pays interest because it lends your money to others who pay it more interest.
- Taking the interest out each year and expecting compound growth. Compound interest needs the interest left in.
- Forgetting that loans charge interest too. Borrowing costs money.

Make it a game • Two Hundred Year Gift. Start with ten beans. Each year add one bean for every ten you have, and keep adding as the pile grows. Fill in an interest table for ten years, guessing the total before you count. Tell how Ben Franklin's gift to Boston and Philadelphia grew for two hundred years. Compare totals with your parent.

Scripture. "His lord said unto him, Well done, thou good and faithful servant: thou hast been faithful over a few things, I will make thee ruler over many things: enter thou into the joy of thy lord." (Matthew 25:21, KJV)

In the parable of the talents, the faithful servants put their master's money to work and it grew. We are stewards of what God gives us, and wise saving is one way to be faithful with a little.

8.3 OWNING A SHARE: THE FIRST SHARES IN AMSTERDAM

OBJECTIVES

- Tell how the Dutch East India Company sold the first shares to ordinary people in Amsterdam in 1602.
- Explain what a share of stock is, what a dividend is, and why owning shares has both reward and risk.
- Run a pretend family business with shareholders and figure each one's share of the profit.

Warm-up. You and three friends want to buy a \$20 kite together, and each puts in \$5. Who owns the kite? If you later sell rides on it and earn \$8, how should the money be divided? Why?

WATCH

What are Stocks? A Simple Explanation for Kids and Beginners

Easy Peasy Finance • 4:22

<https://www.youtube.com/watch?v=bJg-rF3bLH0>

WHEN TO WATCH

After the story of the first shares, before the family company.

BACKUP VIDEO

The Birth of Public Stock: The Dutch East India Company

The Art of Being Human • 1:53

<https://www.youtube.com/watch?v=M1AjFOqiW-U>

KEY TERMS

share

One small piece of ownership in a company.

shareholder

A person who owns one or more shares of a company.

stock

The shares of a company, taken together.

dividend

Part of a company's profit paid out to its shareholders.

stock exchange

A place where people buy and sell shares.

CORE IDEAS

The story. Four hundred years ago, Dutch ships sailed all the way to the islands of Asia to buy pepper, nutmeg, cloves and cinnamon, which sold for high prices in Europe. But a voyage cost a fortune: ships, sailors, food and goods for trading, and it took a year or more. Many ships sank or were captured. No one merchant could pay for many voyages or bear the risk alone. In 1602 the Dutch East India Company was formed, and anyone in the Netherlands, not just rich merchants, was invited to buy a part of it. More than a thousand people in Amsterdam signed up, from wealthy traders to servants and craftsmen.

How they figured it out. Each person who put in money owned a **share** of the company. Together the **shareholders** paid for many ships and voyages. If a ship sank, everyone lost a little instead of one person losing everything. If the voyages made a profit, part of it was paid to the shareholders as a **dividend**. And if a shareholder needed his money back, he did not have to wait for the ships: he could sell his share to someone else. People began meeting every day to buy and sell shares, and in 1611 Amsterdam opened a building for this trading, called the Exchange. It was one of the first **stock exchanges**.

The big idea. When you own a share, you own a small piece of a business. If the business earns a profit, you may receive dividends, and your share may become worth more. If the business does poorly, your share may be worth less, and you could lose your money. That is the **risk**. The Bible gives wise advice about risk: “Give a portion to seven, and also to eight” (Ecclesiastes 11:2). Spreading your money among many businesses means one failure will not wipe you out.

In business today. Millions of people own shares in companies, often through savings for retirement. Shares are bought and sold every day on stock exchanges in New York, London, Tokyo and other cities. A wise investor saves first, spreads out his risk, thinks long term and never invests money he cannot afford to lose. Children in this course practice only with pretend money.

PICTURE STUDY



The Courtyard of the Old Exchange in Amsterdam, Emanuel de Witte, 1653 · Oil on canvas · Museum Boijmans Van Beuningen, Rotterdam
Image: [Wikimedia Commons](#), public domain

This is the Exchange in Amsterdam, built in 1611, where merchants met every day at set hours to trade goods and buy and sell shares in the Dutch East India Company. The painter Emanuel de Witte loved to paint buildings with light pouring through them, and here he shows the merchants at their daily business.

Look closely

- Find the clock tower. Why would a clock matter at an exchange where trading happened at set hours?
- Find the men talking in small groups. What do you think they are discussing?
- Find the man in the red cloak. How is he different from the others?
- Find the dog. Even a busy market has a few visitors who are not there to trade!

Talk about it

1. Why would merchants want one special place to meet every day?
2. If you owned a share in a ship sailing to Asia, how would you feel when you heard news of a storm?

3. How is this exchange like a market? How is it different?

PROJECT

The Family Lemonade Company: Shares and Dividends

You will start a pretend company, sell shares to family members with play money, run a few pretend “voyages,” and pay dividends from the profit.

You will need

- Play money
- Index cards for share certificates
- A die (number cube)
- Ledger notebook and a calculator

Steps

1. Your company needs \$40 of play money to start. Sell 10 shares at \$4 each to family members. Make a share certificate for each: company name, owner, number of shares.
2. Keep a shareholder list: Name, Number of shares.
3. **Run a season.** Roll the die to see how the season went: 1 = a loss of \$10; 2 = no profit; 3 or 4 = \$10 profit; 5 = \$20 profit; 6 = \$30 profit.
4. If there is a profit, pay half of it as dividends and keep half in the company. Figure the dividend per share: $(\text{profit} \div 2) \div 10 \text{ shares}$.
5. Pay each shareholder: dividend per share $\times$ number of shares. Record every payment in your ledger.
6. Play four seasons. Make a table: Season, Roll, Profit or loss, Dividend per share, Money kept in company.
7. Write two sentences: Did the shareholders gain or lose overall? What is the risk of owning shares, and how could someone spread out that risk?

Tips

- A loss means no dividend that season, and the company’s money goes down.
- Remember: this is pretend money only. Real investing is for grown-ups.

Check your work

- ☐ I made share certificates and a shareholder list.

- ☐ I figured dividends per share correctly for each season.
- ☐ I can explain what a share is and why owning one has risk.

LEDGER NOTEBOOK

1. Draw a Dutch sailing ship and around it write the names of ten pretend shareholders, each with an arrow to the ship.
2. Copy one of your share certificates.
3. Copy your four-season table and circle the best season.

From history. The Dutch East India Company was known in Dutch by its initials, VOC. Its ships, called East Indiamen, carried spices, tea, silk and porcelain back to Amsterdam for nearly two hundred years.

COMMON MISTAKES

- Thinking a share is a loan. A shareholder is an owner, not a lender.
- Thinking shares always go up. They can go down, and a company can fail.
- Putting all your money in one company. Spreading it out lowers the risk.

Make it a game • Family Share Market. Divide your family lemonade company into ten paper shares. Sell some shares to your parent for pretend chips. When the pretend stand earns a profit, pay out dividends per share. Talk about what happens if the stand loses. Tell how the Dutch East India Company sold the first shares in Amsterdam.

8.4 GIVING CHEERFULLY AND THE FAMILY MARKET DAY

OBJECTIVES

- Tell how John Wesley taught Christians to “gain all you can, save all you can, give all you can,” and how he lived it.
- Make a Give-Save-Spend plan and explain why Christians give cheerfully.
- Plan and hold a family market day showing the best work of the year.

Warm-up. Think of a time someone gave you something you did not expect: a gift, help with a hard job, a kind word. How did it feel? Now think of a time you gave something away. Which felt better?

WATCH

 **Charitable Giving for Kids | How to be Charitable | National Give Something Away Day | Twinkl USA**

Twinkl Teaching Resources - United States · 3:10

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

WHEN TO WATCH

After the story of John Wesley, before you plan market day.

BACKUP VIDEO

Two Minute Methodism - The Use of Money (Sermon 50)

Wesley Freedom · 2:36

<https://www.youtube.com/watch?v=W0R0uhELAUk>

KEY TERMS

generosity

Being glad to share what you have with others.

charity

Help given to people in need, or a group that gives such help.

tithe

A tenth of one's income, given to God's work.

budget

A plan for how money will be given, saved and spent.

steward

A person who takes care of something that belongs to someone else.

CORE IDEAS

The story. John Wesley was an English preacher of the 1700s who traveled on horseback all over Britain, preaching in fields and towns. In 1760 he published a sermon called “The Use of Money” with three simple rules: “Gain all you can, save all you can, give all you can.” Gain all you can, by honest, hard work that harms no one. Save all you can, by not wasting money on things you do not need. Give all you can, to God’s work and to people in need.

How they figured it out. Wesley lived by his own rules. As a young teacher at Oxford, he worked out how much he needed to live on, and he gave away the rest. Later, his books sold very well and his income grew many times over, but he kept living on about the same small amount and gave away almost everything else, to the poor, to schools and to people in prison. He believed that money is a good servant when it is used to help others, and a bad master when we love it.

The big idea. Everything we have belongs to God, and we are His **stewards**. A **budget** is a plan for how money will be used, and a good one has three parts: give, save and spend. Many Christian families give a **tithe**, a tenth, to their church, and give more as they are able to **charity** and to neighbors in need. Jesus noticed a poor widow who put two tiny coins into the temple offering, and He said she had given more than all the rich, because she gave all she had (Mark 12:41-44). God cares about the heart of the giver more than the size of the gift: “God loveth a cheerful giver” (2 Corinthians 9:7).

Try it. Your family market day puts the whole year together. You will make or bring something to sell or show, price it fairly, make an honest sign, keep a sales ledger, figure your profit, and then divide it into Give, Save and Spend, just as Wesley taught.

PICTURE STUDY



The Market Cart, Thomas Gainsborough, 1786 · Oil on canvas · Tate Britain, London

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

Thomas Gainsborough loved to paint the English countryside. Here a farm family is taking a cart full of vegetables to market through the woods, early in the day. Families like this one grew food all season and brought it to market to sell, just as you will bring your work to the family market day.

Look closely

- Find the cart. What is piled on it?
- Count the people. Who is riding and who is walking?
- Find the dog and the white horse.
- Find the woodcutter at the right. What is he doing? Is he going to market too?

Talk about it

1. What work did this family do before they could take their cart to market?
2. When they sell their vegetables, what wise things could they do with the money?
3. What will you bring to your own market day?

Safety first. A parent runs the cash box and supervises all selling. Sell only to family, friends and neighbors you know, at home or at a gathering your parents choose. If you sell food, follow your family's food-safety rules and check local rules first.

PROJECT

Give, Save, Spend and the Family Market Day

You will plan and hold a family market day, keep a sales ledger, figure your profit, and divide it into Give, Save and Spend.

You will need

- A table, a tablecloth and a sign
- Your best project or portfolio from each unit this year
- Something to sell: your product from Unit 6, baked goods, cards or crafts
- Price tags, a cash box with coins for change, and play money for guests if you like
- Three jars or envelopes labeled Give, Save and Spend
- Ledger notebook and a pencil

Steps

1. With a parent, choose a day and invite family, grandparents or friends.
2. Set up your table: one item from each unit (a trade log, the money timeline, the price survey, the stakeholder report, the fair rules poster, the product plan, the month of ledger pages, the savings chart) and your products to sell.
3. Make honest price tags and a sign. Figure your cost per item first, as in Lesson 6.4.
4. During the market day, keep a sales ledger: Time, Item, Price, Money received, Change given.
5. Explain to each guest how you made and priced your product and what you learned this year.
6. Afterward, count the money. Figure your profit: money in – costs.
7. Make a Give-Save-Spend plan. For example, give 10%, save 30% and spend 60%. Figure each amount, put the money in the jars, and record it in your ledger.
8. Decide where your Give money will go, and give it.

Tips

- Count the money in the cash box with a parent at the start and at the end.
- Smile, thank every guest, and tell the truth about every item.

Check your work

- ☐ I held a market day and kept a correct sales ledger.
- ☐ I figured my profit and divided it into Give, Save and Spend.
- ☐ I can explain Wesley's three rules and why Christians give cheerfully.

LEDGER NOTEBOOK

1. Draw three jars labeled Give, Save and Spend, and write in each how much you put there and why.
2. Copy your market-day sales ledger and profit.
3. Write Wesley's three rules in your best handwriting and draw a picture for each.

From history. John Wesley rode an estimated quarter of a million miles on horseback in his lifetime and preached tens of thousands of sermons. He often read books while riding, letting his horse find the way.

COMMON MISTAKES

- Thinking you must be rich to give. The widow gave two tiny coins, and Jesus praised her.
- Spending all the profit before planning. Divide it first: give, save, then spend.
- Forgetting to subtract costs before figuring profit.

Make it a game • Wesley's Three Jars. Start with twenty chips as pretend earnings. Quickly divide them into Give, Save and Spend, then explain your plan in thirty seconds. Your parent challenges one choice. Tell John Wesley's rule to gain all you can, save all you can and give all you can. Play again with new earnings.

Scripture. "Every man according as he purposeth in his heart, so let him give; not grudgingly, or of necessity: for God loveth a cheerful giver." (2 Corinthians 9:7, KJV)

Paul did not tell the Corinthians exactly how much to give. He told them to decide in their hearts and give gladly. A Give jar is a way to plan ahead for cheerful giving.

SAVING, INVESTING AND GIVING

What should you do with the money you earn? In this last unit you will learn three wise things to do with it: **save** it for a goal, let it **grow** through interest and by owning a share of a business, and **give** part of it cheerfully. You will meet young Benjamin Franklin, who paid far too much for a whistle and learned to think before spending; Franklin again as an old man, whose gift of money to two cities grew for two hundred years; the merchants of Amsterdam, who bought the first shares in a company in 1602; and John Wesley, who taught, “Gain all you can, save all you can, give all you can.”

In your ledger you will make a savings plan, a growth chart for interest, a record of a pretend share in a family business and a Give-Save-Spend plan. The unit ends with the **family market day**, when you set up a table with your best work from the year and sell or show something you made.

PREREQUISITES

- Can keep a ledger with a running balance (Unit 7)
- Knows profit and loss (Lesson 7.3)
- Can multiply and use a calculator

MASTERY CHECKLIST

- ☐ I can set a savings goal and make a plan to reach it.
- ☐ I can explain interest and show with a table how money can grow when interest is added again and again.
- ☐ I can explain what it means to own a share of a business and why it has risk.
- ☐ I can make a Give-Save-Spend plan and explain why Christians give cheerfully.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **The Way to Wealth, by Benjamin Franklin (1758)**: Free at Project Gutenberg. Franklin's best sayings from Poor Richard about work and thrift, gathered into one short speech. Read a few aloud in Lessons 8.1 and 8.2. Ages 9 and up with a parent.
- **One Grain of Rice, by Demi (Scholastic)**: A picture-book folktale from India in which a clever girl asks for one grain of rice, doubled every day for thirty days. A wonderful way to see how fast doubling grows, for Lesson 8.2. Search the title on the publisher's site. Ages 5–10.
- **Federal Reserve Bank of St. Louis: Econ Lowdown**: Free lessons on saving, interest and banks for children, from a Federal Reserve bank. A parent may make a free teacher account to find them.

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	Saving for a Goal: Franklin and the Whistle	2 sessions of 45 minutes
8.2	Interest Grows: Franklin's 200-Year Gift	2 sessions of 45 minutes
8.3	Owning a Share: The First Shares in Amsterdam	2 sessions of 45 minutes
8.4	Giving Cheerfully and the Family Market Day	2 sessions of 45 minutes

UNIT 8 REVIEW

Answer each question. Your parent may read the questions aloud and write down your spoken answers. Show your work for the money questions. The review is worth 50 points.

1. **5 pts**

What did Benjamin Franklin learn from the whistle?

2. **5 pts**

A bicycle costs \$60. You have \$15 saved and can save \$5 a week. How many weeks will it take?

3. 5 pts

What is interest?

4. 5 pts

You put \$100 in a bank that adds 10% interest each year, and you leave the interest in. How much will you have after 1 year? After 2 years?

5. 5 pts

What did Benjamin Franklin leave to Boston and Philadelphia, and what was it for?

6. 5 pts

What is a share of stock? What is a dividend?

7. 5 pts

Why did the Dutch East India Company sell shares to many people instead of one rich merchant paying for everything?

8. 5 pts

What could happen if someone put all his savings into one company and it failed?

9. 5 pts

What were John Wesley's three rules for the use of money?

10. 5 pts

You earned \$20 profit at market day. You give 10%, save 30% and spend the rest. How much goes to each?

ANSWER KEY

1. Not to pay too much for something he did not really need; to think before spending. “Don’t give too much for the whistle.”
2. $\$60 - \$15 = \$45$ more. $\$45 \div \$5 = 9$ weeks.
3. Money paid for the use of someone else’s money: a bank pays it on savings, and a borrower pays it on a loan.
4. $\$100 + \$10 = \$110$. $\$110 + \$11 = \$121$.
5. 1,000 pounds to each city, to be lent with interest to young craftsmen so they could start their shops; the fund grew for 200 years and then was used for schools and scholarships.
6. A share is a small piece of ownership in a company. A dividend is part of the company’s profit paid to shareholders.
7. Voyages cost too much and were risky. Many shareholders together could pay for many ships, and if one ship sank each person lost only a little.
8. He could lose all his savings. Spreading money among many companies lowers the risk (Ecclesiastes 11:2).
9. Gain all you can, save all you can, give all you can.
10. Give \$2, Save \$6, Spend \$12.

PORTFOLIO PIECE: MY MARKET DAY AND GIVE-SAVE-SPEND PLAN

Make a two-page record of your family market day. On the first page, draw or photograph your table, list what you showed and sold, and copy your sales ledger with the total money taken in, your costs and your profit. On the second page, show your Give-Save-Spend plan with the percent and dollar amount for each jar, tell where your gift went and why, and update your savings thermometer from Lesson 8.1. End with a short paragraph about the most important thing you learned about money this year.

LOOK FOR	WHAT IT MEANS
Market day	The table showed work from every unit, and the student explained it clearly to guests.
Records	The sales ledger, costs and profit are complete and correct.
Give-Save-Spend	The plan is figured correctly and the gift was really given.
Reflection	The closing paragraph is thoughtful and connects money to work, honesty and generosity.

BONUS: RUN A REAL BUSINESS

This optional bonus unit is your chance to run a real small business with a parent as your partner: a **lemonade stand** or a **baked-goods stand** for family, friends and neighbors you know. You will plan it on one page, make a test batch and a **cost sheet**, sell it honestly and give correct change, and then close the books with a profit report, a reflection and a gift.

Each lesson begins with a real story: the lemonade sellers of old Paris who carried tanks of lemonade on their backs, Ruth Wakefield testing the recipe for the first chocolate chip cookies, Marshall Field and his famous care for customers, and Henry Parsons Crowell, who sold oats in clean boxes and gave away most of what he earned. Use this unit after the family market day, over the summer, or alongside the year.

PREREQUISITES

- Has finished, or is working through, Units 6–8 (selling, bookkeeping, saving and giving)
- Has a parent willing to be a partner, supervisor and cash-box keeper
- Has checked, with a parent, any local rules for a children's stand or for selling food

MASTERY CHECKLIST

- ☐ I can write a one-page plan for a small stand.
- ☐ I can make a test batch, fill in a cost sheet and find the cost per cup or per item.
- ☐ I can sell honestly and politely, make correct change by counting up, and keep a sales ledger.
- ☐ I can close my books with a profit report, reflect on what I learned, and give part of my profit.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Biz Kid\$ (public television series)**: Free videos made for public television in which young people start real businesses. Watch an episode about starting a business with a parent before Lesson 9.1. Ages 8–14.
- **Lemonade in Winter, by Emily Jenkins, illustrated by G. Brian Karas (Penguin Random House)**: A picture book about a brother and sister who run a lemonade stand in the cold and count their coins, with lots of real money math. A fun read-aloud for Lessons 9.1 and 9.3. Ages 4–8.

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 Plan Your Stand: The One-Page Plan	2 sessions of 45 minutes
9.2 The Test Batch and the Cost Sheet	2 sessions of 45 minutes
9.3 Selling Day: Honest Selling and Making Change	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 about your own business and the stories in this unit. Your parent may read the questions aloud and write down your spoken answers. Show your work for calculations. The review is worth 50 points.

1. **5 pts**
Name the seven parts of your one-page plan.
2. **5 pts**
How did the lemonade sellers of old Paris run their business?
3. **5 pts**
A batch of lemonade uses \$2.00 of lemons, \$0.50 of sugar and \$1.00 of cups, and makes 14 cups. What is the cost per cup?

4. **5 pts**

Why did Ruth Wakefield keep testing her cookie recipe after the first good batch?

5. **5 pts**

A customer buys a cup of lemonade for 25¢ and pays with a \$1 bill. How much change is due? Show how to count up.

6. **5 pts**

What did Marshall Field mean by “Give the lady what she wants”?

7. **5 pts**

What would happen if a stand never counted its cash box or kept a sales ledger?

8. **5 pts**

Your stand took in \$18.00. Your costs were \$7.50, paid with \$5.00 borrowed from your parent and \$2.50 of your own savings. What was your profit? After you repay the \$5.00 loan from the cash box, how much is left in the box?

9. **5 pts**

How did Henry Parsons Crowell sell oats differently from other sellers, and what did he do with much of his income?

10. **5 pts**

Name one thing that went well at your stand and one thing you would change, and explain why.

ANSWER KEY

1. What I will sell; my customers; where and when; what I need to buy; my price; safety and rules; saving and giving.
2. They carried tanks of lemonade on their backs and walked to busy places such as markets, bridges and squares, pouring cups for customers.
3. $\$2.00 + \$0.50 + \$1.00 = \$3.50$. $\$3.50 \div 14 = \$0.25$ per cup.
4. So it would come out right every time; careful testing kept the quality steady before she shared or sold it.
5. 75¢: $25¢ + 25¢ = 50¢$, $+ 25¢ = 75¢$, $+ 25¢ = \$1.00$ (three quarters).
6. Serve customers well and fairly, listen to them and make them happy, instead of arguing; good service brings customers back.
7. No one would know if change was wrong, money was lost or taken, or whether the stand made a profit.
8. Profit = $\$18.00 - \$7.50 = \$10.50$. Cash box: $\$18.00 - \$5.00 = \$13.00$ left, which is your own $\$2.50$ back plus the $\$10.50$ profit.
9. He sold them in clean, sealed boxes with cooking directions and a trusted brand instead of loose from barrels; he gave more than half his income to churches, missions and Christian schools.
10. Answers vary; a full answer gives a specific success, a specific change and a reason based on the records.

PORTFOLIO PIECE: MY REAL BUSINESS REPORT

Put together a complete record of your stand: your one-page plan and signed partnership agreement, your cost sheet from the test batch, your sales ledger and cash counts, your profit report with the loan repayment, a drawing or photograph of your stand, a note about your gift, and your one-page reflection. Present it to your family as a short report, as if they were investors hearing how their money was used.

LOOK FOR	WHAT IT MEANS
Plan	A complete one-page plan with safety rules and a signed partnership agreement.
Records	Cost sheet, sales ledger, cash counts and profit report are complete, correct and match the receipts.
Honesty and service	Prices and signs were truthful, customers were served kindly, and change was counted correctly.
Reflection and giving	An honest reflection with specific lessons, and the planned gift was given.

9.1 PLAN YOUR STAND: THE ONE-PAGE PLAN

OBJECTIVES

- Tell how lemonade sellers in Paris in the 1670s carried their business on their backs.
- Choose a lemonade or baked-goods stand and write a one-page plan for it.
- Agree on a partnership with a parent, including safety rules and how money will be handled.

Warm-up. If you set up a stand in front of your house, who would walk by? When would they come? What might they want to buy on a hot day? On a cold day? Make a list.

WATCH

What Should I Sell? Tip #1 for Youth Entrepreneurs

Kids Markets • 2:20

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

WHEN TO WATCH

Before you write your one-page plan.

Note: Young sellers at a children's market share ideas.

BACKUP VIDEO

Biz Kid\$: Crash Course On Starting A Business (Accessible Preview)

Described and Captioned Media Program • 4:07

<https://www.youtube.com/watch?v=kB7bGNBPaCM>

Optional: Biz Kid\$ preview about starting a business.

KEY TERMS

business plan

A written plan that tells what a business will sell, to whom, for how much, and how it will run.

customer

A person who buys from a business.

location

The place where a business sells.

partner

A person who shares in running a business; here, the parent who helps and supervises.

permission

Being allowed to do something by the person or rule in charge.

CORE IDEAS

The story. Lemonade is an old drink. In the 1600s it became popular in Paris, France, and in 1676 a company of lemonade sellers was formed there. Its members walked the busy streets with metal tanks of lemonade strapped to their backs and cups at their belts, pouring a drink for anyone who wanted one. They went where the thirsty crowds were: markets, bridges and squares. A lemonade seller's whole business was what he could carry, and his success depended on choosing the right place and time, keeping his drink fresh and cool, and treating customers well. Street lemonade sellers like them could be found in many cities for hundreds of years.

How they figured it out. A good small business starts with a few simple questions. What will I sell? Who will buy it? Where and when will I sell it? What will it cost, and what price will I charge? What could go wrong, and how will I keep everyone safe? Writing the answers on one page is a **business plan**. It helps you think before you spend any money, and it helps your **partner** see what you plan to do.

The big idea. Your stand is a real business, and every stakeholder you studied in Unit 4 is part of it. You are the risk-taker and the builder. Your parent is your partner and maybe your financier, lending you the start-up money. Your **customers** deserve a good product at a fair price. Your neighbors are your community, so your stand must be clean, safe and polite. Before anything else, get **permission**: from your parents, and, if your town has rules about stands or selling food, by following those rules.

In business today. Food trucks, farm stands and festival booths are still small, movable businesses like the lemonade sellers of Paris. Their owners still ask the same questions about **location**, customers, costs and safety. Jesus said that a wise builder "sitteth down first, and counteth the cost" (Luke 14:28).

PICTURE STUDY



A Street Lemonade Seller in Thessaloniki, Unknown photographer, early 1900s · Photograph · Thessaloniki, Greece

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

Like the lemonade sellers of old Paris, this street seller in the Greek city of Thessaloniki carried his whole business on his back: a tall metal tank of lemonade with a long, curved spout. He bent forward to pour a drink for each customer. He chose busy streets, kept his drink cool and clean, and sold one cup at a time.

Look closely

- Find the tank on his back. How does the lemonade come out?
- Find his white apron. Why would a drink seller want to look clean?
- Find the customer or onlooker. What do you think he is waiting for?
- Look for cups or glasses. How many could the seller carry?

Talk about it

1. Where in a city would this seller go to find the most customers?
2. What would be hard about carrying your business on your back? What would be easy?
3. How is your stand plan like this seller's business? How is it different?

Safety first. A parent must approve and supervise the stand. Sell only at home or at a place your parents choose, to people you know or with a parent right beside you. Never go to strangers' houses, never give out personal information, and check any local rules for stands and food sales first.

PROJECT

My One-Page Plan and Partnership

You will write a one-page plan for your stand and sign a simple partnership agreement with your parent.

You will need

- One clean page in your ledger notebook
- A pencil and colored pencils
- A parent partner

Steps

1. Choose your stand: lemonade, or one baked good such as cookies or muffins.
2. Write your plan with seven headings: What I will sell; My customers; Where and when; What I need to buy (start-up list); My price (a first guess); Safety and rules; Saving and giving.
3. Under Safety and rules, write at least four rules, such as: wash hands, keep food covered, a parent keeps the cash box, sell only where my parent says.
4. With your parent, check whether your town has any rules for children's stands or food sales. Write what you found.
5. Write a partnership agreement: what your parent will do (supervise, lend start-up money, keep the cash box), what you will do (make the product, sell politely, keep the books, pay back the loan), and how you will pay back any loan. Both of you sign it.
6. Pick a date for your test batch (Lesson 9.2) and your selling day (Lesson 9.3).
7. Read your plan aloud to your partner and fix anything that is unclear.

Tips

- Keep it small: one product, one place, one day.
- A plan is a guess. You will change it as you learn.

Check your work

- ☐ My one-page plan has all seven headings filled in.
- ☐ My partner and I signed a partnership agreement.

- ☐ I wrote at least four safety rules and checked local rules with a parent.

LEDGER NOTEBOOK

1. Draw your stand as you imagine it, with a sign, the table, your product and you behind the table.
2. Draw a map of where your stand will be and where customers will come from.
3. Copy your partnership agreement neatly.

From history. Lemons were once rare and costly in northern Europe because they grow only in warm places. They came by ship from Italy, Spain and other sunny lands, so lemonade was a treat that showed how far trade could reach.

COMMON MISTAKES

- Skipping the plan and buying supplies first. Plan, then buy.
- Forgetting safety rules. A safe, clean stand is part of serving customers.
- Planning too big. A small first business teaches the most.

Make it a game • Business on Your Back. Carry a lemonade pitcher and cups around the room like a Paris vendor in the 1670s, calling out your price. Then write a one-page plan in three minutes: what you sell, where, who helps and what permission you need. Your parent scores each part from one to three. Highest plan wins.

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 said a wise builder plans before he starts. A one-page plan is your way of sitting down first and counting the cost.

9.2 THE TEST BATCH AND THE COST SHEET

OBJECTIVES

- Tell how Ruth Wakefield carefully tested recipes at the Toll House Inn and created the chocolate chip cookie.
- Make a test batch and fill in a cost sheet with every ingredient and supply.
- Find the cost per cup or per cookie and set a fair price.

Warm-up. Look at a recipe for lemonade or cookies. List every ingredient. Then list the other things you would need to sell it: cups, napkins, bags, a sign. Which list is longer?

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 Toll House story, before your test batch.

KEY TERMS

test batch

A first small batch made to try out a recipe and find the real costs before making a lot.

cost per item

The total cost of a batch divided by the number of good items it made.

waste

Food or supplies spoiled, spilled or left over that cannot be sold.

cost sheet

A table that lists every ingredient and supply, what it cost, and how much each batch uses.

quality

How good something is; for food, how fresh, clean and tasty it is.

CORE IDEAS

The story. In 1930, Ruth Wakefield and her husband Kenneth bought an old inn in Whitman, Massachusetts, called the Toll House, and opened it as a restaurant. Ruth had studied cooking and nutrition and had been a teacher, and she was known for careful, tested recipes and fine desserts. One day, while making butter cookies, she chopped up a bar of semi-sweet chocolate and stirred the pieces into the dough. The chocolate pieces held their shape as the cookies baked. Her guests loved them.

How they figured it out. Ruth Wakefield did not stop with one good batch. She kept testing the recipe, measuring exactly, until it came out right every time, and she printed it in her cookbook in 1938. The cookies became so popular that the Nestlé company, which made the chocolate, began printing her recipe on its chocolate packages and later sold chocolate in small chips made for baking. Her careful testing turned one kitchen idea into the most famous cookie in America.

The big idea. Before you can set an honest price, you must know your real costs. Make a **test batch** and fill in a **cost sheet**: each ingredient, what the package cost, how much of it the batch used, and what that part cost. Add in cups, bags, napkins and the ingredients for a sign. Divide the batch cost by the number of good cups or cookies to find the **cost per item**. Watch for **waste**: if 2 cookies of 24 burn, your cost is spread over only 22. Keep a high standard of **quality**: sell only what you would be proud to serve to a friend.

In business today. Every bakery and restaurant tests recipes and keeps cost sheets, and changes its prices when the cost of flour, sugar or lemons goes up. The best businesses also keep the quality steady, so a customer gets the same good cookie every time. “Whatsoever ye do, do it heartily, as to the Lord” (Colossians 3:23).

PICTURE STUDY



Woman Baking Bread, Jean-François Millet, 1854 · Oil on canvas · Kröller-Müller Museum, Otterlo, the Netherlands

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

Millet painted this farm woman sliding loaves of bread into a hot brick oven with a long wooden paddle called a peel. Baking bread for a whole family took careful work: measuring flour, letting the dough rise in baskets, heating the oven just right and watching the loaves closely so none would burn.

Look closely

- Find the oven. Where is the fire?
- Find the long wooden peel. Why would a baker need such a long handle?
- Find the baskets on the shelf. What do you think was in them before?
- Look at how she leans. How does Millet show that this is hard, careful work?

Talk about it

1. What could go wrong with a batch of bread, and how would that change the cost of each good loaf?
2. What ingredients and supplies would this baker need to count on a cost sheet?
3. How is her work like the test batch you will make?

Safety first. Bake or mix only with a parent. Wash hands, use clean cups and tools, and keep food covered. Ask about allergies, and label your food with its main ingredients, especially nuts, milk, eggs and wheat.

PROJECT

My Test Batch and Cost Sheet

You will make one test batch of your product with a parent, fill in a cost sheet, find the cost per item, and set your price.

You will need

- Ingredients and supplies for one batch, with their receipts or prices
- Measuring cups and spoons, a kitchen scale and a calculator
- Ledger notebook

Steps

1. Make a cost sheet with columns: Item, Package price, Package size, Amount used, Cost for this batch.
2. Example for lemonade: a \$3.00 bag of 6 lemons, and the batch uses 4 lemons, so the lemons cost $\$3.00 \div 6 \times 4 = \$2.00$.
3. Make your test batch carefully, measuring everything. Fill in the Amount used column as you go.
4. Count the good items (cups or cookies). Do not count spilled cups or burned cookies.
5. Add the cost column to find the batch cost, including cups, bags or napkins. Divide by the number of good items to find the cost per item.
6. Taste-test with your family and write down their feedback. Change the recipe if needed.
7. Set your price: it must be more than your cost per item. Figure your profit per item = price – cost. Write your final price in your plan.

Tips

- Keep every receipt. Your cost sheet is only as good as the numbers on it.
- Round your price to an easy amount, like 25¢ or 50¢, to make change simpler.

Check your work

- ☐ My cost sheet lists every ingredient and supply.
- ☐ I found the cost per item correctly and set a price above it.

- ☐ I can tell how Ruth Wakefield tested her recipe until it was right every time.

LEDGER NOTEBOOK

1. Draw your product and label each ingredient with its cost.
2. Copy your cost sheet neatly with the cost per item circled.
3. Write three sentences about your test batch: what went well, what went wrong and what you changed.

From history. The Toll House got its name from the story that the building had once been a place where travelers paid a toll, a fee for using the road, and could rest and change horses. The inn burned down in 1984, but the cookie named for it is still baked all over the world.

COMMON MISTAKES

- Forgetting cups, bags and napkins on the cost sheet.
- Counting burned or spilled items as if they could be sold.
- Setting a price before you know the cost.

Make it a game • Toll House Test Batch. Make a small test batch of cookies or crackers. Taste and rate it with your parent from one to five. Change one thing and rate again, like Ruth Wakefield. Fill out a cost sheet with each ingredient and find the cost per item. Which version tasted best for the lowest cost?

9.3 SELLING DAY: HONEST SELLING AND MAKING CHANGE

OBJECTIVES

- Tell how Marshall Field built a great Chicago store by serving customers well.
- Greet customers politely, describe the product honestly and make correct change by counting up.
- Keep a sales ledger and count the cash box with a parent.

Warm-up. Play store with a parent. The parent buys something for 35¢ and pays with a \$1 bill. How much change is due? Count it out loud, starting at 35¢: “40, 50, 75, one dollar.” Try three more.

WATCH

Making Change by Counting Up - Money Math

MooMooMath and Science · 3:07

<https://www.youtube.com/watch?v=Z2ejhmKHY3k>

WHEN TO WATCH

Before you practice making change.

BACKUP VIDEO

Making Change With Money *Math for Kids*

Turtlediary · 5:39

<https://www.youtube.com/watch?v=MqqnhzlsPL8>

KEY TERMS

customer service

How a business treats its customers: being polite, helpful and fair.

change

The money given back when a customer pays more than the price.

counting up

Making change by starting at the price and counting up to the amount paid.

cash box

A box that holds the money for a stand, with coins for making change.

sales ledger

A record of every sale: time, item, price and money received.

CORE IDEAS

The story. Marshall Field was a farm boy from Massachusetts who became a store clerk and, in 1865, a partner in a store in Chicago. He became famous for how he treated customers. His store marked clear prices on its goods, let customers return things they were not happy with, and trained its clerks to be courteous and helpful. Field is remembered for telling one of his managers who was arguing with a shopper, “Give the lady what she wants!” Marshall Field and Company grew into one of the largest stores in the world.

How they figured it out. Field understood that a customer who is treated well comes back and tells friends. So his clerks greeted every shopper, answered questions truthfully, and never pushed people to buy what they did not want. They counted change carefully. A store that shortchanges even one customer, by accident or on purpose, loses trust.

The big idea. Good **customer service** means being polite, honest and careful. Greet each customer with a smile, tell them truthfully what you are selling and what is in it, and thank them whether they buy or not. Make **change** by **counting up**: start at the price and count coins and bills up to the amount the customer paid. Record every sale in your **sales ledger**, and keep the money in a **cash box** that your parent watches.

In business today. Cash registers and card readers now figure change automatically, but good stores still train their workers to count it back to the customer and to treat people kindly. The Golden Rule is still the best rule for selling: treat each customer the way you would want to be treated.

PICTURE STUDY



Marshall Field & Co.'s Retail Store, Chicago, Unknown artist (picture postcard), about 1910 · Color printed postcard · State Street, Chicago, Illinois

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

This postcard shows Marshall Field's great store on State Street in Chicago in the early 1900s. It began as a much smaller store. It grew because customers trusted it: clear prices, honest goods, easy returns and kind service brought them back again and again.

Look closely

- Count the floors of the building. How many workers might a store this big need?
- Find the streetcars and wagons. How did customers get to the store?
- Look for the doors and shop windows at street level. What might be shown in them?
- Compare this store with your small stand. What is the same about serving customers?

Talk about it

1. Why would good customer service help a store grow so big?
2. What would you do if a customer at your stand was not happy with what he bought?

3. How can a small stand show the same care for customers as a giant store?

Safety first. A parent stays at the stand the whole time and keeps the cash box. Sell only to people you know or with your parent beside you. If anyone makes you uncomfortable, go to your parent right away. Never leave the cash box alone.

PROJECT

My Selling Day

You will hold your stand on your chosen day, serve customers politely, make correct change, keep a sales ledger and count the money with your parent.

You will need

- Your product, made fresh and covered
- A table, a clean cloth and an honest sign with your price
- A cash box with starting change (for example, \$5 in coins and \$1 bills), counted with a parent
- Ledger notebook and a pencil

Steps

1. Before you open, count the starting change with your parent and write it in your ledger: "Starting cash: \$___."
2. Practice making change three times with your parent, counting up out loud.
3. Open your stand. Greet each customer, tell them truthfully what you are selling, and say thank you whether they buy or not.
4. Record every sale in your sales ledger: Time, What was sold, Price, Money received, Change given.
5. Count the change back to each customer out loud, counting up from the price.
6. When you close, count the cash box with your parent. Ending cash – starting cash should equal your total sales. Does it match?
7. Write two sentences: What was the best moment of the day? What would you do differently next time?

Tips

- Keep your stand clean and your food covered between customers.
- If you make a mistake with change, say so and fix it right away. Honest mistakes, quickly fixed, build trust.

Check your work

- ☐ I served customers politely and described my product honestly.
- ☐ I made correct change by counting up.
- ☐ My sales ledger matched the money in the cash box.

LEDGER NOTEBOOK

1. Draw your stand on selling day with your sign and a customer.
2. Copy your sales ledger and circle your total sales.
3. Write three things you said to customers that made them feel welcome.

From history. Marshall Field's store on State Street had a great clock on its corner. "Meet me under the clock" became a common saying in Chicago, because everyone knew where it was.

COMMON MISTAKES

- Handing over change without counting it back. Counting out loud catches mistakes.
- Forgetting to record sales when it gets busy. Keep the ledger beside the cash box.
- Mixing your own money with the cash box. Keep business money separate.

Make it a game • Marshall Field Service Drill. Role play three customers, one polite, one in a hurry and one confused. Greet each, describe your product honestly and make change by counting up from a made-up price. Score two points for each good service step. Tell how Marshall Field built a store by serving customers well.

9.4 CLOSE THE BOOKS: PROFIT, LESSONS AND GIVING

OBJECTIVES

- Tell how Henry Parsons Crowell built the Quaker Oats business and gave away much of what he earned.
- Close the books for your stand: total sales, total costs, profit, loan repaid.
- Write a reflection and divide your profit into Give, Save and Spend.

Warm-up. Look at your sales ledger and cost sheet. Before you add anything up, guess: did your stand make a profit? About how much? Write your guess down.

WATCH

What are Income and Expenses? A Simple Explanation for Kids and Beginners

Easy Peasy Finance • 3:07

<https://www.youtube.com/watch?v=E2wcbUNZ-yo>

WHEN TO WATCH

After the story of Henry Crowell, before your profit report.

KEY TERMS

close the books

To finish the records for a period of time: add everything up, check it and write the results.

total sales

All the money taken in from customers.

total costs

All the money spent to make and sell the product.

repay

To pay back money that was borrowed.

reflection

Thinking back carefully about what happened and what you learned.

CORE IDEAS

The story. Henry Parsons Crowell was a young Christian businessman in Ohio. In 1881 he bought a run-down oat mill in the town of Ravenna, and he set out to make

oatmeal a trusted breakfast. At that time oats were usually sold loose from open barrels in general stores, where they could get dirty. Crowell sold Quaker Oats in clean, sealed cardboard boxes with cooking directions printed on them, and he advertised his brand all over the country. The business grew into one of the best-known food companies in America.

How they figured it out. Crowell kept careful books and watched his costs, but he also thought hard about what his profits were for. As a young man he had prayed that if God would allow him to make money, he would use it to serve God. For about forty years he gave away a large part of his income, more than half of it, to churches, missions and Christian schools. He served for many years as head of the board of the Moody Bible Institute in Chicago.

The big idea. When a business ends its season, the owner must **close the books**: add up **total sales** and **total costs**, figure the profit or loss, **repay** any money borrowed, and decide what to do with the profit. Then comes **reflection**: what went well, what went wrong, and what to change. Jesus told a parable about a rich farmer who stored up all his crops for himself and thought only of taking his ease, but God called him a fool, “So is he that layeth up treasure for himself, and is not rich toward God” (Luke 12:21). A wise business owner saves wisely, but also gives.

In business today. Every business closes its books at the end of each month and year, reports its profit or loss, and pays back its lenders. Many business owners give part of their profits to their churches and communities. Your small stand can do the same.

PICTURE STUDY



The Parable of the Rich Fool, Rembrandt van Rijn, 1627 · Oil on panel · Gemäldegalerie, Berlin

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

Rembrandt painted this picture when he was only about twenty-one. An old man sits alone at night among his account books and money bags, holding a coin up to the candle. Many people think Rembrandt was showing the rich man in Jesus' parable, who thought only of storing up his riches for himself.

Look closely

- Find the candle. What is the man holding up to the light?
- Look at the piles of books and papers. What kind of books might they be?
- Find the coins and the small scale on the table.
- Look at his face. Does he look happy, worried or greedy?

Talk about it

1. Keeping careful books is good. What is wrong with this man, according to Jesus' parable?
2. How is the way he uses money different from the way Henry Crowell used his?
3. When you close the books on your stand, what will you do with your profit?

PROJECT

My Profit Report and Gift

You will close the books on your stand, repay your partner, write a short profit report and reflection, and divide your profit into Give, Save and Spend.

You will need

- Your cost sheet, sales ledger, receipts and cash box
- Ledger notebook and a calculator
- Three jars or envelopes labeled Give, Save and Spend

Steps

1. Add up your total sales from your sales ledger. Check it against the cash box count.
2. Add up your total costs from your cost sheet and receipts, including cups, bags and the sign.
3. Figure your profit or loss: total sales – total costs.
4. Repay your parent partner any money you borrowed, and record the repayment.
5. Write a profit report in your ledger: Total sales, Total costs (listed), Profit or loss, Loan repaid.
6. Divide your profit: for example, give 10%, save 40%, spend 50%. Figure each amount and put it in the jars. Decide where your gift will go, and give it.
7. Write a one-page reflection: What went well? What went wrong? What would you change? What did you learn about work, honesty and serving customers? Compare your profit with your guess from the warm-up.

Tips

- If your stand had a loss, that is all right. Write down why, and what you would change. Many great businesses lost money at first.
- Keep all your records together in your portfolio.

Check your work

- ☐ My profit report is complete and correct.

- ☐ I repaid my partner and recorded it.
- ☐ I divided my profit into Give, Save and Spend and gave my gift.

LEDGER NOTEBOOK

1. Draw three jars, Give, Save and Spend, with the amount in each.
2. Copy your profit report neatly.
3. Write Luke 12:21 and one sentence about how it applies to your profit.

From history. The Quaker man on the oats box was one of the first registered trademarks for a breakfast cereal in America. Crowell used it on every box and in every advertisement, so customers came to trust the picture as a promise of clean, good oats.

COMMON MISTAKES

- Forgetting to subtract costs and calling all the money profit.
- Forgetting to repay the loan before spending the profit.
- Skipping the reflection. What you learn is worth more than what you earned.

Make it a game • Crowell Close the Books. Race to close the books on your stand. Add total sales, add total costs, subtract to find profit and repay any loan. Check each other's math. Then decide what to give and explain it in one sentence. Tell how Henry Parsons Crowell built Quaker Oats and gave away much of his earnings.

Scripture. “So is he that layeth up treasure for himself, and is not rich toward God.” (Luke 12:21, KJV)

Jesus did not say saving is wrong. He warned against keeping everything for ourselves. A wise steward saves, gives and remembers that all he has comes from God.

BONUS: RUN A REAL BUSINESS

This optional bonus unit is your chance to run a real small business with a parent as your partner: a **lemonade stand** or a **baked-goods stand** for family, friends and neighbors you know. You will plan it on one page, make a test batch and a **cost sheet**, sell it honestly and give correct change, and then close the books with a profit report, a reflection and a gift.

Each lesson begins with a real story: the lemonade sellers of old Paris who carried tanks of lemonade on their backs, Ruth Wakefield testing the recipe for the first chocolate chip cookies, Marshall Field and his famous care for customers, and Henry Parsons Crowell, who sold oats in clean boxes and gave away most of what he earned. Use this unit after the family market day, over the summer, or alongside the year.

PREREQUISITES

- Has finished, or is working through, Units 6–8 (selling, bookkeeping, saving and giving)
- Has a parent willing to be a partner, supervisor and cash-box keeper
- Has checked, with a parent, any local rules for a children’s stand or for selling food

MASTERY CHECKLIST

- ☐ I can write a one-page plan for a small stand.
- ☐ I can make a test batch, fill in a cost sheet and find the cost per cup or per item.
- ☐ I can sell honestly and politely, make correct change by counting up, and keep a sales ledger.
- ☐ I can close my books with a profit report, reflect on what I learned, and give part of my profit.

OPTIONAL BOOKS AND GAMES FOR THIS UNIT

- **Biz Kid\$ (public television series)**: Free videos made for public television in which young people start real businesses. Watch an episode about starting a business with a parent before Lesson 9.1. Ages 8–14.
- **Lemonade in Winter, by Emily Jenkins, illustrated by G. Brian Karas (Penguin Random House)**: A picture book about a brother and sister who run a lemonade stand in the cold and count their coins, with lots of real money math. A fun read-aloud for Lessons 9.1 and 9.3. Ages 4–8.

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 Plan Your Stand: The One-Page Plan	2 sessions of 45 minutes
9.2 The Test Batch and the Cost Sheet	2 sessions of 45 minutes
9.3 Selling Day: Honest Selling and Making Change	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 about your own business and the stories in this unit. Your parent may read the questions aloud and write down your spoken answers. Show your work for calculations. The review is worth 50 points.

1. 5 pts

Name the seven parts of your one-page plan.

2. 5 pts

How did the lemonade sellers of old Paris run their business?

3. 5 pts

A batch of lemonade uses \$2.00 of lemons, \$0.50 of sugar and \$1.00 of cups, and makes 14 cups. What is the cost per cup?

4. 5 pts

Why did Ruth Wakefield keep testing her cookie recipe after the first good batch?

5. 5 pts

A customer buys a cup of lemonade for 25¢ and pays with a \$1 bill. How much change is due? Show how to count up.

6. 5 pts

What did Marshall Field mean by “Give the lady what she wants”?

7. 5 pts

What would happen if a stand never counted its cash box or kept a sales ledger?

8. 5 pts

Your stand took in \$18.00. Your costs were \$7.50, paid with \$5.00 borrowed from your parent and \$2.50 of your own savings. What was your profit? After you repay the \$5.00 loan from the cash box, how much is left in the box?

9. 5 pts

How did Henry Parsons Crowell sell oats differently from other sellers, and what did he do with much of his income?

10. 5 pts

Name one thing that went well at your stand and one thing you would change, and explain why.

ANSWER KEY

1. What I will sell; my customers; where and when; what I need to buy; my price; safety and rules; saving and giving.
2. They carried tanks of lemonade on their backs and walked to busy places such as markets, bridges and squares, pouring cups for customers.
3. $\$2.00 + \$0.50 + \$1.00 = \$3.50$. $\$3.50 \div 14 = \$0.25$ per cup.
4. So it would come out right every time; careful testing kept the quality steady before she shared or sold it.
5. 75¢: $25¢ + 25¢ = 50¢$, $+ 25¢ = 75¢$, $+ 25¢ = \$1.00$ (three quarters).
6. Serve customers well and fairly, listen to them and make them happy, instead of arguing; good service brings customers back.
7. No one would know if change was wrong, money was lost or taken, or whether the stand made a profit.
8. Profit = $\$18.00 - \$7.50 = \$10.50$. Cash box: $\$18.00 - \$5.00 = \$13.00$ left, which is your own $\$2.50$ back plus the $\$10.50$ profit.
9. He sold them in clean, sealed boxes with cooking directions and a trusted brand instead of loose from barrels; he gave more than half his income to churches, missions and Christian schools.
10. Answers vary; a full answer gives a specific success, a specific change and a reason based on the records.

PORTFOLIO PIECE: MY REAL BUSINESS REPORT

Put together a complete record of your stand: your one-page plan and signed partnership agreement, your cost sheet from the test batch, your sales ledger and cash counts, your profit report with the loan repayment, a drawing or photograph of your stand, a note about your gift, and your one-page reflection. Present it to your family as a short report, as if they were investors hearing how their money was used.

LOOK FOR	WHAT IT MEANS
Plan	A complete one-page plan with safety rules and a signed partnership agreement.
Records	Cost sheet, sales ledger, cash counts and profit report are complete, correct and match the receipts.
Honesty and service	Prices and signs were truthful, customers were served kindly, and change was counted correctly.
Reflection and giving	An honest reflection with specific lessons, and the planned gift was given.