Save and Invest—Put It in the Bank

Lesson Overview

Description

In this lesson, students will compare two savings plans: stuffing a mattress with money and using a bank. After identifying the disadvantages of stuffing a mattress, students will examine different types of banks and how banks act as a financial intermediary between borrowers and savers. Students will compare four types of accounts offered by banks and discuss the differences between them. In an extension activity, students will use a sample bank statement to find mistakes and irregularities that might occur. Students will then compare simple and compound interest and use the Rule of 72 to estimate the time it takes for savings to double in value.

Standards

- [National Standard in K-12 Personal Finance Education](#)
- [Texas State Social Studies Standards](#)
- [Texas State CTE Standards](#)

Instructional Objectives

- Evaluate the role of banks as financial intermediaries between savers and borrowers.
- Define and describe interest.
- Describe the benefits of using a bank.
- Compare various accounts offered by banks.
- Reconcile a bank statement using a ledger.
- Compare growth of savings using simple and compound interest.
- Use the Rule of 72 to estimate the time required for savings to double in value.

Time Required*

- One 90-minute class period.
- Two 45-minute class periods.

Additional time may be needed if students are given in-class time to complete the handouts.

Materials Required

- PowerPoint/PDF slides
- Copies of Handout 1: Guided Notes
- Copies of Handout 2: Bank Comparison Chart
- Copies of Handout 3: Bank Reconciliation
- Copies of Handout 4: Interest Rates and the Rule of 72
- Copies of Assessment 1: Tic-Tac-Toe Choice Board
- Copies of Assessment 2: Quiz

Lesson Procedures

1. **Display slide 1.** Tell students the topic of the lesson is banking.

2. **Display slide 2.** Review the instructional objectives for the lesson.

3. **Display slides 3–4.** Use the graphics on the slides and the information below to introduce students to the distinction between saving money and saving to invest.

   - Ask students if both icons represent savings.
   - Explain that both are savings, or a monthly budget surplus.
   - Remind students this is the first step to building wealth—budgeting to save.
   - The second step is saving to invest.

4. **Display slide 5.** Use the brainstorm space on the slide to lead a discussion about why people should not just stuff their mattresses with money. Use the fillable text box to type in responses.

   - Students' answers will vary but might include: mattresses are not a secure method of storage, they do not pay a saver anything, accessing your money isn't very convenient if you're not home.

   Suggested questions for student discussion:

   - Why might someone save their money in a mattress?
   - Is saving your money in your mattress the same as saving it in a piggy bank?
   - Where else can you save your money?

   Classroom response strategy:

   - Have students brainstorm ideas, list them in their guided notes and share with the class.

   Additional questions for student discussion: To understand your students' exposure to the banking industry, here are some additional questions to gauge prior knowledge.

- Do you save money?
- Where do you save your money?
- Why do you save?
- Do you have a bank account?
- Have you ever been to a bank?
- Do you trust banks? Why or why not?

5. **Display slide 6.** Review the definitions on the slide.

   - Explain to students that interest and interest rate have different meanings to consumers and banks. Banks charge interest on loans and pay interest on savings accounts.

6. **Display slide 7.** Use the graphic on the slide to explain the different roles of savers, banks and borrowers. Tell students that when money is saved, or not actively consumed, there is an opportunity for it to be loaned to someone who would like to use it immediately. Explain to students that:

Savers

- Deposit money into the bank, a secure way of storing money.
- In many cases, a bank will pay interest to savers in return for saving their money at the bank.

Banks

- Help facilitate the transfer of funds from savers to borrowers. Explain that the spread, or difference between the rate banks charge borrowers and pay savers, is the banks' profit.

Borrowers

- Get a loan from a bank.
- Pay back the loan with interest to the bank.
- When borrowers get a loan from the bank, they are borrowing money from savers.

Classroom response strategy:

- Have students describe the roles of savers, banks and borrowers in their guided notes.

Optional extension group activity:

- Have students create a poster in small groups that explains the role of savers, banks and borrowers. Ask students share their poster.

Suggested questions for student discussion:

- What does a bank give a saver in return for depositing money?
- What does a borrower give a bank in return for a loan?

7. **Display slides 8–10.** Use graphics on the slide and the information below to discuss the incentives for savers to put money in the bank.

Dollar bill

- Explain that when a saver puts money in the bank, the bank pays interest to the saver.
- Ask students how the rate of interest impacts the amount the saver is paid.
  Answer: Higher rate, higher return.
- Explain that, in general, the longer savers are willing to commit to saving, the higher the return they will receive from the bank.

Safe

- Explain that, additionally, banks offer safety to savers that they do not have in a mattress.
- Banks have infrastructure in place to protect against theft.
- Banks have access to insurance through the Federal Deposit Insurance Corp. (FDIC) that protects savers against loss if a bank goes out of business. The FDIC insures bank account owners for up to $250,000.
- Similarly, the National Credit Union Administration (NCUA) insures credit union account owners for up to $250,000.
- Both the FDIC and NCUA are backed by the full faith and credit of the U.S. government.
- For detailed descriptions of standard insurance amounts, visit FDIC: Deposit Insurance At A Glance and How Your Accounts Are Federally Insured brochure (ncua.gov).

Debit card

- Explain that banks also offer convenience. It is often unwieldy and sometimes impossible to carry the currency necessary to meet financial obligations. Banks offer convenient ways for consumers to use their money without physical currency, such as online transfers.

Classroom response strategy:

- Have students list incentives for banking in their guided notes.

8. **Display slides 11–20.** Explain to students that although there are incentives for banking, not everyone uses a bank. Review the definitions of fully banked, underbanked and unbanked before beginning the quiz. As a class, work through the "To Bank or Not to Bank?" quiz. Use the quiz to discover truths about who is banked and not banked in the U.S.

Classroom response strategy:

- Have students work together in small groups to share their answer.
- Have students write down their answer and show it to the class.
- Have students move to different sides of the room based on their answers.

9. **Display slide 21.** Display the discussion question and ask students to share their ideas of why some people don't use banks. Answers will vary but might include:

    - Lack of money to open an account.
    - Distrust in the banking system.
    - No banks located close by.
    - Lack of internet access for online banking.
    - Afraid of financial scams.
    - Language barriers.
    - Little to no exposure to depository institutions.
    - Cultural or religious norms.

    Suggested teaching strategies:

    - Think pair share.
    - Small groups.
    - Use as a discussion question online if you are using a learning management system for your course.

10. **Display slide 22.** Explain to students that there are many choices when selecting a depository institution and bank account.

11. **Display slide 23.** Review the definitions on the slide. Explain to students that people can choose from different types of depository institutions.

12. **Display slide 24.** Use the information on the slide to help students understand the different types of accounts available to those who choose to use bank services.

    - **Checking accounts** offer safety and convenience. You keep your money in the account and write a check, use a debit card or access your account online when you want to pay a bill or transfer money to someone else. If your checkbook or debit card is lost or stolen, you can cancel the card or close your account and open a new one to prevent people from using your old account information. (When cash is lost or stolen, it's not traceable and you rarely see it again.) Banks sometimes charge a fee for checking accounts because processing transactions can be costly. Many banks also offer no-fee checking and checking accounts that earn interest if you agree to keep a certain amount of money—a minimum balance—in the account.
    - **Savings accounts** are for people who want to keep their money in a safe place and earn interest at the same time. You don't need a lot of money to open a savings account, and you can withdraw your money easily. You can make deposits and withdrawals but usually can't write checks. The bank usually pays an interest rate that's higher than a checking account but lower than some other types of interest-bearing accounts. Many people use it as a place to keep

emergency cash since access to cash is easily available. Some savings accounts charge a fee if your balance falls below a specified minimum.

- **Certificates of deposit (CDs)** are savings deposits that are sometimes called "time deposits" because you are required to keep a certain amount of money in the bank for a fixed period of time (for example: $1,000 for two years). Because your money will be inaccessible for the period of time you have agreed upon, you are rewarded with interest. The longer you allow the bank to hold your money, the higher the rate of interest you will receive. There is usually a penalty if you withdraw your money early, so don't select this option if you think you might need the money before the maturity date (the time period you have agreed upon).
- **Money market deposit accounts (MMDAs)** are like checking accounts that earn interest, except that they usually pay a higher rate of interest and require a higher minimum balance (often $2,500 or more). They also limit the number of checks you can write per month.

Classroom response strategy:

- Have students record characteristics of different types of bank accounts in their guided notes.

13. **Display slide 25.** Distribute copies of Handout 2: Bank Comparison Chart.

- Have students use the internet to research three different banks and compare the features and fees of different types of bank accounts.
- Encourage students to compare similar types of savings and checking accounts. For example, they might choose to look at savings accounts designed for children and teenagers.

Suggested teaching strategies:

- Model how to search for a bank and types of accounts for your students before sending them to complete the activity on their own.
- Select the banks your students should research. That way you are familiar with each bank's website when students do the activity. Examples might include a local bank, a credit union and a large commercial bank.
- Answers will vary. Handout 2 can also be used as an assessment.

14. **Display slide 26.** Review the instructional objective for part 2.

15. **Display slide 27.** Explain to students that additional responsibilities come with using a bank account, such as reporting lost or stolen debit cards, monitoring for fraudulent charges and tracking where your money is going.

16. **Display slide 28.** Review why it is important for savers to reconcile their bank accounts.

- Explain to students that savers who use banks are still responsible for tracking their money. It is important to reconcile, or verify the accuracy of, all transactions on a bank statement.

17. **Display slide 29.** Distribute copies of Handout 3: Bank Reconciliation.

- Review the scenario on the slide.
- Using Handout 3, have students compare Maria's receipts to her bank statement to find the errors.

Suggested questions for student discussion:

- What errors were you able to find?
- Why do you think it was an error?
- Why would someone want to automatically transfer money from checking to savings?
- What would you do if you found an error on your bank statement?
- What is an overdraft fee?

Answers to Handout 3: Bank Reconciliation:

- Double charge for debit card: Fuel & Go.
- Debit amount is wrong for BW Café. According to the receipt, Maria only tipped $1. However, the charge included an additional $10 that is not accounted for.

18. **Display slide 30.** Review the instructional objectives for part 3.

19. **Display slides 31–32.** Explain to students that now that they have reviewed banks, it is time to discover the benefits of saving. When savers begin to seek a return through the interest paid by banks, they take the next step to wealth building—budgeting to save.

20. **Display slide 33.** Review the definitions on the slide.

21. **Display slide 34.** Review the definitions and formulas for simple and compound interest.

- Simple interest includes level payments for the life of the loan/deposit and is calculated based on the principal amount and the interest rate.
- Compound interest includes increasing payments over the life of the loan/deposit and is calculated each year based on the principal plus the interest accrued in the previous years.
- Money grows more quickly when savers receive compound interest.

Classroom response strategy:

- Have students record the characteristics of simple and compound interest in their guided notes.

22. **Display slide 35. Show the graph on the slide.**

- Explain to students that the rate of growth differs between compound interest and simple interest.

Suggested questions for student discussion:

- Which interest rate grows at a faster rate on the graph?
- What would happen to the $1,000 if it were invested for 10 years instead of five?

23. **Display slide 36.** Ask students to identify what changed between the previous slide and this one.

   - Explain to students the only change between the previous slide and this one was the length of time the original $1,000 was invested.
   - Ask students how many years it took for the $1,000 to double. Answer: a little over nine years.

24. **Display slides 37–38.** Use the information on the slide to introduce the Rule of 72. Remind students that on the previous slide, it took a little over nine years for the original $1,000 investment to double at 8 percent interest.

   - Explain that students can calculate the time it takes for money to double by dividing the number 72 by the rate of interest (expressed as a whole number).

25. **Display slide 39.** Work through the first example as a class. Have students work in pairs or small groups to solve for how many years it will take for the investment to double.

   Answers to slide 39.

Interest rate	Years to double
4%	72/4 = 18 years
6%	72/6 = 12 years
9%	72/9 = 8 years
12%	72/12 = 6 years

   Classroom response strategy:

   - Have students record their answers in their guided notes.

26. **Display slide 40.** Review the answers.

27. **Display slide 41.** Distribute copies of Handout 4: Interest Rates and the Rule of 72. Explain to students that they will calculate how much their initial investment will grow over time.

   Suggested teaching strategy:

   - Go to www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator to model how to enter the information in the first example. Then instruct students to use the online calculator to complete their answers on the handout.

28. **Display slides 42–47.** Review the learning objectives with students.

29. **Hand out Assessment 1.** Tic-Tac-Toe Choice Board.

30. **Hand out Assessment 2.** Quiz.

31. **Additional resource.** Federal Reserve Bank of St. Louis: PAGE ONE Economics: Banking Basics.

Lesson 3—Handout 1

Guided Notes

Lesson 3 vocabulary

Bank—A depository institution that makes loans and stores deposits.

Interest—A fee for the use of money over time or money earned on a savings account.

Interest rate—The percentage charged for a loan or the percentage paid on a savings account.

Loan—A sum of money lent at interest.

Savers—People who deposit money into the bank.

Borrowers—People who get loans from a bank.

Fully banked—A person who has some form of checking, savings or money market account.

Underbanked—A person who has some form of checking, savings or money market account but has used some form of alternative financial service such as: money order, check cashing service, pawnshop loan, auto title loan or payday loan.

Unbanked—A person who does not have a checking, savings or money market account.

Brick-and-mortar bank—A bank that has physical locations.

Digital bank—A bank that delivers products and services remotely though electronic channels.

Credit union—A nonprofit depository institution that is owned by members.

Brainstorm and write down what's wrong with a mattress full of money.

Lesson 3—Handout 1

Guided Notes (Cont.)

Use the space below to describe the role of savers, banks and borrowers.

| Savers | Deposit → ← Pay interest | Banks | Lend → ← Pay interest | Borrowers |
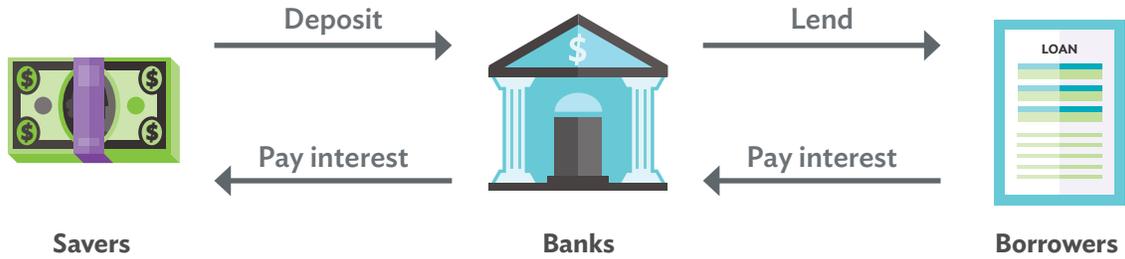
List three incentives for banking below.

1. _____

2. _____

3. _____

Write the characteristics of the different types of bank accounts below.

Checking account	Certificate of deposit
Savings account	Money market deposit account

Lesson 3—Handout 1

Guided Notes (Cont.)

Use the space below to describe the difference between simple and compound interest.

Simple

Definition:

Compound

Definition:

Formula: P x r x t

P = _____

r = _____

t = _____

Formula: P x (1+r)^{t}

P = _____

r = _____

t = _____

Rule of 72 examples: Complete the chart below and solve for how many years it will take your investment to double with the given interest rate.

Interest rate	Years to double
4%	72/4 = 18 years
6%	
9%	
12%	

Lesson 3—Handout 2

Bank Comparison Chart

Use the bank comparison chart below to research and compare different types of bank accounts.

Directions: Pick three different banks and compare account features, fees, minimum opening deposit and minimum daily balance.

Bank name	Checking	Saving	Money market	Certificate of deposit

After researching the accounts, explain which one you would choose and why.

Lesson 3—Handout 3

Bank Reconciliation

Maria normally checks her bank balance on her phone weekly. On May 24, she checked her balance before withdrawing money from an ATM at the mall. What Maria forgot to include when calculating her balance was the $4.50 ATM fee. As a result, she overdrew her account when her cellphone bill automatically deducted two days later. When she looked at her bank statement online, Maria also noticed other errors to charges during the month. Compare Maria's receipts to her bank statement to find the errors. **Circle or highlight the errors below.**

Posting	Transaction type	Amount	Balance
1–May	Beginning balance		$ 105.25
1–May	ACH payment: Music Streaming Service LLC	$ (10.99)	$ 94.26
7–May	Debit card: Movie Lights 17	$ (15.65)	$ 78.61
7–May	Debit card: Movie Lights 17	$ (12.10)	$ 66.51
8–May	Debit card: Corner Quickstop	$ (5.81)	$ 60.70
15–May	Direct deposit: ABC Grocery	$ 159.33	$ 220.03
16–May	Automatic transfer to savings ending in 7762	$ (100.00)	$ 120.03
20–May	Debit card: Fuel & Go	$ (26.33)	$ 93.70
20–May	Debit card: Fuel & Go	$ (26.33)	$ 67.37
24–May	ATM withdrawal	$ (44.50)	$ 22.87
24–May	Debit card: BW Café	$ (21.79)	$ 1.08
26–May	ACH: cellphone service	$ (67.00)	$ (65.92)
26–May	Overdraft transfer from savings	$ 65.92	$ –
30–May	Direct deposit: ABC Grocery	$ 167.35	$ 167.35
31–May	Ending balance		$ 167.35
Savings Account xxxx-7762			
1–May	Beginning balance		$ 147.00
16–May	Automatic transfer from checking ending in 3476	$ 100.00	$ 247.00
26–May	Overdraft transfer to checking 3476	$ (65.92)	$ 181.08
26–May	Overdraft fee	$ (20.00)	$ 161.08
31–May	Interest payment @ .25% annual	$ 0.03	$ 161.11
31–May	Ending balance		$ 161.11

Lesson 3—Handout 3

Bank Reconciliation (Cont.)

Maria's receipts

Music Streaming Service LLC

RECEIPT

May 1 ————	$10.15
Subtotal	$10.15
Tax	$0.84
Total	$10.99

Cellphone Service

May 26 ———— $67.00

Summary

MOVIE LIGHTS 17

Feature Film   **May 7**

Screen	Row	Seat
15	C	12

Admission ———— $15.65

Fuel & Go

May 20

Gas ———— $26.33

MOVIE LIGHTS 17

May 7

Soda ————	$4.73
Popcorn ————	$6.45
Subtotal	$11.18
Tax	$0.92
Total	$12.10

Debit Card
0000 0000 0000 0000
Maria

ATM Withdrawal

May 24

Customer Card
xxxxxxxxxxxx0000

Transaction
Withdrawal from checking

Amount	$40.00
Withdrawal fee	$4.50

BW Café   **May 24**

1 Belgian Waffle	$6.25
1 Side Hash Browns	$1.79
1 Orange Juice	$1.90
Subtotal	$9.94
Tax	$0.85
Amount	$10.79
Tip	$1.00
Total	$11.79

Corner Quickstop

May 8

1 Pack of Gum	$.99
1 Bag of Chips	$2.75
1 Bottle of Water	$1.63
Subtotal	$5.37
Tax	$0.44
Total	$5.81

Lesson 3—Handout 4

Interest Rates and the Rule of 72

Try it on your own

Section 1

Calculate how much your initial investment will grow over time.

Complete the following questions using the online compound interest rate calculator at www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator. Enter 0 for monthly contribution and interest rate variance range.

Initial investment	Estimated interest rate	Length of time in years	Compound frequency	Growth in dollars
$250	6%	10	Annual	
$1,000	8%	5	Annual	
$100	4%	15	Annual	

Section 2

Using the same online calculator, calculate how much your money will grow if you contribute $20 a month to your initial savings/investment over the time period. Enter 0 for interest rate variance range.

Initial investment	Monthly contribution	Estimated interest rate	Length of time in years	Compound frequency	Growth in dollars
$250	$20	6%	10	Annual	
$1,000	$20	8%	5	Annual	
$100	$20	4%	15	Annual	

How did total growth change between section 1 and section 2? Why do you think there was such a large difference?

Lesson 3—Handout 4

Interest Rates and the Rule of 72 (Cont.)

Section 3

Interest rates on traditional savings accounts are normally well below the interest rates used in the examples above.

Using the same online calculator, calculate how much your money will grow if you contribute $20 a month and your interest rate is 0.25 percent. Enter 0 for interest rate variance range.

Initial investment	Monthly contribution	Estimated interest rate	Length of time in years	Compound frequency	Growth in dollars
$250	$20	0.25%	10	Annual	
$1,000	$20	0.25%	5	Annual	
$100	$20	0.25%	15	Annual	

Section 4

What are the advantages of saving your money at a bank?

Would you rather invest your money and earn 6 percent interest or save your money in a bank savings account and earn 0.25 percent? Explain your answer below.

Is it realistic for you to save $20 a month? Explain your answer below.

Your friend has just started his first job, working weekends at a local restaurant. He has come to you for advice on saving money at a bank for his first car. He doesn't have any bills and makes around $400 a month. He has already saved $250 and keeps his money at home. Since he is unfamiliar with banks, what advice would you give him regarding saving his money?

Name_____   Date_____

Lesson 3—Assessment 1

Tic-Tac-Toe Choice Board

Click on the links below and complete your tic-tac-toe choice board to learn more about savings and banking. Circle or highlight your choices. When you are finished, answer the questions on the next page to reflect on what you learned.

Banking Methods Infographic	**Covid-19 and Banking** Reading	**Mexico and Digital Banking** Infographic
Lost or Stolen Debit Card? Reading	**FREE CHOICE** Research a banking or investing topic and provide a summary below	**FDIC Coverage** Video
How Banks Make Money Video *-or-* **Banks vs. Credit Unions** Reading	**Savings and Investing** Infographic	**Survey of Economic Well-Being in 2019** Reading *-or-* **How Racial Inequality Manifests in the U.S. Banking System** Podcast

Lesson 3—Assessment 1

Tic-Tac-Toe Choice Board (Cont.)

What was the most interesting topic above? Describe why.

What new information did you learn? How can you use this information to make personal or financial decisions?
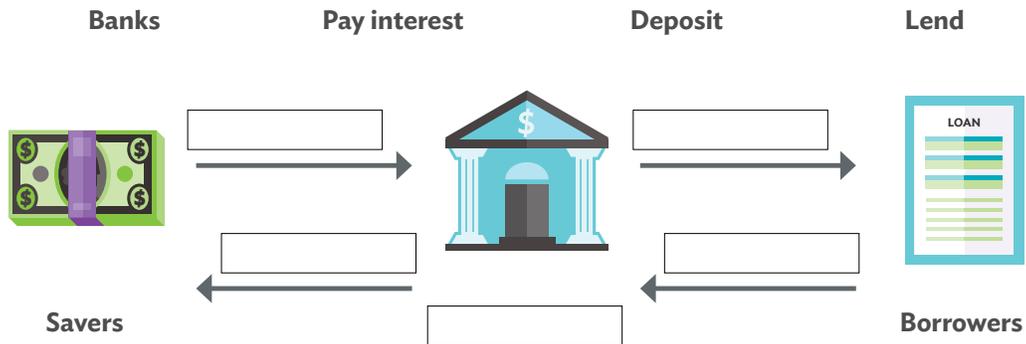
How will you use what you've learned in the future?

What questions do you still have about banking, savings and/or interest rates?

Name_____ Date_____

Lesson 3—Assessment 2

Quiz

1. Use the terms below to complete the flowchart, labeling all boxes.

Banks   **Pay interest**   **Deposit**   **Lend**

Savers   **Borrowers**

2. What are the benefits of saving money at a bank?

3. Define "interest" in your own words.

4. What is the difference between simple and compound interest?

5. Use the Rule of 72 to answer the question. If you save $500 in an account that pays 3 percent annual interest, how many years will it take for your savings to double in value?

Vocabulary matching

1._____Person who does not have a checking, savings or money market account

2._____Bank that delivers products and services remotely through electronic channels.

3._____Percentage charged for a loan or the percentage paid on a savings account.

4._____Fee for the use of money over time or money earned on a savings account.

5._____Sum of money lent at interest.

A. Digital bank

B. Interest

C. Unbanked

D. Loan

E. Interest rate

Answer Key for Handouts

Handout 3: Bank Reconciliation

Maria normally checks her bank balance on her phone weekly. On May 24, she checked her balance before withdrawing money from an ATM at the mall. What Maria forgot to include when calculating her balance was the $4.50 ATM fee. As a result, she overdrew her account when her cellphone bill automatically deducted two days later. When she looked at her bank statement online, Maria also noticed other errors to charges during the month. Compare Maria's receipts to her bank statement to find the errors. **Circle or highlight the errors below.**

Posting	Transaction type	Amount	Balance
1-May	Beginning balance		$ 105.25
1-May	ACH payment: Music Streaming Service, LLC	$ (10.99)	$ 94.26
7-May	Debit card: Movie Lights 17	$ (15.65)	$ 78.61
7-May	Debit card: Movie Lights 17	$ (12.10)	$ 66.51
8-May	Debit card: Corner Quickstop	$ (5.81)	$ 60.70
15-May	Direct deposit: ABC Grocery	$ 159.33	$ 220.03
16-May	Automatic transfer to savings ending in 7762	$ (100.00)	$ 120.03
20-May	Debit card: Fuel & Go	$ (26.33)	$ 93.70
20-May	Debit card: Fuel & Go	$ (26.33)	$ 67.37
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26-May	Overdraft transfer from savings	$ 65.92	$ –
30-May	Direct deposit: ABC Grocery	$ 167.35	$ 167.35
31-May	Ending balance		$ 167.35
Savings Account xxxx-7762			
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26-May	Overdraft fee	$ (20.00)	$ 161.08
31-May	Interest payment @ .25% annual	$ 0.03	$ 161.11
31-May	Ending balance		$ 161.11

Answers

Double charge on 20-May (debit card: Fuel & Go).

Total on receipt doesn't match total on bank statement (24-May debit card: BW Café).

Answer Key for Handouts (Cont.)

Handout 4: Interest Rates and the Rule of 72

Section 1

Calculate how much your initial investment will grow over time.

Complete the following questions using the online compound interest rate calculator at www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator. Enter 0 for monthly contribution and interest rate variance range.

Initial investment	Estimated interest rate	Length of time in years	Compound frequency	Growth in dollars
$250	6%	10	Annual	$447.71
$1,000	8%	5	Annual	$1,469.33
$100	4%	15	Annual	$180.09

Section 2

Using the same online calculator, calculate how much your money will grow if you contribute $20 a month to your initial savings/investment over the time period. Enter 0 for interest rate variance range.

Initial investment	Monthly contribution	Estimated interest rate	Length of time in years	Compound frequency	Growth in dollars
$250	$20	6%	10	Annual	$3,611.10
$1,000	$20	8%	5	Annual	$2,877.31
$100	$20	4%	15	Annual	$4,985.76

How did total growth change between section 1 and section 2? Why do you think there was such a large difference?

Answer might vary but should include:

Total growth was larger in section 2, and adding $20 a month for the life of the saving/investment led to the substantial difference in growth.

Lesson 3

Handout 4: Interest Rates and the Rule of 72 (Cont.)

Section 3

Interest rates on traditional savings accounts are normally well below the interest rates used in the examples above.

Using the same online calculator, calculate how much your money will grow if you contribute $20 a month and your interest rate is 0.25 percent. Enter 0 for interest rate variance range.

Initial investment	Monthly contribution	Estimated interest rate	Length of time in years	Compound frequency	Growth in dollars
$250	$20	0.25%	10	Annual	**$2,683.50**
$1,000	$20	0.25%	5	Annual	**$2,218.58**
$100	$20	0.25%	15	Annual	**$3,767.50**

Section 4

What are the advantages of saving your money at a bank?

Interest, convenience and safety.

Would you rather invest your money and earn 6 percent interest or save your money in a bank savings account and earn 0.25 percent? Explain your answer below.

Answers will vary.

Is it realistic for you to save $20 a month? Explain your answer below.

Answers will vary.

Your friend has just started his first job, working weekends at a local restaurant. He has come to you for advice on saving money at a bank for his first car. He doesn't have any bills and makes around $400 a month. He has already saved $250 and keeps his money at home. Since he is unfamiliar with banks, what advice would you give him regarding saving his money?
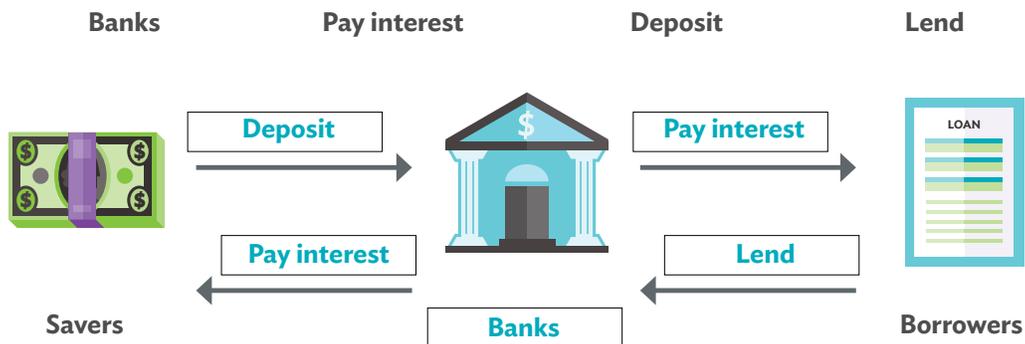
Answers will vary but might include: create a budget, set goals and open a savings account.

Lesson 3

Answer Key for Assessment

Assessment 2: Quiz

1. Use the terms below to complete the flowchart, labeling all boxes.

Banks   **Pay interest**   **Deposit**   **Lend**

Deposit

Pay interest

Pay interest

Lend

Savers   Banks   Borrowers

2. What are the benefits of saving money at a bank?

   Answers will vary but might include interest, convenience and safety.

3. Define "interest" in your own words.

   Interest is the price paid to use someone else's money.

   Interest is the payment received if someone else uses your money.

   Interest is paid to a saver in return for giving up consumption in the present.

   Interest is paid by a borrower because he or she is consuming before income has been earned.

4. What is the difference between simple and compound interest?

   Simple interest is paid on the amount of the original investment and does not change over time. Compound interest is paid on the amount of the original investment and all accrued interest.

5. Use the Rule of 72 to answer the question. If you save $500 in an account that pays 3 percent annual interest, how many years will it take for your savings to double in value?

   It will take 24 years.

Vocabulary matching

1. __C__ Person who does not have a checking, savings or money market account

2. __A__ Bank that delivers products and services remotely through electronic channels.

3. __E__ Percentage charged for a loan or the percentage paid on a savings account.

4. __B__ Fee for the use of money over time or money earned on a savings account.

5. __D__ Sum of money lent at interest.

A. Digital bank

B. Interest

C. Unbanked

D. Loan

E. Interest rate