

# Budget to Save—The Balance Sheet

## Lesson Overview

### Description

This lesson begins with dispelling common myths about millionaires through the interactive millionaire quiz. Students then have an opportunity to give their opinions of wealth in a brainstorming activity that culminates in a formalizing of the definition of wealth through the equation of: assets - liabilities = net worth. Using a variety of activities, students will further distinguish between wealth-building assets and depreciating assets and finalize the discussion by using a balance sheet to calculate and visualize how wealth is created.

### Standards

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

### Instructional Objectives

- Define wealth using the concept of net worth.
- Measure wealth using a balance sheet.
- Distinguish between wealth-building assets and other types of assets.

### Time Required

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

### Materials Required

- PowerPoint/PDF slides
- Copies of Handout 1: Real-Life Balance Sheets
- Copies of Handout 2: Try It on Your Own Balance Sheet
- Assessment 1: What Does It Mean to be Wealthy?

# Lesson Procedures

1. **Display slide 1.** Tell students that today they will start a series of lessons that will equip them in making decisions around their financial future.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Suggested questions for the student discussion:
  - Ask students who they think the typical millionaire is.
  - Name a typical millionaire.
  - Do you think a millionaire is wealthy?
4. **Display slides 4–17.** As a class, work through “The Typical Millionaire” quiz. Use the quiz to dispel myths about millionaires. Advance the questions by clicking to the next slide.

## *Classroom Response Strategy:*

- Have students write True/False on a sheet of paper and hold up their answers.
  - Have students move to different sides of the room.
5. **Display slide 19.** Have students brainstorm answers to the question “What does building wealth mean to you?”
    - Collect responses on the board. Answers will vary but might include: Wealth is having lots of money; wealth is having nice/expensive things.
    - Guide the discussion to the idea that simply having “things” or money does not make you wealthy if those things are accompanied by debt. If you still owe money on “things,” it doesn’t make you wealthy. Tell students that these examples will demonstrate how to measure wealth.
  6. **Display slide 20.** Explain that net worth is a way to measure wealth.  
Explain that  $\text{net worth} = \text{assets} - \text{liabilities}$ .
    - Explain to students that they will discuss what assets and liabilities are. They will learn that a person can build wealth by increasing assets and/or reducing total liabilities.
  7. **Display slide 21.** Review definition of an asset.

## *Suggested question for student discussion:*

- Ask students to name other assets and write examples on the board. Examples might include: collectible items, gaming consoles, money in a piggy bank, sports equipment, bicycles, etc.

*Classroom Response Strategy:*

- Have students write names of assets on sticky notes and place on the board. (Later these can be sorted into wealth-building assets or depreciating assets.)

8. **Display slide 22.** Discuss the definitions.

- Sort the assets that were named and written on the board in the previous slide into wealth-building assets vs. depreciating assets.
- **Wealth-building assets** are called appreciating assets and generally increase in value over time or provide a rate of return.
- **Depreciating assets** are assets that decrease in value over time.
- **Intellectual property**, such as patents, copyrights and trademarks, is also an asset if it has market value.

9. **Display slide 23.** Review the definition of liability.

*Suggested question for student discussion:*

- Who do we owe money to? (Note: Students may have different levels of awareness of household and family expenditures.) Examples might include: family member, bank, friend, utility provider, internet provider, cell phone company, etc.

10. **Display slide 24.** Review the definition of net worth.

*Suggested question/reminder for student discussion:*

- Does driving an expensive car make you wealthy?
- Remind students that the net worth is the value of the assets minus the money you owe. Driving an expensive car doesn't make you automatically wealthy. It depends on how much money you owe.

11. **Display slides 25–28.** Hand out copies of Handout 1: Real-Life Balance Sheets: Asset or Liability?

- Follow the prompts/instructions on each slide.
- Have students fill in their answers.

12. **Display slides 28–29.** Guide students through the scenario on the slides.

- Ask students to share their answers with the whole class, then display the answer slide.

13. **Display slides 30–49.** Continue to guide students through each scenario or use the suggested strategy below.

*Classroom Response Strategy:*

- Review slides 30–49. Divide the class into groups.

- Assign each group one section of the Real-Life Balance Sheets: Asset or Liability?, Handout 1. Allow each group to read the description and complete the balance sheet.
- Have groups come to the board and present their answers.
- After students have presented their answers, display the answer slide for each scenario.

14. **Display slides 50–55.**

- Distribute Handout 2, Real-Life Balance Sheets: Try It on Your Own.
- Lead the class in sorting assets and liabilities and calculating net worth for Sandra and Daniel.
- Have students fill in their answers.

15. **Display slides 56–57.** Review learning objectives with students.

16. **Hand out Assessment 1.** What Does It Mean to be Wealthy?





## Handout 1: Real-Life Balance Sheets

### Asset or Liability?

#### Jose

Freelance App Developer

Condo  
Credit card debt  
Store-financed  
home theater  
New car  
Copyrighted  
mobile app

#### Assets


#### Liabilities


#### Maria

Loan Officer

Home mortgage  
Car loan  
Student loan  
Retirement  
account

#### Assets


#### Liabilities


#### Andrea

College Sophomore

Savings account  
Credit card balance  
Car  
Bobblehead  
collection  
\$1,300 bank loan

#### Assets


#### Liabilities


## Sam

Engineer

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Company stock

Car

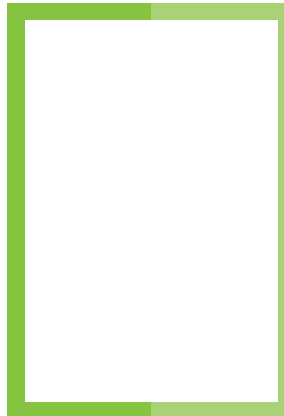
Boat loan

Medical bills

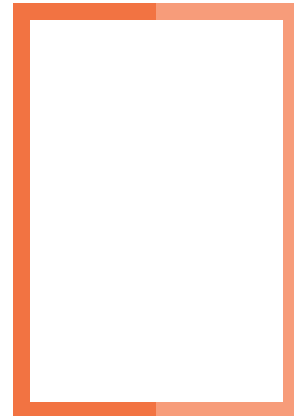
Co-signed a loan

Credit card  
balance

### Assets



### Liabilities



## Isabella

Analyst

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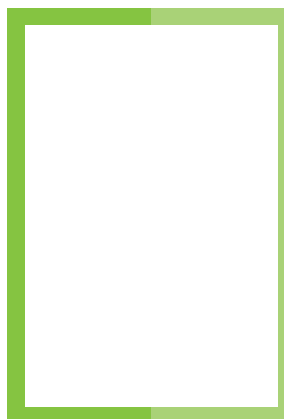
College loans

Credit card  
balance

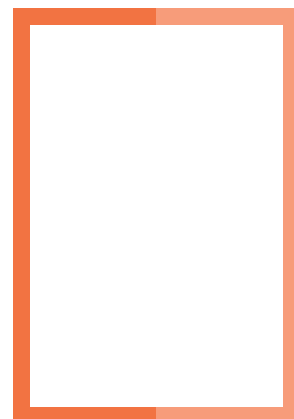
Savings account

Inheritance

### Assets



### Liabilities



## Henry

Retiree

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Retirement  
accounts

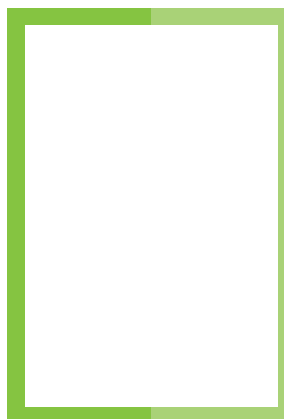
House

Medical bills

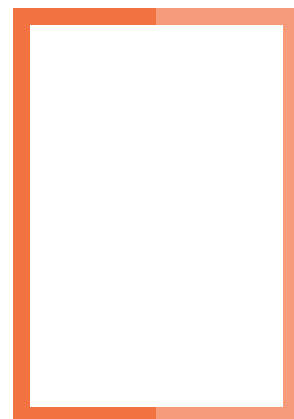
Graduate school  
loan

RV loan

### Assets



### Liabilities



# Kunal

Teacher

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College loan

Home mortgage

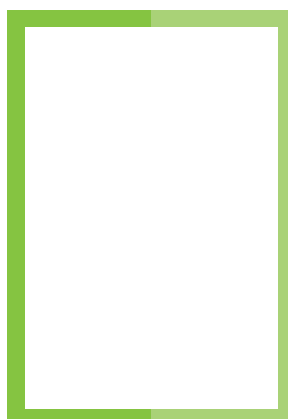
Paid-off car

Car loan

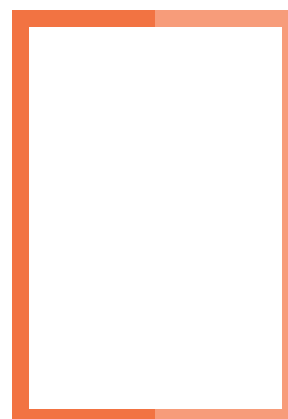
College savings  
account

Home-repair loan

## Assets



## Liabilities



# Zoe

Lead Singer

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Music royalties

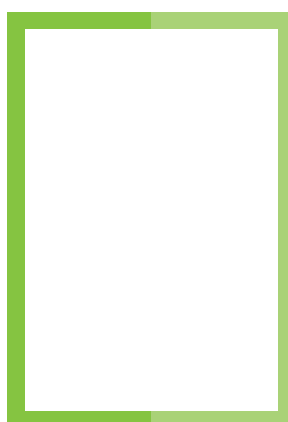
Guitar collection

Van

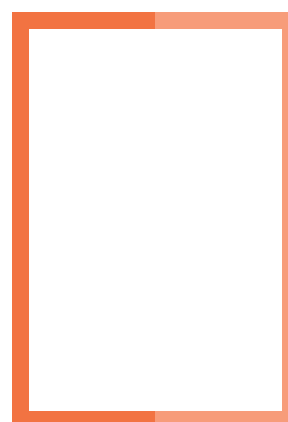
Checking and  
savings accounts

Credit card  
balance

## Assets



## Liabilities





## Handout 2: Real-Life Balance Sheets

# Try It on Your Own

### Question #1

**Sandra**

Description	Amount
Savings account from summer job	\$750
Prom dress credit card balance	\$200
Savings bond	\$150
Owed to mom for cell phone	\$120
2012 car	\$3,500
Video games	\$200
Car loan balance	\$1,500

### Question #2

**Daniel**

Description	Amount
Checking account	\$900
Cell phone balance	\$250
College savings account	\$500
Balance due on annual gaming membership	\$100
Laptop computer	\$1,500
Balance due on laptop computer	\$600

**Sandra's Balance Sheet**

Wealth-Building Assets	
Depreciating assets	
<b>Total assets</b>	
Liabilities	
<b>Total liabilities</b>	
<b>Total assets</b>	
<b>Total liabilities</b>	
<b>Assets - Liabilities = Net Worth</b>	

**Daniel's Balance Sheet**

Wealth-Building Assets	
Depreciating assets	
<b>Total assets</b>	
Liabilities	
<b>Total liabilities</b>	
<b>Total assets</b>	
<b>Total liabilities</b>	
<b>Assets - Liabilities = Net Worth</b>	



## Assessment 1

# What Does It Mean to be Wealthy?

Match the following terms to the correct definition:

1. _____ Assets	A. The difference between the total assets and total liabilities of an individual
2. _____ Balance sheet	B. Assets that add to net wealth
3. _____ Depreciation	C. The loss of value of an asset over time
4. _____ Liabilities	D. Anything an individual or business owns that has commercial or exchange value
5. _____ Net worth	E. A financial statement showing a snapshot of the assets, liabilities and net worth of an individual
6. _____ Wealth-building assets	F. Money an individual or organization owes

Write a short response to the following:

7. Name two assets that are likely to depreciate in value over time.
8. What happens to wealth if money is borrowed to purchase a depreciating asset?
9. Give one reason why houses are generally considered a wealth-building asset.
10. If your total liabilities increase without a change in assets, how will it impact net worth?

What generally happens to net worth if you do the following actions?

Circle I for increase and D for decrease.

11. I or D Invest in a retirement plan
12. I or D Buy a car and make a small down payment
13. I or D Buy concert tickets with your credit card
14. I or D Spend money on your fall wardrobe
15. I or D Buy a bond

# Answer Key for Handouts

## Asset or Liability Scenarios

### Jose

**Assets:** Condo, new car, copyrighted mobile app

**Liabilities:** Credit card debt, store-financed home theater

### Maria

**Assets:** Retirement account

**Liabilities:** Home mortgage, car loan, student loan

### Andrea

**Assets:** Savings account, car, bobblehead collection

**Liabilities:** \$1,300 bank loan, credit card balance

### Sam

**Assets:** Company stock, car

**Liabilities:** Boat loan, medical bills, co-signed a loan

### Isabella

**Assets:** Inheritance, savings account

**Liabilities:** College loans, credit card balance

### Henry

**Assets:** Retirement accounts, house

**Liabilities:** Medical bills, graduate school loan, RV loan

### Kunal

**Assets:** Paid off car, college savings account

**Liabilities:** College loan, home mortgage, car loan, home-repair loan

### Zoe

**Assets:** Music royalties, guitar collection, van, checking and savings accounts

**Liabilities:** Credit card balance

## Balance Sheets

### Sandra

**Assets:** \$4,600

**Liabilities:** \$1,820

**Net worth:** \$2,780

### Daniel

**Assets:** \$2,900

**Liabilities:** \$950

**Net worth:** \$1,950

# Answer Key for Handouts

Match the following terms to the correct definition:

1. <b>D</b> - Assets	A. The difference between the total assets and total liabilities of an individual
2. <b>E</b> - Balance Sheet	B. Assets that add to net wealth
3. <b>C</b> - Depreciation	C. The loss of value of an asset over time
4. <b>F</b> - Liabilities	D. Anything an individual or business owns that has commercial or exchange value
5. <b>A</b> - Net worth	E. A financial statement showing a snapshot of the assets, liabilities and net worth of an individual
6. <b>B</b> - Wealth-building assets	F. Money an individual or organization owes

Write a short response to the following:

7. Name two assets that are likely to depreciate in value over time.

Answers will vary but might include cars, computers, video games, clothes, etc.

8. What happens to wealth if money is borrowed to purchase a depreciating asset?

When money is borrowed to purchase a depreciating asset, liabilities increase.  
If total assets remain the same while total liabilities increase, net worth decreases.

9. Give one reason why houses are generally considered a wealth-building asset.

Answers will vary but might include, house is a wealth-building asset when it appreciates in value over time; if a house maintains its value as the mortgage is paid off, net worth will increase.

10. If your total liabilities increase without a change in assets, how will it impact net worth?

Net worth decreases.

What generally happens to net worth if you do the following actions?

Circle **I** for increase and **D** for decrease.

11. **I** or **D** Invest in a retirement plan

14. **I** or **D** Spend money on your fall wardrobe

12. **I** or **D** Buy a car and make a small down payment

15. **I** or **D** Buy a bond

13. **I** or **D** Buy concert tickets with your credit card

# Budget to Save—Developing a Budget

## Lesson Overview

### Description

Prior to the start of the lesson, students track their consumption during a one-to-two-week period.

This lesson begins brainstorming ways students can earn an “A” in class. Students then practice writing SMART goals, which culminates in a goal-writing assessment. Students will further distinguish between needs and wants and marginal decision-making and explore different sample budgets. The lesson concludes with students using marginal decision-making to adjust a sample budget.

### Standards

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

### Instructional Objectives

- Analyze personal goals to determine related and necessary financial goals.
- Create personal goals for a variety of time frames and develop related financial goals.
- Gather data and then analyze personal spending.
- Develop a budget that allows for personal saving.

### Time Required

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

### Materials Required

- PowerPoint/PDF slides
- Copies of Handout 1: Consumption Log
- Copies of Handout 2: Guided Notes
- Copies of Handout 3: Day-to-Day Spending Logs
- Copies of Assessment 1: Where Am I Going? A Goal-Setting Exercise
- Copies of Assessment 2: Budget Worksheet



# Lesson Procedures

1. Prior to the start of the lesson, Distribute Handout 1: Consumption Log to students. Have students record all their consumption for one to two weeks. Since parents/guardians pay for many high school students' expenses, encourage students to record all consumption whether they paid for the items or not.
  - Alternative recording option: Ask students to take pictures on their cellphone of everything they consume for one to two weeks. Then have students transfer the pictures to their consumption log in class.
2. **Display slide 1.** Distribute Handout 2: Guided Notes. Tell students that today they will start a lesson about setting goals, budgeting and saving.
3. **Display slide 2.** Review the instructional objectives for the lesson.
4. **Display slides 3-4.** Introduce goal setting by asking students to brainstorm steps they need to take to earn an "A." Answers will vary but might include:
  - Set aside time for studying.
  - Turn in all homework.
  - Limit cellphone use.
  - Attend class every day.

*Classroom response strategy:*

- Have students write brainstorm ideas in their guided notes.
  - Have students transfer each brainstorm idea on a sticky note and place them on the whiteboard. If sticky notes are used, you can re-sort them in the next two steps.
  - Have students share their ideas and type them into the fillable text box on the slide.
5. **Display slide 5.** Explain to students that their plans for earning an "A" should be specific and action oriented. Then have students sort their previous steps to earn an "A" into the following categories:
    - **General** (General plans are not only harder to follow; they are more likely to fail.)
    - **Specific** (Specific plans focus on actions that can be controlled.)

*Classroom response strategy:*

- Have students sort their steps into specific or general in their guided notes.
- If you used sticky notes in the previous steps, ask students to come to the board and re-sort sticky notes.
- Have students share their ideas and type them into the fillable text box on the slide.

6. **Display slides 6-7.** Use the information below and the keywords on the slide to introduce SMART Goals. SMART is the acronym used to help set high quality goals. Use each of the words and the examples provided on slide 7 to demonstrate the difference between goals that meet each of the requirements and goals that do not.

- **Goal:** I would like to work out three days a week for 30 minutes a day for the next two months.
- Explain how “three days” and “for 30 minutes” are both specific and measurable.
- Explain that they are generally attainable and realistic.
- Explain that by setting a timetable of two months, the goal remains timely.

*Classroom response strategy:*

- Have students record what the acronym SMART stands for in their guided notes.

7. **Display slide 8.** Give students time to rewrite their original brainstorm responses into a SMART goal and share with the class.

8. **Display slide 9.** Have students rewrite the following goal: I want to do better at completing all my homework. Add the necessary details to make it SMART. Answers will vary. A sample answer is given below.

- I will use my planner to record all major deadlines and assignments for each class, use the first hour I’m home to focus on my homework without technology and attend tutorials with my teachers weekly for help on my homework from now until the next test.

*Classroom response strategy:*

- There is space in the guided notes for students to complete the rewrite.
- Complete the rewrite as a class or in pairs and record student responses using the fillable textbox on slide 9.

9. **Display slides 10-11.** Review example goals. Using the space provided in the guided notes, have students write SMART goals for each example:

- New cellphone.
- Community college.
- Student competition trip.
- New computer.

*Classroom response strategy:*

- Split class into four groups and have each group write a SMART goal and share. If you have a large class, split into eight groups if needed and compare SMART goals. Not every SMART goal will be the same.
- Have students record their SMART goals in their guided notes.

10. **Display slide 12.** Explain to students that in order to build wealth, they must establish goals.

11. **Display slide 13.** Introduce personal and financial goals.

12. **Display slide 14.** Distribute Assessment 1: Where Am I Going? A Goal Setting Exercise.

Have your students set personal goals for each time frame. This assessment can be used as a summative or formative assessment.

- This would be a good ending point for the 45-minute lesson.
- Reminder—Handout 1: Consumption Log needs to be completed before the next section.

13. **Display slides 15-19.** Review the definition of needs, wants and marginal decision-making.

- Explain to students that before they can create a budget to meet their goals, they must first understand needs and wants and marginal decision-making.

*Classroom response strategy:*

- Have students record needs, wants and marginal decision-making in their guided notes.

14. **Display slides 20-22.** Explain to students that the next step before creating a budget is to identify needs and wants.

Distribute Handout 3: Day-to-Day Spending Log.

- Split class into six groups to identify whether each expense is a need or a want. Have student groups share their answers when finished.
- Needs and wants are not as clear as they seem. For example, some students may view a cellphone as a need, and another student might not own a cellphone and consider it a want.

15. **Display slide 23.** Review the scenario on the slide.

Karthik spends \$5-\$10 a day for coffee. What could Karthik change to save more?

*Suggested questions for student discussion:*

- Is coffee a need or a want?
- Is there a less-expensive way he can still have coffee?
- If Karthik wants to save money and decides not to give up coffee, is there another way he can cut his budget?

16. **Display slide 24.** If students have been using Handout 1: Consumption Log to record their consumption over the last one to two weeks, ask students to turn in their logs. If you chose to have students take photos on their cellphone of all the items they consumed, this would now be the time to have them transfer their consumption to the consumption log.
- Step 1: Have students enter all their consumption expenses for the past week.
  - Step 2: Have students identify each item as a need or a want.
  - Step 3: Have students identify three items they could adjust or modify if they changed their savings goal or had a change in income.

*Classroom response strategy:*

- Have students share their examples to step 3 in class.
17. **Display slide 25.** Review the brainstorm question “Why Is a Budget Important?”
18. **Display slides 26-27.** Review the definition of budget, how budgets can help you and what is needed to develop a budget.
19. **Display slides 28-29.** Use the information below and the visuals on the slide to explain Riley’s monthly budget.
- Explain that Riley needs to save \$100 per month.
  - Ask for student suggestions on how Riley could save money.
  - Don’t write specific numbers on this slide; just get students thinking about what changes Riley could make.
20. **Display slide 30.** Distribute Handout 4: Riley’s Monthly Budget. On the handout, have students adjust Riley’s budget to save at least \$100 a month. A sample outcome of Riley’s budget is below.
- Instruct students to record the spending changes and new expenses in the last two columns.
  - Have students calculate Riley’s new savings.

### Riley's New Monthly Budget

Assets	Current income	Income changes	New income
Part-time job	\$ 580		\$
Lunch money from parents	80		
<b>Total income</b>	<b>\$ 660</b>		<b>\$</b>
Liabilities	Current expenses	Spending changes	New expenses
Eating out at lunch (\$6 per school day)	\$ 120		\$
Movie night with friends (\$20 per week)	80	-\$20 every other week	40
Dinner with friends (\$12.50 per week)	50	-\$12.50 every other week	25
Football games and snacks	20		
Car insurance	140		
New clothing	170	-\$40	130
Gas	60		
Soft drink from vending machine (per school day)	20		
<b>Total expenses</b>	<b>\$ 660</b>		<b>\$ 555</b>
	Current savings		New savings
Available to save (income - expenses)	\$ None		\$ 105

21. **Display slides 31-32.** Review learning objectives with students.

*Suggested question for student discussion:*

- How does making a budget help you reach your goals?

22. **Optional.** Have students complete Assessment 2: Budget Worksheet.

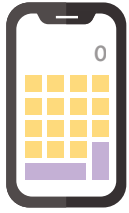
**Handout 1****Consumption Log**

**Before class:** Use this chart to write down EVERYTHING you consume in the next one to two weeks. Whether it is a \$75 item of clothing or a \$1 candy bar, write it down. Even if someone else pays for the items you consume, write it down. This is the first step of budgeting.

Date	Expense	Amount	Need	Want

**During class:**

1. Identify each item as a need or a want.
2. Identify three items you consume that could be adjusted or modified if you changed your savings goal or had a change in income.



## Handout 2

# Guided Notes

Brainstorm and write down what steps are needed to earn an “A” in class.

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Now, sort your goals listed above into the following categories:

Specific

General

**SMART Goals:** Fill in the blank:

**S**

\_\_\_\_\_

**M**

\_\_\_\_\_

**A**

\_\_\_\_\_

**R**

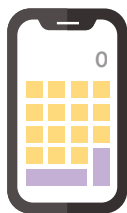
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**T**

\_\_\_\_\_

**Rewrite the following goal into a SMART goal:**

I want to do better at completing all my homework.

## Handout 2

# Guided Notes, Cont.

### Setting Goals

Write a goal to accomplish the up-front and ongoing cost for each purchase.

#### Buy a new cellphone

- a. Phone: \$600
- b. Cellphone plan: \$50/month

#### Pay for community college

- c. Tuition: \$4,000/year
- d. Books: \$600/year
- e. Bus pass: \$50/month

#### Pay for student competition trip

- f. Plane ticket: \$500
- g. Hotel: \$400
- h. Food and souvenirs: \$300

#### Purchase a computer

- i. Computer: \$1,200
- j. Internet: \$75/month
- k. Two-year warranty: \$100

Need

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Want

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Marginal Decision-Making

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## Handout 3

# Day-to-Day Spending Log

### Karthik

Date	Expense	Amount	Need	Want
1/1	Donut shop	\$25.00		
1/1	Coffee	\$10.72		
1/2	Musical instrument monthly rental	\$24.86		
1/2	Coffee	\$5.36		
1/3	Work T-shirt	\$17.00		
1/3	Coffee	\$5.36		
1/4	Monthly music streaming service	\$7.99		
1/4	Coffee	\$5.36		
1/5	Donut shop	\$8.27		
1/5	Movie and popcorn	\$19.75		
1/6	Coffee	\$10.72		

### Maria

Date	Expense	Amount	Need	Want
1/1	Campus monthly meal plan	\$250.00		
1/1	Coffee	\$5.83		
1/2	Concert ticket	\$175.00		
1/2	Dinner	\$22.67		
1/4	Textbook	\$127.86		
1/5	Cellphone bill	\$63.88		
1/5	Lunch	\$19.79		
1/5	Online shoe store	\$65.24		
1/7	Internet bill	\$54.99		

### Terri

Date	Expense	Amount	Need	Want
1/1	Monthly bus pass	\$112.00		
1/1	Groceries	\$162.21		
1/2	Rent	\$1,275.00		
1/2	Tech, TV and more	\$176.99		
1/4	Cellphone bill	\$87.99		
1/5	Daycare	\$1,100.00		
1/5	Restaurant dinner	\$37.78		
1/5	Clothing for kids	\$115.98		
1/6	Groceries	\$244.73		



## Handout 3

# Day-to-Day Spending Log

### Destiny

Date	Expense	Amount	Need	Want
1/1	Family gym membership	\$273.00		
1/1	Soccer registration	\$154.25		
1/2	Mortgage	\$1,816.00		
1/2	Electricity bill	\$276.09		
1/4	Cellphone bill	\$145.99		
1/5	Internet and cable	\$189.74		
1/5	Restaurant dinner	\$127.52		
1/5	Car payment	\$468.63		
1/8	Gas	\$31.77		

### Zane

Date	Expense	Amount	Need	Want
1/1	Restaurant dinner	\$84.37		
1/1	Rent	\$2,700.00		
1/2	Restaurant dinner	\$121.27		
1/3	Coffee	\$5.27		
1/4	Cellphone bill	\$89.43		
1/4	Lunch	\$34.75		
1/4	Airfare for vacation	\$427.52		
1/5	Monthly parking	\$175.00		
1/7	Restaurant breakfast	\$31.77		

### Tandy

Date	Expense	Amount	Need	Want
1/1	Supplemental medical plan	\$188.00		
1/1	Prescription	\$23.46		
1/1	Rent	\$899.00		
1/1	RV payment	\$235.10		
1/3	Cellphone bill	\$35.99		
1/4	Cable	\$65.78		
1/5	Restaurant breakfast	\$8.99		
1/5	Groceries	\$72.32		
1/6	Electricity bill	\$65.21		



## Handout 4

# Riley's Monthly Budget Worksheet

Assets	Current income	Income changes	New income
Part-time job	\$ 580		\$
Lunch money from parents	80		
<b>Total income</b>	\$ 660		\$

Liabilities	Current expenses	Spending changes	New expenses
Eating out at lunch (\$6 per school day)	\$ 120		\$
Movie night with friends (\$20 per week)	80		
Dinner with friends (\$12.50 per week)	50		
Football games and snacks	20		
Car insurance	140		
New clothing	170		
Gas	60		
Soft drink from vending machine (per school day)	20		
<b>Total expenses</b>	\$ 660		\$

	Current savings		New savings
Available to save (income - expenses)	\$ None		\$

What did you change and why?

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## Assessment 1

# Where Am I Going?

### A Goal-Setting Exercise

To build wealth, you must establish goals. For each time frame, set one personal goal. Then set a financial goal that will allow you to meet the personal goal. For example, if you want to take a trip with friends this summer, how much will you need to save?

In preparing your goals:

- Be realistic.
- Establish time frames.
- Be flexible; goals can change.

### By the end of the school year ...

Personal goal \_\_\_\_\_

Financial goal \_\_\_\_\_

### By the end of summer ...

Personal goal \_\_\_\_\_

Financial goal \_\_\_\_\_

### In one year ...

Personal goal \_\_\_\_\_

Financial goal \_\_\_\_\_

### SMART Goal

Choose one goal above and write it as a SMART goal:

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## Assessment 2

# Where Am I Going?

- Document the sources and amounts of income that allowed you to make purchases while tracking your consumption.
- Record your expenses below. You can use general spending categories like “eating out” or “entertainment” if needed.
- Look for ways to increase income and/or decrease expenses so that you begin to save or increase your savings. Keep in mind your financial goals. Is there something you have been buying that you could live without?
- Remember, keep your budget realistic and include everything. Make plans that you can live with week after week.

<b>Assets</b>	<b>Current income</b>	<b>Income changes</b>	<b>New income</b>
	\$		\$
<b>Total income</b>	\$		\$
<b>Liabilities</b>	<b>Current expenses</b>	<b>Spending changes</b>	<b>New expenses</b>
	\$		\$
<b>Total expenses</b>	\$		\$
	<b>Current savings</b>		<b>New savings</b>
<b>Available to save (income - expenses)</b>	\$		\$

# 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](http://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 through electronic channels.

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

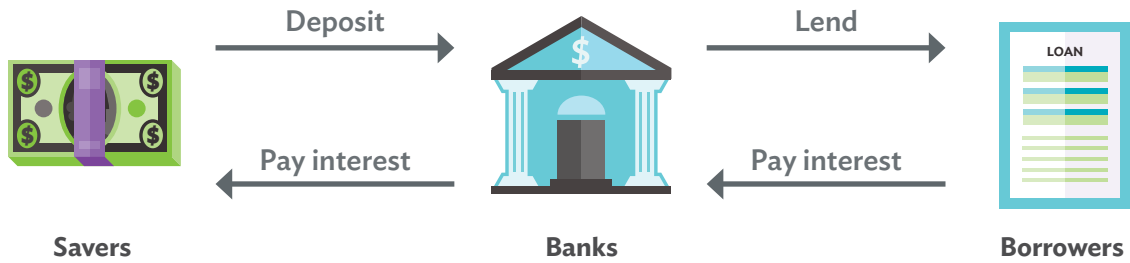
Brainstorm and write down what's wrong with a mattress full of money.



## Lesson 3—Handout 1

# Guided Notes (Cont.)

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



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:

**Formula:**  $P \times r \times t$

P = \_\_\_\_\_

r = \_\_\_\_\_

t = \_\_\_\_\_

#### Compound

Definition:

**Formula:**  $P \times (1+r)^t$

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



#### 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	\$0.99
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](http://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?



## 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.

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

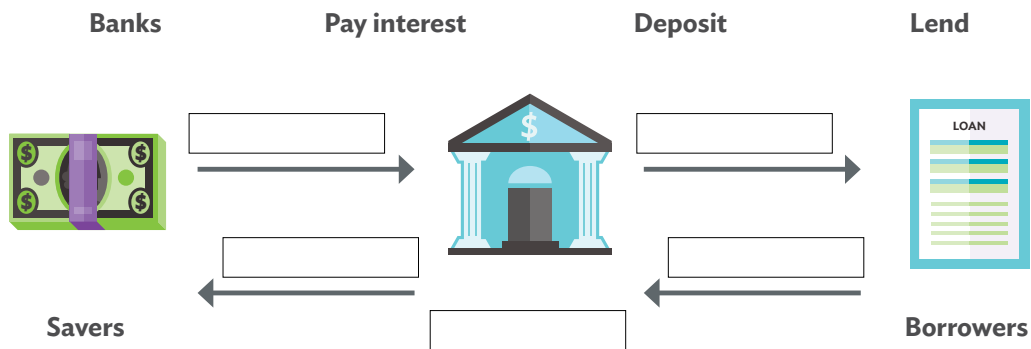
What questions do you still have about banking, savings and/or interest rates?



## Lesson 3—Assessment 2

### Quiz

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



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           | <b>A. Digital bank</b>  |
| 2. ___ Bank that delivers products and services remotely through electronic channels. | <b>B. Interest</b>      |
| 3. ___ Percentage charged for a loan or the percentage paid on a savings account.     | <b>C. Unbanked</b>      |
| 4. ___ Fee for the use of money over time or money earned on a savings account.       | <b>D. Loan</b>          |
| 5. ___ Sum of money lent at interest.   | <b>E. Interest rate</b> |



## Lesson 3

# 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 overdraw 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.**

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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

### 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).**

## Lesson 3

# 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](http://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	<b>\$447.71</b>
\$1,000	8%	5	Annual	<b>\$1,469.33</b>
\$100	4%	15	Annual	<b>\$180.09</b>

#### 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	<b>\$3,611.10</b>
\$1,000	\$20	8%	5	Annual	<b>\$2,877.31</b>
\$100	\$20	4%	15	Annual	<b>\$4,985.76</b>

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

# Answer Key for Handouts (Cont.)

### 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?

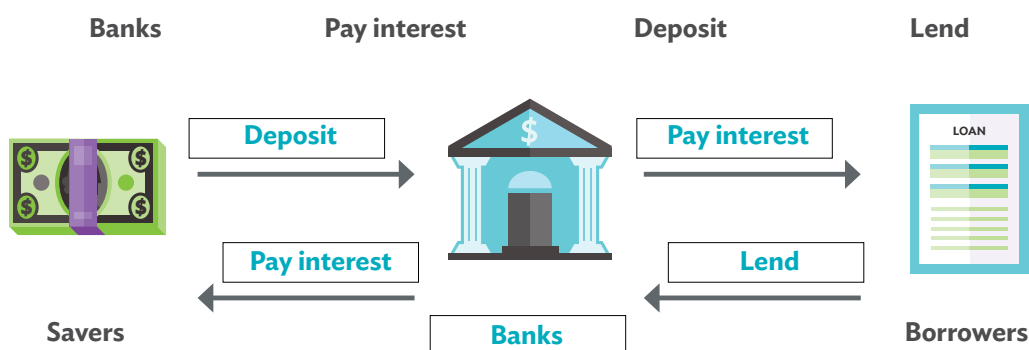
**Answers will vary but might include: create a budget, set goals and open a savings account.**

## Lesson 3

# Answer Key for Assessment

### Assessment 2: Quiz

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



- What are the benefits of saving money at a bank?

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

- 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.**

- 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.**

- 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. <u>C</u> Person who does not have a checking, savings or money market account           | <b>A. Digital bank</b>  |
| 2. <u>A</u> Bank that delivers products and services remotely through electronic channels. | <b>B. Interest</b>      |
| 3. <u>E</u> Percentage charged for a loan or the percentage paid on a savings account.     | <b>C. Unbanked</b>      |
| 4. <u>B</u> Fee for the use of money over time or money earned on a savings account.       | <b>D. Loan</b>          |
| 5. <u>D</u> Sum of money lent at interest.   | <b>E. Interest rate</b> |

# Save and Invest—Owning Versus Renting

## Lesson Overview

### Description

In this lesson, students will compare owning versus renting a place to live. Beginning with a brainstorming activity, students will explore whether they would prefer to own or rent housing in the future. Students will then explore the responsibilities and risk of renting. After looking at a sample lease agreement, students will research additional lease sections not found in the sample lease agreement. Exploring the costs and benefits of owning a home, students will evaluate the effects of owning on net worth. Concluding the lesson, students will create a video and explain their decision regarding whether they would prefer to rent or own, discuss the cost and benefits of their choice and create SMART goals. An optional extension activity has been included to introduce examples of housing discrimination.

### Standards

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

### Instructional Objectives

- Identify the responsibilities and risks of being a homeowner and renter.
- Compare the costs and benefits of buying a home and renting.
- Analyze the impact of buying and renting on an individual's net worth.

### Time Required

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

### Materials Required

- PowerPoint/PDF slides
- Copies of Handout 1: Guided Notes
- Copies of Handout 2: Lease Agreement
- Copies of Assessment 1: Lease or Buy Video
- Copies of Extension Activity: Examples of Housing Discrimination

# Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is buying versus renting a place to live.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Have students brainstorm answers to the question “Assuming you had the financial resources to do so, would you prefer to own or rent housing?”

- Ask students to share their answer.

*Suggested questions for student discussion:*

- Why would you prefer to rent or own?
- What are the advantages of renting or owning?
- What costs do you need to think about if you were to rent or own? Examples will vary but might include amount of money for a down payment, deposit, credit score, length of time you plan to stay in one place, size of family, pets, location, taxes, insurance.

*Classroom response strategies:*

- Have students move to separate sides of the classroom to identify whether they would prefer to rent or own.
  - Have students list their brainstorm ideas in their guided notes and then share with the class.
4. **Display slide 4.** Tell students they will explore the costs and benefits of renting.

*Suggested question for student discussion:*

- What various factors should you consider when looking for a place to rent? Examples will vary but might include: location, costs, amenities and requirements.
5. **Display slide 5.** Use the information on the slide and below to introduce concepts a person must think about when considering renting a place to live.
    - **Up-front costs:** Renters must have up-front money for deposits and other costs associated with moving into a rental property.
    - **Renters insurance:** Renters can carry insurance to protect their property while leasing.
    - **Lease agreement:** Renters sign lease agreements that outline many of their rights and responsibilities, as well as the terms of the lease they are entering into.
    - **Responsibilities:** Renters responsibilities may not be as great as if they were to own a home but will be outlined in their lease agreement.
  6. **Display slide 6.** Review the up-front costs of renting.
    - Explain to students that if renters take care of the property during their lease, they may be eligible to get some of their deposit back when they move out.

7. **Display slide 7.** Review renters insurance.

- Explain to students that renters insurance is not required by law but can be required as a term of the lease agreement.
- Monthly premiums for rental insurance are significantly less than homeowners insurance.

8. **Display slide 8.** Review the definition of landlord, tenant and lease agreements.

9. **Display slide 9.** Explain to students that lease agreements are legally binding contracts when signed and often include sections such as:

- Names of parties.
- Description of the property.
- Term length.
- Deposits and fees.
- Tenant responsibilities.
- Early termination fees.

Additional sections that can be included in a rental agreement:

- Landscaping.
- Contact information.
- Request for repairs.
- Notice before landlord entry/access to premises.
- Rules and regulations on smoking/illegal activity.
- Direct deposit.
- Subleasing.
- Move-out conditions.

*Classroom response strategy:*

- Have students list five common sections that can be found in a lease agreement in their guided notes and share which they feel are the most important to have included in the agreement.

10. **Display slide 10.** Review tenant responsibilities.

- While homeowners maintain property to protect or improve its value, the responsibilities of a renter are outlined in the lease agreement.

11. **Display slide 11.** Hand out copies of Handout 2: Lease Agreement.

- Give students time to read the lease agreement.

*Suggested questions for student discussion:*

- What were you surprised to find in the lease agreement?
- Were there any tenant/landlord responsibilities missing?

- Why would it be important to read a lease agreement before signing? Examples might include: to understand tenant responsibilities, costs associated with rent, late payments, pet fees and move-out conditions.

*Classroom response strategies:*

- Encourage students to identify tenant responsibilities by highlighting the text as they read.
- Using the internet, have students research additional sections that can be found in a lease agreement and complete their answers on page 2 of Handout 2: Lease Agreement.

12. **Display slide 12.** Tell students they will explore the costs and benefits of owning.

*Suggested questions for student discussion:*

- What costs might be associated with buying a property? Examples might include: upkeep/maintenance, monthly payment (mortgage), down payment, appraisal fees.
- Are costs for buying the same for renting? Examples will vary but might include costs for renting are less than the costs to buy and maintain a property.
- What benefits might be associated with buying a property? Examples will vary but might include appreciation of the home value, tax write-off, freedom to make changes to the property.

13. **Display slide 13.** Use the information on the slide and below to introduce concepts a person must think about when considering owning a property.

- **Property value:** The estimated price of a property.
- **Mortgage:** The loan a person gets to purchase a home.
- **Homeowners insurance:** Insurance a person purchases to protect the contents and structure of a home.
- **Equity:** The difference between the appraisal value and the balance on the mortgage loan.
- **Responsibilities of homeownership:** Homeowners have responsibilities that are unique to homeownership.
- **Risks of homeownership:** Homeowners face risks just like the owners of any financial assets.

14. **Display slide 14.** Review property value.

- Tell students that homes are appraised, or have a market value established, whether they are offered for sale or not.
- When a home is sold, lenders use appraisals to determine how much money a homeowner must provide as a down payment (cash the borrower must provide to cover the difference between the purchase price and the mortgage value).
- Assessments are also conducted by cities to determine property tax.
- Explain to students that assessments can fluctuate. When values appreciate, property taxes go up as well. This increases the property tax bill due each year and vice versa.



- There is no guarantee that the appraised or assessed value is the price a home will sell for; it is someone's opinion of the value of the home based on its size, location and real estate conditions in the market where it would be offered for sale.
- Property value is an asset on the balance sheet.

*Classroom response strategy:*

- Have students record examples of how appraisals are used in their guided notes.

**15. Display slide 15.** Review mortgage loan.

- Tell students that a mortgage is the loan a homebuyer obtains if unable to pay cash for a home. The mortgage is owned by the bank until the loan is paid in full.
- Mortgages are considered a liability on a balance sheet.
- Mortgages have terms up to 30 years in most cases.
- Most mortgage loans require a down payment. Exceptions include VA (Veterans Affairs) and USDA (United States Department of Agriculture) mortgage loans.
- Mortgagees must pay the bank (or lending institution) interest over the life of the loan.
- The interest rate charged on a loan is based on creditworthiness, or likelihood of repayment, of borrowers.
- The interest charged on a primary mortgage can be deducted from a person's income tax each year, lessening the tax burden.

**16. Display slide 16.** Review homeowners insurance.

- Homeowners insurance protects homeowners from many types of loss that can occur.
- Losses can be a result of natural disasters, fire, crime or other circumstances.
- Mortgage companies require homeowners to keep homeowners insurance for as long as there is a loan against the house. This is to protect the mortgage company in the event the home is destroyed while the mortgagee still owes money.
- It is important to read carefully what is covered by homeowners insurance because it varies by policy.

*Classroom response strategy:*

- Have students summarize in their guided notes what homeowners insurances covers and why it would be important to have it.

**17. Display slide 17.** Review equity.

- Equity is the difference between the appraisal value and the balance on the mortgage loan.
- Because property value is an asset and a mortgage is a liability, the equity in a home is what contributes to the growth of net worth.

- Equity can increase if the value of the home increases or as the remaining value on the mortgage decreases.
- In 2009, negative equity peaked at 26 percent of mortgaged residential properties. As of second quarter 2020, only 3.2 percent of mortgaged properties had negative equity in the United States. For more information, visit [www.corelogic.com/insights-download/homeowner-equity-report.aspx](http://www.corelogic.com/insights-download/homeowner-equity-report.aspx).

*Classroom response strategy:*

- Have students describe positive and negative equity in their guided notes.

18. **Display slide 18.** Have students brainstorm answers to the question “What would happen to equity if the appraisal value decreases? How would this affect a homeowner’s net worth?” Answer: Equity and net worth would both decrease.

*Classroom response strategy:*

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

19. **Display slide 19.** Review equity examples.

*Suggested questions for student discussion:*

- How is it possible to have a home valued less than the balance on a loan? Examples might include: changes in the housing market, homeowner borrowed against the home with a home equity loan and then there was a decline in the market.
- How would negative equity affect a homeowner’s net worth? Answer: Net worth would decrease.

20. **Display slide 20.** Review responsibilities of homeowners.

- There are many responsibilities associated with homeownership including: paying the mortgage, taxes and insurance, maintaining the home to protect its value and routine upkeep.
- Some homeowners can perform maintenance on their own, while others bear the cost of paying people directly for the maintenance.
- Some homes are built in locations that place special restrictions on what homeowners can and cannot do to their property.
- When making a purchasing decision, homeowners should consider all the restrictions and responsibilities they are taking on.

*Suggested questions for student discussion:*

- What chores or responsibilities are you required to perform at home? Examples will vary but might include: mowing the lawn, taking out the trash, cleaning your room, washing windows.
- Have you ever helped with a major project at home? If so, what type? Examples will vary but might include: painting, landscaping, remodels or repairs.

*Classroom response strategy:*

- Ask students if homeowners' responsibilities are the same as renters'. Have students record their answer in their guided notes, then share.

**21. Display slide 21.** Review risks of homeownership.

- Ask students to name the risks associated with homeownership. Examples will vary but might include: that the house is destroyed, the property value falls or a homeowner is forced to sell unexpectedly.
- If property values fall, homeowners could see their equity, and therefore, net worth, decrease.
- By being responsible for maintenance, if there were a large uninsured event, the homeowner would be responsible for the repairs.
- If a homeowner needed to sell the home quickly or in an unfavorable real estate market, they might be forced to accept a price below what the home would be worth otherwise.

**22. Display slides 22-25.** Review learning objectives with students.

*Classroom response strategy:*

- Have students fill in the blanks for costs and benefits of renting and owning in their guided notes.

**23. Hand out Assessment 1: Lease or Buy Video**

- Have students create a video and share/upload their video. If your students do not have access to technology, they can turn in their script using the template found on Assessment 1. Lease or Buy Video.

**24. Optional—Hand out Extension Activity 1: Examples of Housing Discrimination**

**25. Additional Resources:** The Federal Reserve Bank of St. Louis: [Page One Economics, Focus on Finance edition: “Renters and Homeowners Insurance: When the Unexpected Happens”](#)



## Lesson 4—Handout 1

# Guided Notes

### Lesson 4 vocabulary

**Renters insurance**—Insurance to protect personal property while leasing.

**Landlord**—The owner of property that is leased or rented to another.

**Tenant**—One who rents or leases a property from a landlord.

**Lease agreements**—Rental agreements.

**Property value**—The estimated price of a property.

**Mortgage**—A loan a homebuyer obtains if unable to pay cash for a home.

**Homeowners insurance**—Insurance a person purchases to protect the contents and structure of a home.

**Equity**—The difference between the appraised value and the balance on the mortgage loan.

Brainstorm and write down whether you would prefer to own or rent housing if you had the financial resources to do so.

List five common sections that can be found in a lease agreement.

Besides estimating the property value, how else are appraisals used?



## Lesson 4—Handout 1

### Guided Notes (Cont.)

What does homeowners insurance cover? Why would it be important to have homeowners insurance?

Describe positive and negative equity.

Brainstorm and list what would happen to equity if the appraisal value decreases. How would this affect a homeowner's net worth?

Are the responsibilities of homeowners the same as renters? Explain.



## Lesson 4—Handout 1

### Guided Notes (Cont.)

Fill in the blanks below:

#### Renting Costs Versus Benefits

##### Costs

- Mortgage.
- \_\_\_\_\_
- Homeowners insurance.
- Property taxes.
- \_\_\_\_\_
- Down payment.

##### Benefits

- Potential to build worth through equity.
- \_\_\_\_\_
- \_\_\_\_\_
- Income tax deductions.

#### Owning Costs Versus Benefits

##### Costs

- \_\_\_\_\_
- No equity or opportunity for an increase in net worth.
- Restrictions on activities per lease agreements.
- \_\_\_\_\_

##### Benefits

- \_\_\_\_\_
- No risk of not being able to sell.
- No property taxes.
- \_\_\_\_\_



## Lesson 4—Handout 2

# Lease Agreement



### Residential Lease Agreement

THIS LEASE AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between \_\_\_\_\_ hereinafter referred to as "Landlord" and \_\_\_\_\_, hereinafter referred to as "Tenant".

1. Tenant shall pay as rent the sum of \$ \_\_\_\_\_ per month, due and payable monthly, in advance, no later than 5:00 p.m. by the fourth day of every month. Tenant further agrees to pay a late charge of \$ \_\_\_\_\_ for each day rent is not received after the fourth of the month to the Landlord regardless of the cause, including dishonored checks, time being of the essence. An additional Service Charge of \$ \_\_\_\_\_ will be paid to Landlord for all dishonored checks.

2. Tenant agrees to use said dwelling as living quarters only for \_\_\_\_\_ adults and \_\_\_\_\_ children, namely:

\_\_\_\_\_ and to pay \$50.00 each month for each other person who shall occupy the premises in any capacity.

Tenant agrees to accept the property in its current condition and to return it in "moving-in clean" condition, or to pay a special cleaning charge of \$185.00 upon vacating the premises. The carpets are to be professionally cleaned. If you prefer that we have the carpets cleaned for you, the charge will be billed to you. Carpet cleaning costs are in addition to cleaning charge.

3. PETS ARE NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM LANDLORD. As additional rent, Tenant agrees to pay a non-refundable pet fee of \$25.00 per month for each pet. All pets on the property not registered under this Lease shall be presumed to be strays and will be disposed of by the appropriate agency as prescribed by law. A Pet Agreement, if applicable, is attached hereto as Exhibit "B", and incorporated herein by reference. PET NAMES AND DESCRIPTION: \_\_\_\_\_

4. Tenant will be responsible for payment of all utilities, garbage, water and sewer charges, telephone, gas, association fees or other bills incurred during the term of this Lease. Tenant specifically authorizes Landlord to deduct amounts of any unpaid bills from the Security deposit upon termination of this Agreement.

**IMPROVEMENTS TO PROPERTY**—Any improvements to the property made by tenant inside or outside must not be removed without written permission from the property manager. This includes landscaping, shrubs, flowers, walkways, out buildings such as storage sheds and playhouses, etc. Any interior improvements the tenant may have made to the property must also remain. Improvements include but are not limited to the following: installation of ceiling fans, book shelves, shelving, light fixtures, etc.

5. If Tenant leaves said premises unoccupied for 15 days while rent is due and unpaid, Landlord is granted the right hereunder to take immediate possession thereof and to exclude Tenant therefrom, removing all Tenant's property contained therein and placing it into storage at Tenant's expense.

6. Tenant is responsible for all plumbing repairs including faucets, leaks, stopped-up pipes, frozen pipes, water damage, and bathroom caulking.

**YOU SHOULD READ AND UNDERSTAND THIS LEASE. IT IS A LEGAL AND BINDING CONTRACT.**

Signing below means you have read the Lease, are in full agreement with it and have received a copy of the contract.

ACCEPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,

at \_\_\_\_\_.

(Address, City and State)

Tenant \_\_\_\_\_

Landlord, Property manager or Agent \_\_\_\_\_



## Lesson 4—Handout 2

# Lease Agreement (Cont.)

The example residential agreement is not an all-inclusive list of items that can be found in a lease agreement. Below you will find additional sections that were not mentioned in the sample lease agreement.

**Instructions:** Select three common sections that can be found in a lease agreement below. Research each section to learn more. After your research is complete, summarize and answer the questions for each section.

- Landscaping.
- Landlord duties: repair and maintenance.
- Early termination.
- Access to premises.
- Rules and regulations on smoking/illegal activity.
- Direct deposit.
- Use of common areas.
- Subleasing.

1. Summarize research for \_\_\_\_\_ section.

Why would a tenant want to have this included in the lease agreement?

What are the advantages of the landlord including these in the lease agreement?

2. Summarize research for \_\_\_\_\_ section.

Why would a tenant want to have this included in the lease agreement?

What are the advantages of the landlord including these in the lease agreement?

3. Summarize research for \_\_\_\_\_ section.

Why would a tenant want to have this included in the lease agreement?

What are the advantages of the landlord including these in the lease agreement?





## Lesson 4—Assessment 1

# Lease or Buy Video

**Instructions:** Create a one-to-two-minute video to explain whether you would prefer to lease or buy a property at the age of 25. Explain the benefits and costs you will need to consider if you lease or buy, and include what short-term and long-term goals will help you achieve this goal. Use the template below to create a script for your video.

### Video Template

1. Introduce yourself.
2. Explain why you would choose to lease or buy. Provide personal examples that justify your choice.
3. What did you consider when making this choice? Why does it matter to you?
4. Explain the benefits and costs of your choice.
5. Include which risk concerns you the most and why.



## Lesson 4—Assessment 1

### Lease or Buy Video (Cont.)

6. Create short-term and long-term goals and explain how they will help you achieve your goal to lease or buy at the age of 25.

**Specific**

**Measurable**

**Attainable**

**Relevant**

**Timely**

#### Short-term SMART goals

**S**

\_\_\_\_\_

**M**

\_\_\_\_\_

**A**

\_\_\_\_\_

**R**

\_\_\_\_\_

**T**

\_\_\_\_\_

#### Long-term SMART goals

**S**

\_\_\_\_\_

**M**

\_\_\_\_\_

**A**

\_\_\_\_\_

**R**

\_\_\_\_\_

**T**

\_\_\_\_\_



## Lesson 4—Extension Activity

# Examples of Housing Discrimination

The U.S. Department of Housing and Urban Development (HUD) Office of Fair Housing and Equal Opportunity (FHEO) works to eliminate housing discrimination and promote civil rights and economic opportunity through housing. FHEO enforces fair housing laws. One of its roles is to investigate complaints of housing discrimination.

**Instructions:** Read through the examples of housing discrimination from HUD below. After reading each example, answer the questions on the next page.

### Discrimination Isn't Always Obvious—Example #1

John, who is a Black man, speaks to a prospective landlord on the phone about leasing an apartment. On the phone, the landlord seems eager to rent to John, but when John meets with the landlord in person to fill out an application, the landlord's attitude is entirely different. A few days later, John receives a letter saying that his application was denied because of a negative reference from his current landlord. John is surprised because he never had problems with his landlord, and his landlord swears she was never contacted for a reference. John suspects that the real reason he was denied the apartment was because he is Black, so John files a complaint with HUD. HUD investigates and it turns out John is right; the landlord's files show a pattern of discrimination because of race and color.

### Discrimination Isn't Always Obvious—Example #2

Jane is a Muslim woman who wears a hijab. Jane walks into the leasing office for a large apartment building because she saw a sign in the building's window advertising several available units. Jane introduces herself to the leasing officer, who immediately says there are no units available. Jane asks to be put on the waiting list, but she never receives a call. Jane files a complaint with HUD because she suspects that the leasing officer does not want to rent to her because she is Muslim. HUD investigates and it turns out Jane is right; other employees of the building give HUD information that substantiates Jane's claim of religious discrimination.

### Steering Is a Form of Discrimination

John, who is an Asian man, meets with a real estate broker to discuss purchasing a house for his family. When John names the neighborhood that he is interested in, the broker asks John if he is sure that his family will feel comfortable there. The broker tells John that she has a wonderful listing in another neighborhood where there are more "people like them." When the broker takes John to see the house, John notices that the residents of the neighborhood appear to be mostly Asian. John files a complaint with HUD because steering someone to a certain neighborhood because of his race is a form of race discrimination.



## Lesson 4—Extension Activity

### Examples of Housing Discrimination (Cont.)

#### Reasonable Accommodations Are Required for Persons with Disabilities

John, a person with a disability who uses a wheelchair, views a condominium he is hoping to purchase in a new multistory building. When John arrives, he finds there are no accessible parking spaces in the building's parking lot. When John tries to enter the unit, his wheelchair can barely fit through the door and he bangs his arms on the way in. Inside the unit, the thermostat and light switches are all too high for him to reach. The building has a fitness room, but he cannot look at it because the only way to get to the fitness room is to go up steps. John files a complaint with HUD because failing to comply with accessibility requirements is a form of disability discrimination.

#### Rules Against Children Are Discriminatory

John has three teenage children. John's building has a patio with picnic tables, and one day John's children decide to have lunch there with some of their friends. The next day, John receives a notice from the homeowners association informing him that the building rules say that the patio is for adult use only and that he needs to make sure his children do not violate the building rules. John files a complaint with HUD because building rules that discriminate against children are a form of familial status discrimination.

#### Mortgage Lending Discrimination Is Illegal

Jane and John are filling out an application for a mortgage at their local bank. Their loan officer notices that Jane is visibly pregnant and asks whether she will be taking maternity leave. When Jane says yes, the loan officer informs the couple that they either have to apply without Jane's income or wait until she returns from leave. "I'm sorry," the loan officer says, "but I've seen too many women change their mind about going back to work." Jane and John file a complaint with HUD because the bank's policy discriminates based on sex and familial status.

#### Discrimination in the Conditions of Housing Is Illegal

John recently moved to the United States from Mexico. One day, John sees that there is a new tenant in the apartment next to his, so he welcomes her to the building. John's neighbor comments on how nice everyone in the building seems, especially the building manager who offered to waive her security deposit because she seems like a good person. John is surprised because the building manager was short-tempered with him and said that John's accent made him hard to understand. John later asks around and finds out that the building manager has waived fees and deposits for other tenants he likes but not for him or other persons from Mexico. John files a complaint with HUD because providing different terms and conditions to tenants because of national origin is illegal discrimination.



## Lesson 4—Extension Activity

### Examples of Housing Discrimination (Cont.)

#### 3-2-1 Response Prompt

1. Describe **three** things you have learned from these discrimination examples.
2. List **two** questions you still have about housing discrimination.
3. Name **one** element of the reading that surprised you.

SOURCES: [www.hud.gov/program\\_offices/fair\\_housing\\_equal\\_opp/examples\\_housing\\_discrimination](http://www.hud.gov/program_offices/fair_housing_equal_opp/examples_housing_discrimination); [www.hud.gov/program\\_offices/fair\\_housing\\_equal\\_opp/fair\\_housing\\_rights\\_and\\_obligations](http://www.hud.gov/program_offices/fair_housing_equal_opp/fair_housing_rights_and_obligations)

# Save and Invest—The Role of Financial Markets

## Lesson Overview

### Description

In this lesson, students will learn how the financial system creates a place to match savers with investors and the role financial institutions play in facilitating savings and investment transactions. Students will also learn the importance of creating an emergency savings plan before embarking on an investment strategy. Using a sample scenario, students will adjust a budget to develop an emergency savings plan.

### Standards

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

### Instructional Objectives

- Discuss the role of financial institutions and markets in saving and investing.
- Explain the benefits of saving and investing.
- Develop a strategy to save for an emergency fund.

### Time Required

- One 45-minute class period.

### Materials Required

- PDF slides
- Copies of Handout 1: Guided Notes
- Copies of Handout 2: Emergency Savings

# Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is financial markets and emergency savings.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Tell students they will explore how financial markets and institutions play a role in saving and investing.

*Suggested questions for student discussion:*

- Governments, firms and people borrow money for many purposes. What are some of them? Answers will vary but might include roads, bridges and military goods (governments); manufacturing factories, technology equipment and buildings (firms); and homes, cars and college (people).
4. **Display slides 4–6.** Review markets, financial markets and types of financial institutions.
    - A market brings together buyers and sellers for the purpose of exchange.
    - A farmers market is an example of a physical market. People who sell fruits and vegetables find consumers who wish to purchase.
    - Markets can be virtual. In virtual markets like eBay and StockX, transactions are completed electronically.
    - **Financial markets** are like consumer markets. Both facilitate the transactions for people who buy and sell something. Financial markets exist to match savers to investors.
    - **Consumer banks** offer services to individuals. These services include savings and checking accounts and loans. Consumer banks are also referred to as retail banks.
    - **Commercial banks** offer the same services to individuals as consumer banks but also serve businesses.
    - **Investment banks** offer financial services to individuals, corporations and governments. These include investment services and complex transactions such as initial public offerings (IPOs) and mergers and acquisitions.
  5. **Display slide 7.** Have students brainstorm answers to the question: “When financial markets match savers to investors, who benefits?” Answer: Both savers and investors benefit.

*Classroom response strategy:*

- Have students record answers in their guided notes.
6. **Display slide 8.** Review the saving and investing chart and the investment pyramid.
    - Explain that the investment pyramid shows the relationship between risk and return.
    - When you are saving and investing, the amount of expected return is based on the amount of risk you take with your money.

- Generally, the higher the expected return, the higher the risk of losing money.
- For less risk, an investor can expect a smaller return.
- A certificate of deposit is a savings option that allows access to cash on demand, but there are penalties for early withdrawal. Different types of savings options can be found in Building Wealth Lesson 3.

*Classroom response strategy:*

- Have students fill in the blanks of the investment pyramid and the saving and investment chart in their guided notes.
7. **Display slide 9.** Explain to students that building a strong foundation of goals, budgets, savings and emergency savings is critical before investing in long-term assets.
  8. **Display slides 10–11.** Review short-term and emergency savings examples.
    - Generally, emergency savings should cover a minimum of three months' expenses.
  9. **Display slides 12–13.** Review the realities of savings. Explain to students that although saving for emergencies seems like a great idea, the reality is only 57.8 percent of U.S. households have saved money for emergencies.
    - Savings rates also differ according to race. For example, in the U.S., 62.4 percent of white households and 48.4 percent of households of color have saved for emergencies.

*Suggested teaching strategy:*

- 3-2-1 summary: Have students go to <https://scorecard.prosperitynow.org/data-by-issue#finance/outcome> and research other financial disparities by city, state and race. Have students report back to the class, share in an online discussion post and/or write as an exit task three things they learned, two things that surprised them and one thing they would share with their family.
10. **Display slide 14.** Distribute copies of Handout 2: Emergency Savings.
    - Review the scenario on the slide, and give students time to complete their handout.
    - When students are working on the handout, remind them to assume that Trey's income can't change.
    - Students should focus on identifying needs and wants and adjusting Trey's expenses accordingly so he can save at least \$1,000 before going to college.
    - This handout can be used as an assessment.
  11. **Display slides 15–16.** Review learning objectives with students.





## Lesson 5—Handout 1

# Guided Notes

### Vocabulary

**Financial system**—A system that channels funds from people who save money to people, firms and governments that borrow money.

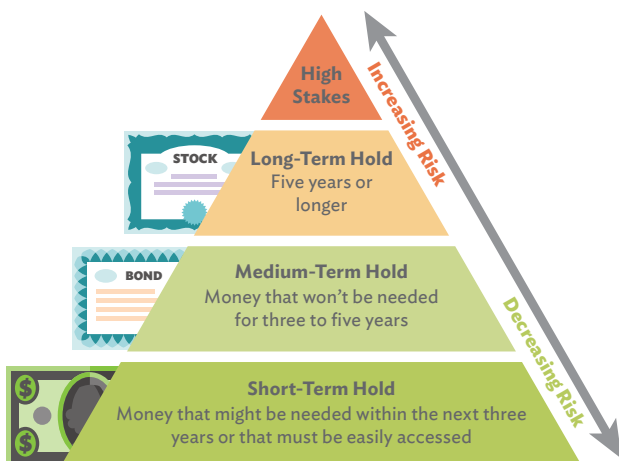
**Financial market**—A marketplace that facilitates the buying and selling of securities such as stocks and bonds.

**Financial institution**—An institution that acts as the intermediary between savers and investors who participate in financial markets.

**Emergency savings**—Money set aside for unforeseen events.

Brainstorm and write down answers to the question of who benefits when financial markets match savers to investors.

### Fill in the blanks



	Saving	Investing
Risk		
Return		
Access to cash		
Time period		



## Lesson 5—Handout 2

# Emergency Savings

**Instructions:** Use the information below to adjust Trey’s budget. Trey has a part-time job earning \$750 a month and has saved \$600 for college. The money is held in a checking account. Trey would like to develop a plan to save an additional \$1,000 in the next eight months for emergencies before starting community college next year. Assume his income each month will not change. After you finish adjusting the budget, answer the questions below:

- Identify areas where Trey can trim expenses.
- Add the new adjusted totals for each expense category.
- Record the amount saved in the last column.
- Adjust the budget until the total amount saved over eight months is equal to or greater than \$1,000.

Monthly Emergency Savings Budget			
<b>Total income</b>	\$ 750		\$ 750
<b>Expenses</b> <i>*Assumes 20 school days in a month</i>		<b>Adjusted</b>	<b>Amount saved</b>
Cellphone plan	\$ 62		
Music streaming subscription	\$ 12		
*Lunch 4x week (\$9.75 x 16)	\$ 156		
Gas 2x month (\$28 x 2)	\$ 56		
Car insurance	\$ 141		
Entertainment 4x month (\$25 per week)	\$ 100		
Gym membership	\$ 25		
Clothing/shoes	\$ 150		
Coffee 2x week (\$6 x 8)	\$ 48		
<b>Total expenses</b>	\$ 750		
<b>Total income</b>	\$ 750		
<b>Total expenses</b>	\$ 750		
<b>Available to save (income - expenses)</b>	\$ 0		

# Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is financial markets and emergency savings.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Tell students they will explore how financial markets and institutions play a role in saving and investing.

*Suggested questions for student discussion:*

- Governments, firms and people borrow money for many purposes. What are some of them? Answers will vary but might include roads, bridges and military goods (governments); manufacturing factories, technology equipment and buildings (firms); and homes, cars and college (people).
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*Classroom response strategy:*

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- A certificate of deposit is a savings option that allows access to cash on demand, but there are penalties for early withdrawal. Different types of savings options can be found in Building Wealth Lesson 3.

*Classroom response strategy:*

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7. **Display slide 9.** Explain to students that building a strong foundation of goals, budgets, savings and emergency savings is critical before investing in long-term assets.
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*Suggested teaching strategy:*

- 3-2-1 summary: Have students go to <https://scorecard.prosperitynow.org/data-by-issue#finance/outcome> and research other financial disparities by city, state and race. Have students report back to the class, share in an online discussion post and/or write as an exit task three things they learned, two things that surprised them and one thing they would share with their family.
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    - When students are working on the handout, remind them to assume that Trey's income can't change.
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    - This handout can be used as an assessment.
  11. **Display slides 15–16.** Review learning objectives with students.



## Lesson 5—Handout 1

# Guided Notes

### Vocabulary

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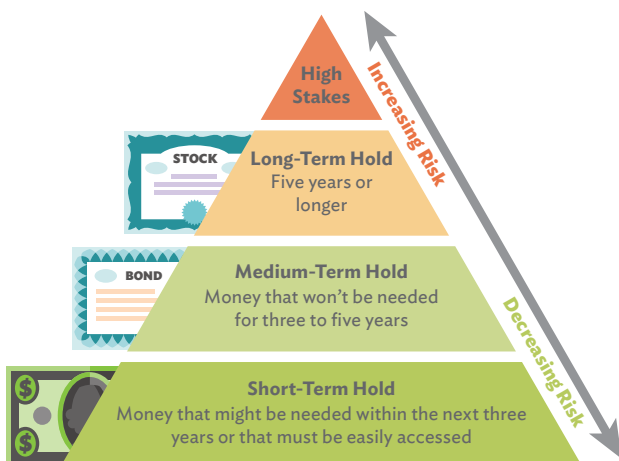
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**Financial institution**—An institution that acts as the intermediary between savers and investors who participate in financial markets.

**Emergency savings**—Money set aside for unforeseen events.

Brainstorm and write down answers to the question of who benefits when financial markets match savers to investors.

### Fill in the blanks



	Saving	Investing
Risk		
Return		
Access to cash		
Time period		



## Lesson 5—Handout 2

# Emergency Savings

**Instructions:** Use the information below to adjust Trey’s budget. Trey has a part-time job earning \$750 a month and has saved \$600 for college. The money is held in a checking account. Trey would like to develop a plan to save an additional \$1,000 in the next eight months for emergencies before starting community college next year. Assume his income each month will not change. After you finish adjusting the budget, answer the questions below:

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<b>Total expenses</b>	\$ 750		
<b>Total income</b>	\$ 750		
<b>Total expenses</b>	\$ 750		
<b>Available to save (income - expenses)</b>	\$ 0		

# Save and Invest—Bonds, Stocks and Mutual Funds

## Lesson Overview

### Description

In this lesson, students will learn about the different types of investments including bonds, stocks and mutual funds. Using handouts, students will research stocks and bonds. To conclude the lesson, an optional stock market bingo game and an investing quiz have been included.

### Standards

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

### Instructional Objectives

- Compare and contrast different types of investments such as stocks, bonds and mutual funds.
- Evaluate risk and return of various investment options.

### Time Required

- Four 45-minute class periods.
- Two 90-minute class periods.

### Materials Required

- PDF slides
- Copies of Handout 1: Vocabulary
- Copies of Handout 2: Comparing Bonds
- Copies of Handout 3: Stock Research
- Copies of Handout 4: Dow Jones Bingo Game
- Copies of Assessment 1: Investing Quiz

# Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is bonds, stocks and mutual funds.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Tell students that after they have a good savings foundation, they may want to diversify their assets among different types of investments. Diversification is covered on the next slide. Use the questions below to gauge what prior knowledge your students have about investment concepts and terms.

*Suggested questions for student discussion:*

- What is diversification?
  - What is a stock, bond and/or mutual fund?
  - Have you heard of the stock market?
  - Do you currently invest?
4. **Display slide 4.** Review diversification.
  5. **Display slides 5–7.** Review bonds and face value. Tell students when they invest in a bond, they are lending their money. It is very similar to how banks lend individuals money and in return ask for the principal and interest back.
    - **Bonds** are financial assets that represent loans to corporations, municipalities, governments or their agencies.
    - The face value is used to calculate the payment the bondholder will receive.
    - Bonds are term loans. The length of time and interest rate are established before they are sold.
    - A bank, rather than an individual depositor, bears the risk of default on a loan. A bondholder individually bears the risk of default on a bond.
    - Banks generally have more stringent lending guidelines, while individual investors are free to accept more risk when they purchase bonds.
  6. **Display slide 8.** Use the graphic and information below to describe the life of a bond.
    - At issuance, investors (savers) purchase the bond for the face value. The investors (savers) are lending their money.
    - Institutions (borrowers) pay the coupon payments to investors (savers) for the life of the bond.
    - When the bond matures, investors (savers) receive the face value of the bond from the institutions (borrowers).

*Suggested question for student discussion:*



- Why would someone lend their money for a time period of 10 years? Answers will vary but might include the interest rate is higher than a traditional savings account, no need to use the money in the next 10 years, the person receives interest payments throughout the term of the bond.

7. **Display slide 9.** Review who issues bonds.

- Corporations, sovereign governments and municipalities often issue bonds.
- Corporations can issue bonds to finance a wide variety of business activities when costs exceed short-term revenue.
- Corporations use business revenues to pay interest on the bonds.
- Sovereign governments issue bonds to finance government activities like wars or social programs when costs exceed tax revenue.
- Governments have taxing authority to generate revenue to pay the interest on the bonds.
- Municipalities issue bonds to finance activities like streets, utilities, and school construction and renovation.
- Most municipalities levy taxes to pay the interest on the bonds.

8. **Display slide 10.** Review where you can buy a bond.

- Primary market: Investors (savers) purchase bonds directly from the original issuer (borrowers) for the face value.
- Secondary market: Investors purchase bonds from other investors:
  - Not all investors hold a bond for its entire life.
  - The price of bonds is no longer fixed.
  - Once a bond is in this market, the new owner will receive the future interest payments.
  - The sales price of a bond does not change its face value.

9. **Display slide 11.** Review U.S. savings bonds.

- Tell students that U.S. savings bonds are government issued and government backed. The only way an individual will not receive their original investment and interest is if the U.S. government defaults on paying them.
- Explain to students that government-issued bonds around the world differ. Countries with less-stable governments pay higher interest rates but also have a greater risk of the government defaulting.
- U.S. government bonds are considered very low risk.
- Explain to students that U.S. savings bonds are like a certificate of deposit (CD). However, the time period is usually longer for U.S. savings bonds, and U.S. savings bonds are not insured through the Federal Deposit Insurance Corp.
- **Optional reading article:** Municipalities can also issue bonds for local projects or even civic projects such as convention centers, ice skating rinks, theaters and hotels. These bonds are not backed by the U.S. government but instead are backed by the cities, counties and states where

they are issued. An article featured on Bloomberg.com, “Cities Save Hotels, Arenas from Bond Defaults After Pandemic Hit,” explains how a city stepped in to avoid bond defaults on civic projects: <https://www.bloomberg.com/news/articles/2020-12-15/cities-save-hotels-arenas-from-bond-defaults-after-pandemic-hit>.

*Suggested questions for online discussion post:*

- Would you rather invest in a bond for a city or the U.S. government? Do city and government bonds have the same return? Explain your answers.

10. **Display slides 12–13.** Review U.S. Treasury investments.

- Treasury investments are ones that the U.S. Treasury issues and are sold to pay for government activities and are backed by the full faith and credit of the federal government.
- **Treasury bonds** are securities with terms of 20 or 30 years. Interest is paid semiannually.
- **Treasury bills** are short-term securities with maturities ranging from a few days to 52 weeks. They are sold at a discount from their face value.
- The difference between cost and what is paid at maturity is the interest earned.
- **Treasury notes** are interest-bearing securities with maturities ranging from two to 10 years. Interest payments are made every six months.
- **Treasury inflation-protected securities (TIPS)** are marketable securities whose principal is adjusted by changes in the Consumer Price Index. TIPS pay interest every six months and are issued with maturities of five, 10 and 30 years.
- Investors (savers) can purchase bills, bonds and notes directly from the Treasury through TreasuryDirect at [www.treasurydirect.gov](http://www.treasurydirect.gov).

11. **Display slide 14.** Review the advantages of investing in bonds.

12. **Display slide 15.** Distribute Handout 2: Comparing Bonds. Instruct students to use the internet to research different types of U.S. government bonds.

- Have students go to [www.treasurydirect.gov/indiv/products/products.htm](http://www.treasurydirect.gov/indiv/products/products.htm).
- Students will need to click on each bond hyperlink to find the information and compare different types of bonds.
- After they are finished with their research, have students answer the questions on the second page.

13. **Display slide 16.** Review stocks and explain that stocks are a type of financial asset.

- An **asset** is anything an individual or business owns that has commercial or exchange value.
- Investors buy stock in the hopes of increasing their net worth, but this is not guaranteed. Net worth = assets – liabilities. See Building Wealth Lesson 1 for more information.

14. **Display slide 17.** Explain the link between consumer markets and a stock exchange (market).

- A market brings together buyers and sellers for the purpose of exchange.

- **Consumer market:** a marketplace to buy and sell consumer goods.
- A farmers market is an example of a physical market. People who sell fruits and vegetables find consumers who wish to purchase them.
- Markets can be virtual. In virtual markets, transactions are completed electronically. For example, eBay and StockX are both virtual markets.
- StockX is the world's first stock market for things—a live bid/ask marketplace. Buyers place bids, sellers place asks and when a bid and ask meet, the transaction happens automatically. Source: <https://stockx.com/how-it-works>.
- **Stock exchange (market):** a marketplace to buy and sell securities such as stocks and bonds.
- Stock exchanges are the institutions that create markets for stocks. Examples of stock exchanges include New York Stock Exchange, Nasdaq, Tokyo Stock Exchange.

15. **Display slide 18–21.** Review the definitions. Explain to students that stocks are also called shares, as in shares of ownership. When investors buy stock, they become part owners of the company.

- **Stockholder/shareholder:** a person who owns stock in a company and is eligible to share in profits and losses.
- **Dividend:** a share of profits paid to a stockholder.
- **Common stock:** a kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met.
- **Preferred stock:** a kind of ownership in a corporation that entitles the investor to the payment of fixed dividends and priority in the distribution of assets.
- Preferred stockholders do not have voting rights, while common stockholders do.
- **Stock appreciation:** value of the stock increases.
- **Stock depreciation:** value of the stock decreases.
- **Ticker symbol:** provides a unique identifier by which individual securities can be researched and traded.
- **Market capitalization (market cap):** the total value of a company in the stock market.

16. **Display slide 22–23.** Use the news headline information on the slides. Review the difference between appreciation and depreciation.

- Explain to students that for each news headline, they will predict if the stock price appreciated or depreciated. The answers are displayed on slide 34.
- Alibaba shares **slump (depreciate)** to six-month low despite proposed rise in shares buyback.
- Boeing stock **falls (depreciates)** after FAA emergency order on thousands of 737 jets.
- Zoom stock **falls (depreciates)** after service outage.
- AMC and Cinemark stocks **soar (appreciate)** on vaccine news.
- Airbnb, now a \$100 billion company after stock market debut, sees stock price **double (appreciate)**.

- Links to news articles:
  - [www.yahoo.com/entertainment/alibaba-shares-slump-six-month-102028041.html](http://www.yahoo.com/entertainment/alibaba-shares-slump-six-month-102028041.html)
  - [www.npr.org/2020/12/10/944931270/airbnb-defying-pandemic-fears-takes-its-company-public-in-ipo](http://www.npr.org/2020/12/10/944931270/airbnb-defying-pandemic-fears-takes-its-company-public-in-ipo)
  - [www.investors.com/news/boeing-stock-faa-emergency-order-thousands-737-jets/](http://www.investors.com/news/boeing-stock-faa-emergency-order-thousands-737-jets/)
  - [www.marketwatch.com/story/zoom-stock-falls-amid-service-outage-2020-08-24](http://www.marketwatch.com/story/zoom-stock-falls-amid-service-outage-2020-08-24)
  - [www.cnn.com/2020/11/09/media/amc-cinemark-stock-theaters-vaccine/index.html](http://www.cnn.com/2020/11/09/media/amc-cinemark-stock-theaters-vaccine/index.html)

*Classroom response strategies:*

- Have students move to different sides of the classroom to identify whether stocks will appreciate or depreciate.
- Use an online poll to gather responses.

*Suggested question for student discussion:*

- Are there any key words in each news headline that helped you predict whether a stock appreciated or depreciated?

17. **Display slide 24.** Explain that when the bid price and the ask price match, a transaction occurs, and shares of stock are sold.

- When buyers offer to buy shares of stock at a given price, it is called a **bid price**.
- When sellers simultaneously offer to sell shares of stock at a given price, it is called a **sell price**.

18. **Display slide 25.** Use the questions on the slide and the information below to discuss the information an investor would seek before buying a stock.

- Who: name of the company and ticker symbol.
- What: the goods and services produced, line of business and sector of the economy.
- When: founding date and dividend payment schedule.
- Where: location of headquarters, production facilities or major markets.
- How much: revenue, total sales, profit margin, earnings, value of company.

19. **Display slide 26–29.** Use the information on each slide to determine which stock example students would rather invest in.

20. **Display slide 30.** Review the instructions on the slide and distribute Handout 3: Stock Research. Allow students time to research two stocks from the Dow Jones Industrial Average and create their investor sheet.

21. **Display slide 31–32.** Review mutual and index funds.

Tell students:

- Mutual funds are a way to diversify investments.

- Mutual funds are made up of a group (or basket) of stocks.
- When you buy mutual fund shares, you become a shareholder of a fund that has invested in many other companies.
- An **index fund** is a type of mutual fund where components of the fund track the performance of a financial market index.

22. **Display slide 33.** Tell students index funds categorized by location refer to the location of the headquarters of the company or the country in which the corporation was chartered. Use the table below to introduce some well-known indexes.

23. **Display slide 34.** Tell students sector indexes refer to the business of the company. Investors consider the types of goods and/or services the company produces. Below are examples of industry sectors found in the Standard & Poor's 500 index.

- Information technology sector consists of companies that develop or distribute technological items or services and includes internet companies. Examples include Microsoft, Oracle and Mastercard.
- Health care consists of medical-supply companies, pharmaceutical companies and scientific-based operations or services that aim to improve human body or mind. Examples include Johnson & Johnson—which produces products like Tylenol—Pfizer and CVS.
- Financial sectors include all companies involved in finance, investing and the movement or storage of money. It includes banks, credit card issuers, credit unions and insurance companies. Examples include Bank of America, JPMorgan Chase & Co., American Express and Goldman Sachs.
- Consumer discretionary products are luxury items or services that are not necessary for survival. Products include cars, jewelry, sporting goods and electronic devices. Examples include Starbucks, Best Buy and Amazon.
- The communication services sector consists of companies that keep people connected. This includes internet providers, phone plan providers, media and entertainment. Examples include Netflix, Walt Disney, AT&T, CBS and Facebook.
- Industrials include a wide range of companies, from airlines and railroad companies to military weapons manufacturers. Examples include Southwest Airlines, FedEx and Boeing.
- Consumer staples companies provide all the necessities of life. This includes food and beverage companies, household-product providers and personal-product providers. Examples include Procter & Gamble, Kroger and Costco.
- The energy sector consists of all companies that play a part in the oil, gas and consumable fuels business. Examples include Exxon Mobil Corp., Chevron Corp. and Kinder Morgan, which transport fuel to gas stations.
- Utility companies provide or generate electricity, water and gas to buildings and households. Examples include Atmos Energy, CenterPoint Energy and Entergy.

- Real estate includes realtors and other companies such as Public Storage, CBRE Group and Crown Castle International Corp.
- Companies within the materials sector provide the raw materials needed for other sectors to function. This includes the mining companies that provide gold, zinc and copper, and forestry companies that provide wood. Examples include International Paper, Sherwin-Williams and DuPont.

SOURCE: <https://corporatefinanceinstitute.com/resources/knowledge/finance/the-sp-sectors/>

24. **Display slide 35.** Review market cap indexes and use the table below to introduce examples of market cap indexes.

- Large-cap companies have a market value over \$10 billion.
- Mid-cap companies have a market value between \$2 billion and \$10 billion.
- Small-cap companies have a market value from \$300 million to \$2 billion.

25. **Display slide 36.** Review the risk-return relationship.

- Tell students that after deciding how much risk they can take, they can use the investment pyramid to help balance their savings and investments.
- Explain that before moving up the pyramid, they must build a strong foundation, which includes setting goals, developing a budget and saving for emergency and short-term needs.

*Suggested questions for student discussion:*

- How much risk are you willing to take?
- What are the benefits of saving and investing? Answers will vary but might include building wealth, being financially prepared for emergencies and growing your money.

26. **Display slides 37–38.** Review learning objectives with students.

27. **Optional.** Distribute copies of Handout 4: Dow Jones Bingo. Tell students that to familiarize the class with the companies that make up a well-known stock index, they will play a Dow Jones bingo game.

- These sheets contain a bingo card and descriptions of the 30 companies that make up the Dow Jones Industrial Average (DJIA). Keep one additional copy of the descriptions to aid in calling the game.
- Give students time to choose 24 ticker symbols from the company description list and write the ticker symbols for each company on their game card.
- Call through the ticker symbols on the company description pages and have students mark their cards until a student has five in a row. The five connecting boxes can be horizontal, vertical or diagonal. The first student to connect five boxes and yell “Bingo!” is the winner.
- After playing bingo, lead a discussion about the companies within the index.

*Suggested questions for student discussion:*

- Can companies be grouped by what they do? Answers may vary but might include: Chevron and Exxon Mobil, which are both in the oil and gas industry and Microsoft and Apple, which are both in the technology industry.
- What companies are you familiar with?
- Where there any companies listed in the Dow Jones index that you were not familiar with?

**28. Hand out Assessment 1: Investing Quiz.**

**29. Additional Resources.** Federal Reserve Bank of Atlanta infographic, [Saving and Investing](#).





## Lesson 6—Handout 1

# Vocabulary

**Diversification**—The distribution of investments among several companies to lessen the risk of loss.

**Bonds**—Financial assets that represent loans to corporations, municipalities, governments or their agencies.

**Face value**—The original value of the bond. This is usually stated in thousands of dollars.

**I savings bonds**—A low-risk savings product that earn interest while protecting you from inflation.

**EE savings bonds**—A secure savings product that pays interest based on current market rates until they reach 30 years or until you cash them, whichever comes first.

**Treasury bonds**—Securities with terms of 20 or 30 years. Interest is paid semiannually.

**Treasury bills**—Short-term securities with maturities ranging from a few days to 52 weeks. They are sold at a discount from their face value.

**Treasury notes**—Interest-bearing securities with maturities ranging from two to 10 years. Interest payments are made every six months.

**Treasury inflation-protected securities (TIPS)**—Marketable securities whose principal is adjusted by changes in the Consumer Price Index. TIPS pay interest every six months and are issued with maturities of five, 10 and 30 years.

**Stockholder/shareholder**—A person who owns stock in a company and is eligible to share in profits and losses.

**Dividend**—A share of profits paid to a stockholder.

**Common stock**—A kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met.

**Preferred stock**—A kind of ownership in a corporation that entitles the investor to the payment of fixed dividends and priority in the distribution of assets.

**Stock appreciation**—When the value of the stock increases.

**Stock depreciation**—When the value of the stock decreases.

**Ticker symbol**—Provides a unique identifier by which individual securities can be researched and traded.





## Lesson 6—Handout 1

### Vocabulary (Cont.)

**Market capitalization (market cap)**—Refers to the total value of a company in the stock market.

**Bid price**—When buyers offer to buy shares of stock at a given price.

**Ask price**—When sellers simultaneously offer to sell shares of stock at a given price.

**Stock exchange (market)**—A marketplace to buy and sell securities such as stocks and bonds.

**Mutual fund**—A pool of money managed by an investment company.

**Index fund**—A type of mutual fund where components of the fund track the performance of a financial market index.



## Lesson 6—Handout 2

# Comparing Bonds

### Instructions:

- Go to [www.treasurydirect.gov/indiv/products/products.htm](http://www.treasurydirect.gov/indiv/products/products.htm)
- Click on each type of bond listed and record the information found for each column.

Comparisons	Treasury bill	Treasury notes	Treasury bonds
Minimum purchase			
Issue method			
Minimum term of ownership			
Rates and terms			
Interest-earning period			
Tax considerations			



Lesson 6—Handout 2

Comparing Bonds (Cont.)

Comparisons	Treasury inflation-protected securities	Series I savings bonds	Series EE savings bonds
Minimum purchase			
Issue method			
Rates and terms			
Minimum term of ownership			
Interest-earning period			
Tax considerations			



## Lesson 6—Handout 2

# Comparing Bonds (Cont.)

1. How does bond ownership build wealth?
2. Are U.S. government bonds considered high or low risk? Explain why.



## Lesson 6—Handout 3

# Stock Research

### Directions:

#### Part 1

Select two companies from the list of stocks included on the Dow Jones Industrial Average. Write the names of the companies below.

- \_\_\_\_\_
- \_\_\_\_\_

Use newspapers, corporate websites and online news sources to research information about both companies you selected. Information should include:

- **Who**—Name of the company.
- **What**—Description of the company and its business, major products or services that it produces, name of president and CEO (may be the same person) along with other leaders that you feel are important.
- **When**—Founding date, dividend payment schedule.
- **Where**—Location of headquarters, production facilities or major markets.
- **How much**—Information about the performance of the stock, including price, revenue, total sales, profit margin, earnings, value of company, dividends and yield over the past year.

#### Part 2

Create an investor information sheet about both of your companies. Provide information that a person should consider before purchasing stock in the company. The sheet should include:

- Information about the company that you gathered in your research.
- Graph of the stock price for the last year.
- Major competitors or related companies.
- Your assessment of the future prospects for the company (see note).

Note: When you assess the future of the company, consider economic developments that would help the company make profits and grow in coming years. Also, consider threats to the company's future growth or profitability. For instance, does the company produce goods or services that are increasingly popular? Are competitors from around the world threatening the company's market share?



## Lesson 6—Handout 4

# Dow Jones Bingo

Symbol	Company Description
<b>AAPL</b>	Apple is known for its Macintosh computers, iPhones, iPads and iPods. The company was founded in 1977 and is headquartered in Cupertino, California.
<b>AMGN</b>	Amgen Inc. is a biotechnology company that engages in the discovery, development, manufacture and marketing of human therapeutics. It was founded on April 8, 1980.
<b>AXP</b>	American Express Co. is best known for its flagship green charge card. It is a global financial services and travel company.
<b>BA</b>	The Boeing Co. designs, develops and manufactures commercial jetliners and military aircraft.
<b>CAT</b>	Caterpillar Inc. manufactures and sells construction, mining and forestry machinery. It also produces engines and has a financial services division.
<b>CRM</b>	Salesforce.com Inc. engages in the design and development of cloud-based enterprise software for customer relationship management. Its solutions include salesforce automation, customer service and support, marketing automation, digital commerce, community management, collaboration, industry-specific solutions and the salesforce platform.
<b>CSCO</b>	Cisco Systems Inc. produces internet-based networking products and provides services related to those products. It was started by scientists from Stanford University.
<b>CVX</b>	Chevron Corp. is an energy company with fully integrated petroleum operations, chemicals operations, mining operations of coal and other minerals, power generation and energy services.
<b>DIS</b>	Walt Disney Co. owns the rights to some of the most famous characters ever created. It operates amusement parks, makes and distributes movies and owns television networks including ABC and ESPN.
<b>DOW</b>	Dow Inc. is a materials science company, combining science and technology to develop innovative solutions. It operates through three business segments: Performance Materials & Coatings, Industrial Intermediates & Infrastructure and Packaging & Specialty Plastics.
<b>GS</b>	Goldman Sachs Group Inc. provides financial services to everyone from individuals to sovereign governments. The company was founded in 1869 and added to the DJIA in 2013.



## Lesson 6—Handout 4

### Dow Jones Bingo (Cont.)

Symbol	Company Description
<b>HD</b>	The Home Depot Inc. is a home-improvement retailer. It operates more than 2,200 full-service, warehouse-style stores that sell building materials and home improvement and lawn and garden products.
<b>HON</b>	Honeywell International Inc. is a software industrial company, which offers industry-specific solutions to aerospace and automotive products and services. It specializes in turbochargers control, sensing and security technologies for buildings and homes; specialty chemicals; electronic and advanced materials; process technology for refining and petrochemicals; and energy-efficient products and solutions for homes, business and transportation.
<b>IBM</b>	International Business Machines Corp. (IBM) is an information technology company that offers technology and business services, as well as system architecture and financing.
<b>INTC</b>	Intel Corp. produces semiconductor chips, boards and other products that are integral to computers, servers and other electronic products.
<b>JNJ</b>	Johnson & Johnson develops, manufactures and sells products in the health care field. Consumer products, pharmaceutical products, and medical devices and diagnostics form the core of its business.
<b>JPM</b>	JPMorgan Chase & Co. is a global financial services firm that offers investment banking, financial services for consumers, small business and commercial banking, financial-transaction processing, and investment and wealth management services.
<b>KO</b>	Coca-Cola is the world's largest beverage company. It manufactures, distributes and markets soft drink concentrates and syrups, water, juices, teas and other beverages in over 200 countries.
<b>MCD</b>	McDonald's Corp. has more than 30,000 quick-service restaurants in more than 100 countries. Items on the menu include the Big Mac, the Quarter Pounder and the Egg McMuffin.
<b>MMM</b>	3M Co. is based in St. Paul, Minnesota, and produces a variety of products, including Scotch tape and Post-it Notes.
<b>MRK</b>	Merck & Co. Inc. is a global pharmaceutical company that was established in 1891. It discovers, develops, manufactures and markets vaccines and medicines.
<b>MSFT</b>	Microsoft Corp. developed the Windows operating system and the Office suite of productivity software. This company also makes the Xbox.



## Lesson 6—Handout 4

### Dow Jones Bingo (Cont.)

Symbol	Company Description
<b>NKE</b>	Nike develops athletic apparel, footwear and equipment for many sports, including running, soccer, football, baseball and basketball. Nike also owns the Jordan brand, built around the reputation of basketball legend Michael Jordan.
<b>PG</b>	Procter & Gamble Co. makes and sells consumer products in 180 countries around the world. Its brands include Tide, Gillette, Duracell and Crest.
<b>TRV</b>	The Travelers Companies Inc. provides a wide variety of insurance products and services through its subsidiaries. Customers around the world include businesses and individuals.
<b>UNH</b>	UnitedHealth Group Inc. is a health and well-being company that provides health benefit plans to consumers and services to businesses of all sizes. The company serves a network of 780,000 physicians and 5,900 hospitals.
<b>V</b>	Visa Inc. is a payment services company that facilitates worldwide movement of financial capital. It is best known to customers for its Visa credit cards.
<b>VZ</b>	Verizon Communications Inc. provides communication services both domestically through its wireless network and internationally with voice, internet, broadband, long distance and other services.
<b>WBA</b>	Walgreens Boots Alliance Inc. engages in the provision of drug store services. The company was founded in 1901 and is headquartered in Deerfield, Illinois.
<b>WMT</b>	Wal-Mart Stores Inc. is the largest retailer in the world. From its headquarters in Arkansas, it operates its namesake discount stores and supercenters, as well as Sam's Clubs.





Lesson 6—Handout 4

Dow Jones Bingo (Cont.)

B	I	N	G	O



## Lesson 6—Assessment 1

# Investing Quiz

**Directions:** Match the following terms to the correct definition:

1. _____ Diversification	A. Share of profits paid to a stockholder
2. _____ Treasury bill	B. Total value of a company in the stock market
3. _____ Dividend	C. Short-term securities with maturities ranging from a few days to 52 weeks
4. _____ Emergency savings	D. Unique identifier by which individual securities can be researched and traded
5. _____ Index fund	E. Securities with terms of 20 or 30 years
6. _____ Stockholder	F. Original value of the bond
7. _____ Face value	G. Money set aside for unforeseen events
8. _____ Ticker symbol	H. Person who owns stock in a company and is eligible to share in profits and losses
9. _____ Market capitalization	I. Distribution of investments among several companies to lessen the risk of loss
10. _____ Treasury bonds	J. Type of mutual fund where components of the fund track the performance of a financial market index



## Lesson 6—Assessment 1

### Investing Quiz (Cont.)

**Write a short response to the following questions:**

11. Explain how financial markets and financial institutions help facilitate the transfer of funds from people who have saved money to people, firms and governments with investment projects.
12. What are three common types of emergencies people save money for?
13. What is the difference between stocks and bonds?
14. What is a stock exchange? Give one example.
15. If a company goes bankrupt and its stock price goes to zero, what happens to its shareholders?



## Lesson 6—Assessment 1

### Investing Quiz (Cont.)

**Choose the correct answer:**

16. A kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met:
- ☐ Preferred stock
  - ☐ Common stock
17. When the value of the stock increases:
- ☐ Stock appreciation
  - ☐ Stock depreciation
18. A financial asset that represents a piece, or share, of ownership in a company:
- ☐ Stock exchange
  - ☐ Stock
19. When a buyer offers to buy shares of stock at a given price:
- ☐ Bid price
  - ☐ Ask price
20. Companies have a market value of more than \$10 billion:
- ☐ Large-cap
  - ☐ Small-cap



## Lesson 6—Handout 3

# Comparing Bonds Answer Key

### Instructions:

- Go to [www.treasurydirect.gov/indiv/products/products.htm](http://www.treasurydirect.gov/indiv/products/products.htm).
- Click on each type of bond listed and record the information found for each column.

Comparisons	Treasury bill	Treasury notes	Treasury bonds
Minimum purchase	\$100	\$100	\$100
Issue method	Electronic	Electronic	Electronic
Minimum term of ownership	Four weeks	45 days	45 days
Rates and terms	Issued for four, eight, 13, 26 and 52 weeks and are sold at a discount from the face value	Notes pay interest every six months until maturity. At maturity, the face value of the note is paid to the owner.	Bonds pay interest every six months until they mature. When a bond matures, the owner is paid the face value of the bond.  Bonds can be held until maturity or sold before maturity.
Interest-earning period	N/A—The difference between the face value and the discount price the bill is purchased for is the return on investment.	To maturity	To maturity
Tax considerations	Interest income is exempt from state and local income taxes.  Interest income is subject to federal income tax.	Interest income is exempt from state and local income taxes.  Interest income is subject to federal income tax.	Interest income is exempt from state and local income taxes.  Interest income is subject to federal income tax.



## Lesson 6—Handout 3

# Comparing Bonds Answer Key (Cont.)

Comparisons	Treasury inflation-protected securities	Series I savings bonds	Series EE savings bonds
Minimum purchase	\$100	\$25	\$25
Issue method	Electronic	Electric and paper bonds are available if purchased with a tax refund.	Electronic
Rates and terms	Issued in terms of 5, 10 and 30 years and can be held until maturity or sold before maturity.  Interest is paid every six months.	Interest is earned monthly from the first day of the month of the issue date. The interest accrues until the bond reaches 30 years or the bond is cashed, whichever comes first.	Interest is fixed and added monthly and paid when the bond is cashed.
Minimum term of ownership	45 days	1 year	1 year
Interest-earning period	To maturity	30 years or until they are cashed, whichever comes first	30 years or until they are cashed, whichever comes first
Tax considerations	Interest income and growth in principal are exempt from state and local income taxes.  Interest income and growth in principal are subject to federal income tax.	Savings bonds are exempt from taxation and state and local income taxes, except for estate or inheritance taxes.  Interest earnings are subject to federal income tax.  Interest earnings may be excluded from federal income tax when used to finance education.	Savings bonds are exempt from taxation and state and local income taxes, except for estate or inheritance taxes.  Interest earnings are subject to federal income tax.  Interest earnings may be excluded from federal income tax when used to finance education.



## Lesson 6—Handout 3

# Comparing Bonds Answer Key (Cont.)

1. How does bond ownership build wealth?

**Bonds build wealth through their coupon payments, which are paid as cash to bond owners. If a bond issuer does not default (fail to make regular payments), investors receive a predictable income stream based on the coupon rate and face value of the bond.**

2. Are U.S. government bonds considered high or low risk? Explain why.

**U.S. bonds are considered low risk since they are backed by the full faith and credit of the U.S. government.**



## Lesson 6—Assessment 1

# Investing Quiz Answer Key

**Directions:** Match the following terms to the correct definition:

1. <u>I</u> Diversification	A. Share of profits paid to a stockholder
2. <u>C</u> Treasury bill	B. Total value of a company in the stock market
3. <u>A</u> Dividend	C. Short-term securities with maturities ranging from a few days to 52 weeks
4. <u>G</u> Emergency savings	D. Unique identifier by which individual securities can be researched and traded
5. <u>J</u> Index fund	E. Securities with terms of 20 or 30 years
6. <u>H</u> Stockholder	F. Original value of the bond
7. <u>F</u> Face value	G. Money set aside for unforeseen events
8. <u>D</u> Ticker symbol	H. Person who owns stock in a company and is eligible to share in profits and losses
9. <u>B</u> Market capitalization	I. Distribution of investments among several companies to lessen the risk of loss
10. <u>E</u> Treasury bonds	J. Type of mutual fund where components of the fund track the performance of a financial market index





## Lesson 6—Assessment 1

### Investing Quiz Answer Key (Cont.)

**Write a short response to the following questions:**

1. Explain how financial markets and financial institutions help facilitate the transfer of funds from people who have saved money to people, firms and governments with investment projects.

**Financial markets are a marketplace that allows the transfer of money from savers to investors to buy and sell securities and investments. Financial institutions allow a place for both savers and investors to store their money and facilitate the transfer of money when transactions take place in financial markets.**

2. What are three common types of emergencies people save money for?

**Answers might vary but could include: unforeseen home and car repairs, job loss, emergency dental work, natural disaster, long-term illness, emergency travel**

3. What is the difference between stocks and bonds?

**When you purchase a bond, you lend your money in return for future payment. When you purchase a stock, you pay for a share of ownership in the company.**

4. What is a stock exchange? Give one example.

**A stock exchange is the institution that creates the market where stocks are bought and sold. Two U.S. exchanges are the New York Stock Exchange and the NASDAQ. International exchanges include the London Stock Exchange and the Tokyo Stock Exchange.**

5. If a company goes bankrupt and its stock price goes to zero, what happens to its shareholders?

**If a company's stock price goes to zero, investors lose all the money they have invested in the company.**



## Lesson 6—Assessment 1

### Investing Quiz (Cont.)

Choose the correct answer:

16. Is a kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met.

Preferred stock

- **Common stock**

17. Is when the value of the stock increases.

- **Stock appreciation**

Stock depreciation

18. Is a financial asset that represents a piece, or share, of ownership in a company.

Stock exchange

- **Stock**

19. Is when a buyer offers to buy shares of stock at a given price.

- **Bid price**

Ask price

20. Companies have a market value of more than \$10 billion.

- **Large-cap**

Small-cap

# Save and Invest—Risk and Return

## Lesson Overview

### Description

This lesson begins with a brainstorming session in which students identify the risks involved in playing a sport or driving a car. From these responses, the concept of risk is defined as the possibility of a loss or injury. After narrowing the discussion to the concept of financial risk—the possibility of a monetary loss—students explore different traits that impact the amount of risk an investor might be willing to take. Next, students work to analyze case studies and identify the risk factors. The lesson concludes with students creating a role-play presentation that explains recommended changes to their client’s investment portfolio based on their client’s goals, risk tolerance and time horizon.

### Standards

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

### Instructional Objectives

- Explain the relationship between risk and return.
- Describe different types of financial risk.
- Analyze investment scenarios to identify types of financial risk.
- Analyze the impact of inflation on personal financial decision-making.
- Evaluate investment goals as they relate to risk tolerance.

### Time Required

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

### Materials Required

- PDF slides
- Copies of Handout 1: Guided Notes
- Copies of Handout 2: Risk and Return of Wealth-Building Assets

- Copies of Handout 3: Building a Portfolio with Building Wealth Funds
- Copies of Assessment 1: Investment Role-Play

## Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is risk and return.
  - Distribute copies of Handout 1: Guided Notes.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Display the discussion question and ask students to share their ideas about the risks of playing a sport or driving a car. Answers will vary but might include: injury, dehydration, wrecks, repairs, tickets and high gas prices.

*Suggested questions for student discussion:*

- Does a person playing a sport or driving a car know what risks are possible? Answers will vary but might include: yes, risks are possible, but nothing bad will happen to me.
- Is the risk different or the same for participating in school sports versus extreme sports? Answers will vary but might include: bungee jumping, surfing, free diving and BASE jumping have higher degrees of risk.

*Classroom response strategy:*

- Have students record their responses in their guided notes and then share with the class.
4. **Display slide 4.** Introduce the definitions of risk and financial risk. Explain to students that people invest with the expectation that assets will increase over time, or produce what is known as a return. However, this is not guaranteed, and there is financial risk in many investments.
    - Return is the profit or loss from an investment.
  5. **Display slides 5–6.** In the discussion of financial risk, review types of assets from Lesson 1: Budget to Save—The Balance Sheet.

*Suggested questions for student discussion:*

- Ask students to name other assets and write examples on the board. Examples might include: collectible items, gaming consoles, money in a piggy bank, sports equipment and bicycles.
- What are some events or conditions that can cause wealth-building assets to lose value or fail to produce a return? Answers will vary but might include: inflation, recession and falling real estate values.
  - Inflation is when there's a sustained rise in the prices of goods and services.
  - Inflation risk is when the rate of return on an investment is less than the rate of inflation.
  - Recession is when U.S. gross domestic product falls for two consecutive quarters.

*Classroom response strategies:*

- Have students write the names of assets on a virtual board or on sticky notes to place on the classroom board.
  - Sort the assets that were named and written on the board, as directed in the previous slide, into wealth-building assets versus depreciating assets.
  - Wealth-building assets are called appreciating assets and generally increase in value over time or provide a rate of return.
  - Depreciating assets are assets that decrease in value over time.
6. **Display slide 7.** Explain to students that assets have varying degrees of financial risk. Explain that the bottom of the pyramid is considered low risk, while the top of the pyramid is considered high risk. High-risk assets are not listed in the examples on the slide but could include: venture capital investments, currency trading and crowdfunding. Ask students where in the pyramid they would categorize the investments listed.

*Classroom response strategies:*

- Have students work in pairs to sort the list.
  - Type responses on the slide.
7. **Display slide 8.** Review the answers, which will vary. For example, some students might consider a mutual fund less risky since it is a diversified investment.

*Classroom response strategy:*

- Have students sort the assets listed into the investment pyramid in their guided notes.
8. **Display slides 9–11.** Review the different types of financial risk that investors face.

**Capital-loss risk:**

- An investor faces capital loss when the value of an asset falls below the purchase price.

**Default risk:**

- Default risk occurs when the borrower fails to make payments as promised.
- Companies that issue bonds can default on interest and bond payments. This can happen due to circumstances such as changing market conditions, recession or increased competition.

**Inflation risk:**

- Inflation risk is when the rate of return on an investment is less than the rate of inflation.
- Explain to students that whenever an investor earns a rate of return less than the rate of inflation, the investor experiences a decrease in purchasing power.

### Liquidity risk:

- Not all investments can be sold easily. When an investment is difficult to sell, an investor faces liquidity risk, or the inability to quickly liquidate an asset at an acceptable price.
- Liquidity risk is often associated with art, certificates of deposit and real estate.

*Suggested question for student discussion:*

- Considering all the risks, why are people willing to invest in anything at all? Answers will vary but might include: with greater risk comes greater return.

9. **Display slides 12–21.** Review the financial-risk scenarios. The answer for each scenario will be displayed on the next slide. An additional slide explains inflation risk.

*Classroom response strategy:*

- Have students solve for Darius' real interest rate in their guided notes.

*Suggested teaching strategies:*

- If your students are struggling with the concept of inflation risk, use the additional examples below to calculate the real interest rate once inflation is factored into the nominal (unadjusted) rate. These examples are also included in the guided notes handout for extra practice:
  - Savings account: With a nominal return of .01% and inflation of 2.0%, the real interest rate is -1.99%.
  - Bond: With a nominal return of 2.0% and inflation of 2.0%, the real interest rate is 0%.
  - Mutual fund: With a nominal return of 8.5% and inflation of 2.0%, the real interest rate is 6.5%.
- If you are using the additional examples, ask students what it means to have a negative real interest rate. Answers will vary but might include: a decrease in purchasing power, or savings eroded by inflation.
- Ask students why someone would want to put their money in a savings account if the real interest rate is negative. Answers will vary but might include: safety, convenience or some interest is better than none.

10. **Display slide 22.** Have students brainstorm answers to the question: “How much risk are you willing to take?”

*Suggested question for student discussion:*

- Will your risk tolerance change as you age? Answers will vary.

11. **Display slide 23.** Review the risk–return relationship. Explain that in general, the greater the risk, the greater the potential return. The lower the risk, the lower the potential return. A higher-risk investment can also have the potential for a greater loss.

*Suggested question for student discussion:*

- If greater risk yields greater returns, why don't all investors purchase very-high-risk investments? Answers will vary but might include: fear of loss as well as different financial goals, liquidity needs and time horizons (for example, for older and younger investors).

*Classroom response strategy:*

- Have students answer the following questions in their guided notes and share: What is the risk–return relationship? Do risk and return always move in the same direction? Explain.
12. **Display slide 24.** Ask students how much risk they can afford to take. Explain that the amount of risk you can afford to take is often related to your financial goals, risk tolerance and time horizon.
  13. **Display slides 25–27.** Review how investors determine how much risk they can afford to take.

### **Financial goals:**

- Tell students that when people develop financial goals, they require certain rates of return.

### **Risk tolerance:**

- When people are selecting investments, they should consider the return necessary to meet their goals and try to minimize their financial risk.
- Explain that people differ in their tolerance for financial risk.
- Even when investments perform as expected over long periods, there may be times when investments lose value or fail to perform. When this happens, an investor's risk tolerance will often dictate the response.

### **Time horizon:**

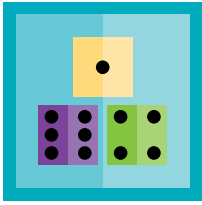
- The time horizon can affect the ability to take financial risks. If the money is for a vacation next summer, an investor will not have the luxury of time to recover from a year of underperformance. If the money is for retirement in 30–40 years, an investor may be able to take more risks in anticipation of higher long-term returns.
14. **Display slides 28–29.** Review types of returns. Explain to students that returns can either be positive or negative.
  15. **Display slide 30.** Distribute Handout 2: Risk and Return of Wealth-Building Assets. Allow time for students to complete the handout and review the answers.
  16. **Display slides 31–33.** Review learning objectives with students.
  17. **Display slide 34.** Distribute Assessment 1 and Handout 3: Investment Role-Play and Building a Portfolio with Building Wealth Funds. Have students create a presentation or record a video of

their role-play. If students do not have access to technology, they can turn in their script using the template found in Assessment 1: Investment Role-Play.

- Review the instructions on the assessment handout.
- Before students begin their assessment, review the sections found in the Building a Portfolio with Building Wealth Funds handout. Give students a few minutes to read the handout and ask questions about the material.

18. **Additional resource:** Federal Reserve Bank of Atlanta, Risk and Return Grab Bag: Bell Ringer Activity





## Lesson 7—Handout 1

# Guided Notes

### Vocabulary

**Risk**—The possibility of loss or injury.

**Financial risk**—The possibility that an asset will fail to produce a return or will lose value over time.

**Asset**—Anything you own that has commercial or exchange value.

**Wealth-building assets**—Possessions that generally increase in value over time.

**Depreciating assets**—Possessions that decrease in value over time.

**Default risk**—An interest-bearing investment that fails to pay the promised interest or return on the original investment.

**Inflation**—A sustained rise in the prices of goods and services.

**Inflation risk**—The rate of return on an investment that is less than the rate of inflation.

**Liquidity risk**—The inability to quickly sell an asset at an acceptable price.

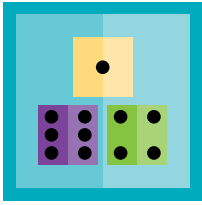
**Return**—The profit or loss from an investment.

**Dividend**—A share of profits paid to a stockholder.

**Interest payment**—The rate of return paid to the saver/investor.

**Capital gain**—The increase in value of an asset (such as stock or real estate) from the time it is bought to the time it is sold.

**Brainstorm and write down answers to the question: What are the risks of playing a sport or driving a car?**

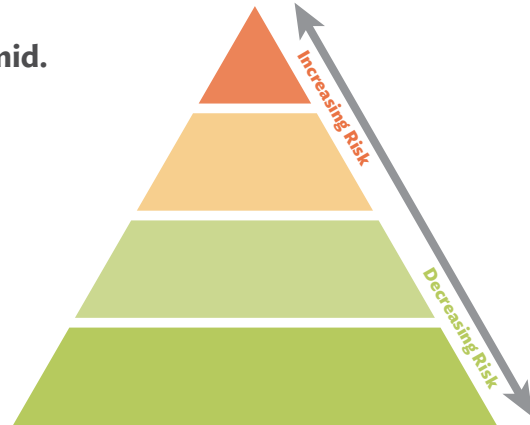


## Lesson 7—Handout 1

### Guided Notes (Cont.)

Sort the assets listed into the investment pyramid.

- Stock.
- Certificate of deposit.
- Mutual fund.
- Bond.
- Savings account.
- Real estate.



Use the formula below to solve for the real interest rate.

$$\text{Nominal interest rate} - \text{Inflation} = \text{Real interest rate}$$

If Darius earned 1% interest (nominal interest rate) on his certificate of deposit and inflation was 2%, what was the real interest rate Darius earned while keeping his money in a CD?

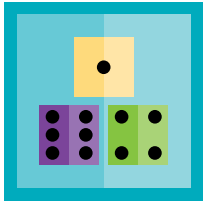
\_\_\_\_\_ %.

**Extra practice: Solve for the real interest rate.**

Savings account example: With a nominal return of .01% and inflation of 2.0%, the real interest rate is \_\_\_\_\_ %.

Bond example: With a nominal return of 2.0% and inflation of 2.0%, the real return is \_\_\_\_\_ %.

Mutual fund example: With a nominal return of 8.5% and inflation of 2.0%, the real return is \_\_\_\_\_ %.



## Lesson 7—Handout 1

# Guided Notes (Cont.)

**What is the risk–return relationship?**

**Do risk and return always move in the same direction? Explain.**



## Lesson 7—Handout 2

# Risk and Return of Wealth-Building Assets



### Try it on your own

Identify potential rewards and risks associated with each financial asset and list them in the appropriate column.

Return Interest, dividend, capital gain	Financial asset	Risk Default, capital loss (falling market price), inflation (lost purchasing power), liquidity
	Savings account	
	Money market account	
	Certificate of deposit (CD)	
	Corporate bond	
	Municipal bond	
	Savings bond	
	Treasury bond, bill and note	
	Stock	
	Mutual fund	
	House and/or real estate	
	Your own business	
	Collectibles such as rare coins, antiques or art	



## Lesson 7—Handout 2

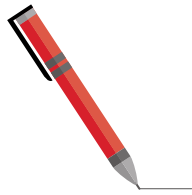
### Risk and Return Suggested Answers



#### Try it on your own

Identify potential rewards and risks associated with each financial asset and list them in the appropriate column.

<b>Return</b> Interest, dividend, capital gain	<b>Financial asset</b>	<b>Risk</b> Default, capital loss (falling market price), inflation (lost purchasing power), liquidity
Interest	Savings account	Inflation
Interest	Money market account	Inflation
Interest	Certificate of deposit (CD)	Inflation, liquidity
Interest, capital gain	Corporate bond	Inflation, liquidity, default
Interest, capital gain	Municipal bond	Inflation, liquidity, default
Interest	Savings bond	Inflation, liquidity
Interest	Treasury bond, bill and note	Inflation (if interest not indexed to inflation), liquidity
Capital gain, dividend	Stock	Liquidity, default, inflation, capital loss
Capital gain, dividend	Mutual fund	Liquidity, capital loss
Capital gain	House and/or real estate	Liquidity, capital loss
Capital gain, dividend	Your own business	Liquidity, default (if company goes bankrupt), capital loss
Capital gain	Collectibles such as rare coins, antiques or art	Liquidity, capital loss



## Lesson 7—Handout 3

# Building a Portfolio with Building Wealth Funds

### Building Wealth Investments

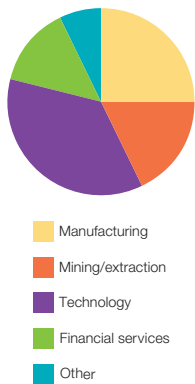
#### Investment objective:

The Building Wealth Large Cap Fund seeks to track the performance of the Building Wealth Large Cap Index, an index that measures the return of many large companies traded on the Building Wealth Domestic Stock Exchange.

Ticker symbol: BWLCF

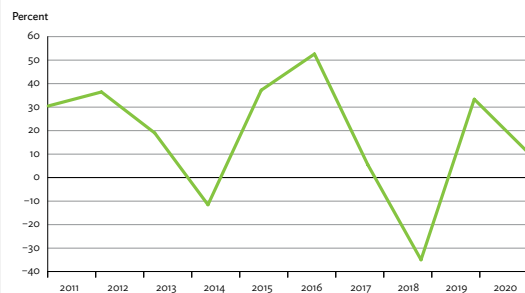
- 1 **Inception date:** June 8, 1996
- 2 **Standard deviation:** 20.28%
- 3 **Maximum one-year return:** 53.99%
- 4 **Minimum one-year return:** -43.34%
- 5 **Average lifetime return:** 11.74%

#### 7 Portfolio breakdown



### Building Wealth Large Cap Fund

#### 10-year annual return



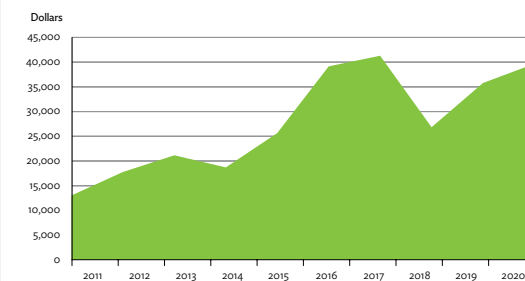
#### Average annual total returns (percent)

1 Yr	3 Yrs	5 Yrs	10 Yrs
10.88	3.07	13.464	17.882

#### Average annual total returns (percent)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
30.47	36.44	18.98	-11.59	37.2	52.62	5.49	-35.03	33.36	10.88
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
-8.19	-4.92	5.71	-8.42	43.61	5.5	-9.11	10.08	31.73	26.68

#### 6 Growth of a \$10,000 initial investment



#### 1 Inception date

The date the fund was created.

#### 2 Standard deviation

A measure of volatility, or how much a stock goes up and down, that shows how much the fund varies from the mean.

#### 3 Maximum one-year return

The fund's best one-year performance.

#### 4 Minimum one-year return

The fund's worst one-year performance.

#### 5 Average lifetime return

The average return since the inception date.

#### 6 Growth of a \$10,000 initial investment

The compound growth of an initial investment (\$10,000) over 10 years yields the average annual total return.

#### 7 Portfolio breakdown

A description of the fund allocation by industry/sector.



## Lesson 7—Handout 3

### Building a Portfolio with Building Wealth Funds (cont.)

#### Building Wealth Investments

##### Investment objective:

The Building Wealth Large Cap Fund seeks to track the performance of the Building Wealth Large Cap Index, an index that measures the return of many large companies traded on the Building Wealth Domestic Stock Exchange.

**Ticker symbol:** BWLCF

**Inception date:** June 8, 1996

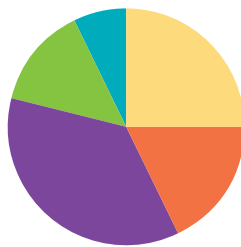
**Standard deviation:** 20.28%

**Maximum one-year return:** 53.99%

**Minimum one-year return:** -43.34%

**Average lifetime return:** 11.74%

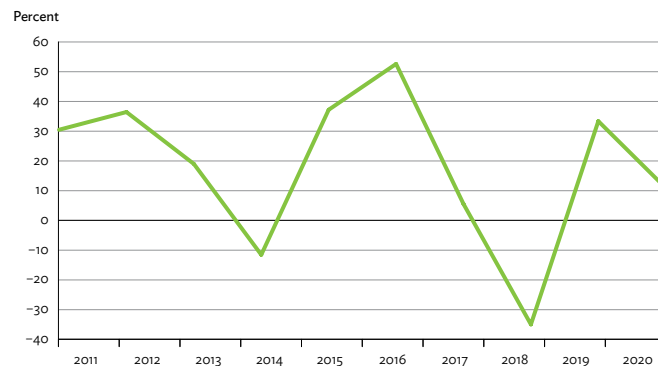
##### Portfolio breakdown



■ Manufacturing  
■ Mining/extraction  
■ Technology  
■ Financial services  
■ Other

#### Building Wealth Large Cap Fund

##### 10-year annual return



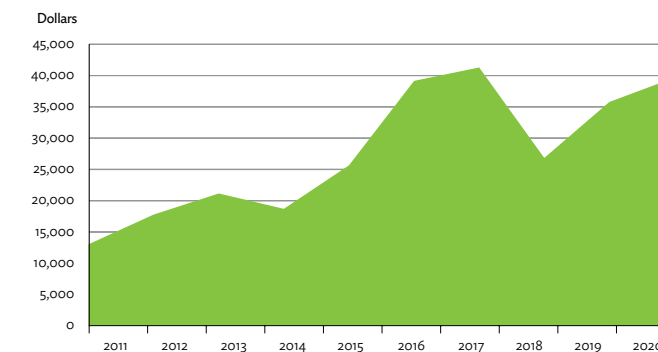
##### Average annual total returns (percent)

1 Yr	3 Yrs	5 Yrs	10 Yrs
10.88	3.07	13.464	17.882

##### Average annual total returns (percent)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
30.47	36.44	18.98	-11.59	37.2	52.62	5.49	-35.03	33.36	10.88
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
-8.19	-4.92	5.71	-8.42	43.61	5.5	-9.11	10.08	31.73	26.68

##### Growth of a \$10,000 initial investment





## Lesson 7—Handout 3

### Building a Portfolio with Building Wealth Funds (cont.)

#### Building Wealth Investments

##### Investment objective:

The Building Wealth Mid Cap Fund seeks to track the performance of the Building Wealth Mid Cap Index, an index that measures the returns of many mid-sized companies traded on the Building Wealth Domestic Stock Exchange.

**Ticker symbol:** BWMCF

**Inception date:** Nov. 15, 1983

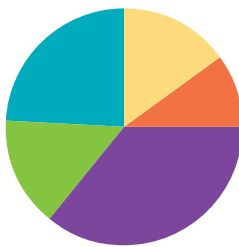
**Standard deviation:** 17.75%

**Maximum one-year return:** 37.38%

**Minimum one-year return:** -36.23%

**Average lifetime return:** 12.50%

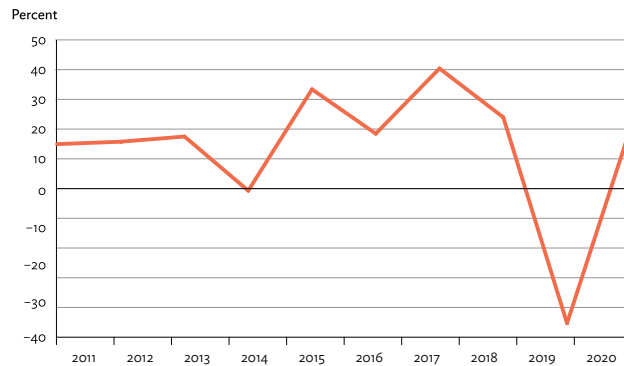
##### Portfolio breakdown



- Manufacturing
- Mining/extraction
- Technology
- Financial services
- Other

#### Building Wealth Mid Cap Fund

##### 10-year annual return



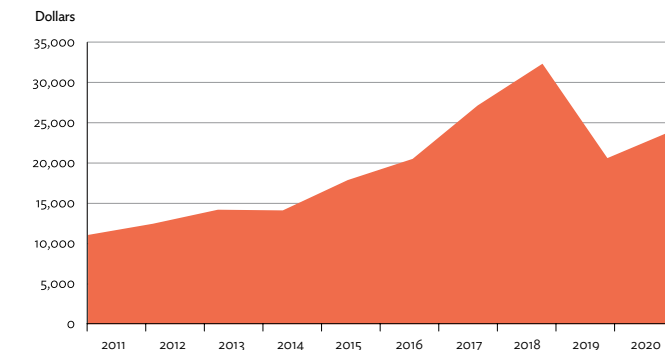
##### Average annual total returns (percent)

1 Yr	3 Yrs	5 Yrs	10 Yrs
16.48	-0.21	9.268	11.08

##### Average annual total returns (percent)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11.91	12.56	13.95	-0.6	26.64	14.72	32.25	19.12	-36.23	16.48
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
-3.58	10.32	30.95	-14.51	19.2	-1.73	37.38	7.98	35.62	17.51

##### Growth of a \$10,000 initial investment







## Lesson 7—Handout 3

### Building a Portfolio with Building Wealth Funds (cont.)

#### Building Wealth Investments

##### Investment objective:

The Building Wealth Small Cap Fund seeks to track the performance of the Building Wealth Small Cap Index, an index that measures the returns of many small companies traded on the Building Wealth Domestic Stock Exchange.

**Ticker symbol:** BWSCF

**Inception date:** Dec. 20, 1974

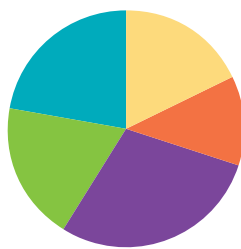
**Standard deviation:** 19.15%

**Maximum one-year return:** 47.25%

**Minimum one-year return:** -33.79%

**Average lifetime return:** 11.99%

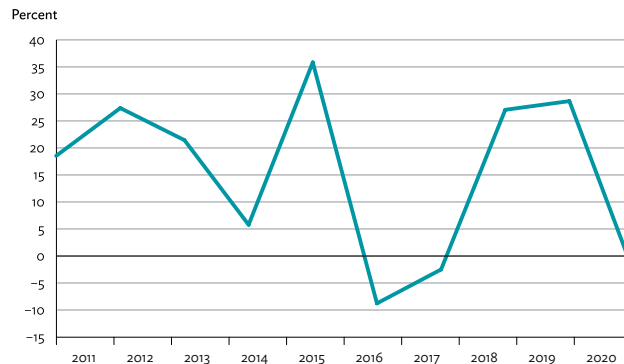
##### Portfolio breakdown



- Food services
- Retail
- Technology
- Financial services
- Other

#### Building Wealth Small Cap Fund

##### 10-year annual return



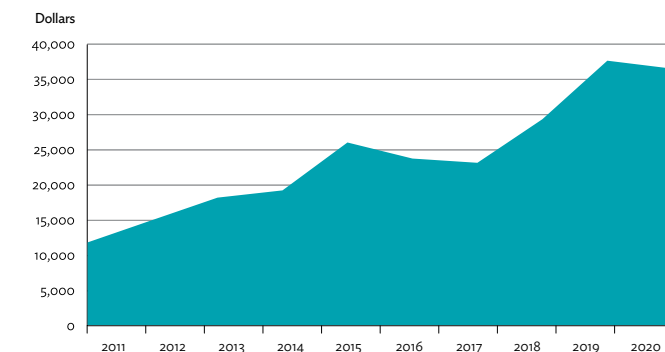
##### Average annual total returns (percent)

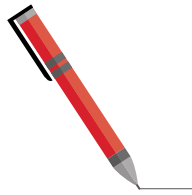
1 Yr	3 Yrs	5 Yrs	10 Yrs
-3.02	17.43	8.19	14.90

##### Average annual total returns (percent)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
18.37	27.17	21.26	5.68	35.58	-8.8	-2.55	26.85	28.45	-3.02
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
24.95	4.55	-1.57	-7.13	-33.79	18.41	47.25	16.49	31.05	25.02

##### Growth of a \$10,000 initial investment





## Lesson 7—Handout 3

### Building a Portfolio with Building Wealth Funds (cont.)

#### Building Wealth Investments

##### Investment objective:

The Building Wealth Bond Index Fund seeks to track the performance of the Building Wealth Bond Index, an index that measures the returns of many bonds issued by sovereign entities, municipalities and corporations.

**Ticker symbol:** BWBIF

**Inception date:** July 25, 1975

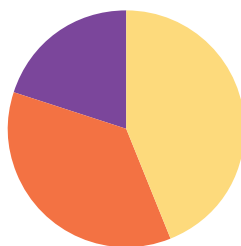
**Standard deviation:** 6.9%

**Maximum one-year return:** 32.60%

**Minimum one-year return:** -2.92%

**Average lifetime return:** 8.51%

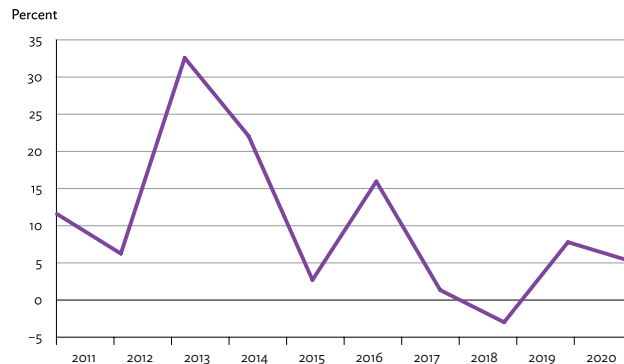
##### Portfolio breakdown



■ Sovereign debt  
■ Corporate debt  
■ Municipal debt

#### Building Wealth Bond Index Fund

##### 10-year annual return



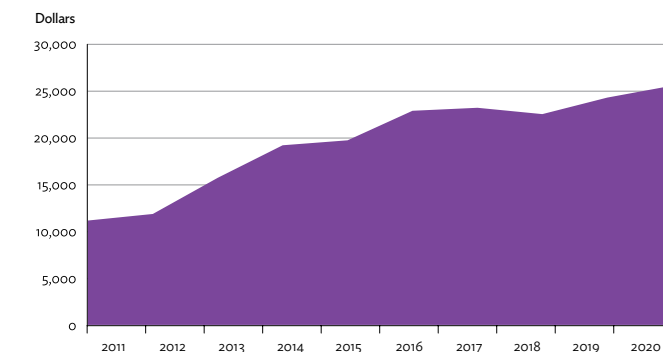
##### Average annual total returns (percent)

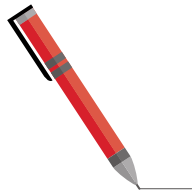
1 Yr	3 Yrs	5 Yrs	10 Yrs
5.24	3.39	5.51	10.30

##### Average annual total returns (percent)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
11.63	6.30	32.60	22.11	2.76	16.00	1.40	-2.92	7.84	5.24
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
9.65	-0.82	6.54	7.89	4.10	8.40	1.90	15.26	4.34	7.40

##### Growth of a \$10,000 initial investment





## Lesson 7—Handout 3

### Building a Portfolio with Building Wealth Funds (cont.)

#### Building Wealth Investments

##### Investment objective:

The Building Wealth Bond International Index Fund seeks to track the performance of the Building Wealth International Index, an index that measures the returns of large companies traded on exchanges located outside of the Building Wealth domestic market.

**Ticker symbol:** BWIIF

**Inception date:** April 8, 1979

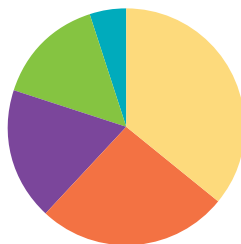
**Standard deviation:** 22.84%

**Maximum one-year return:** 69.46%

**Minimum one-year return:** -43.38%

**Average lifetime return:** 11.14%

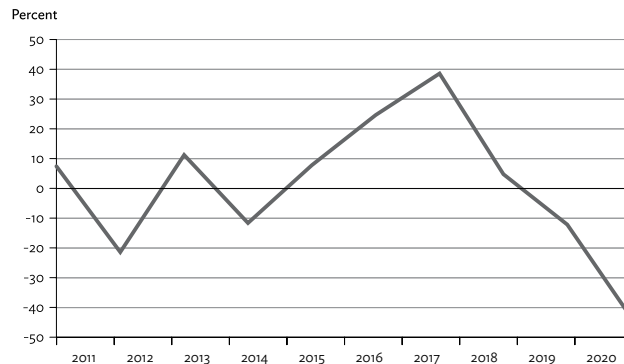
##### Portfolio breakdown



Europe  
Asia  
Australia  
South America  
Africa

#### Building Wealth International Index Fund

##### 10-year annual return



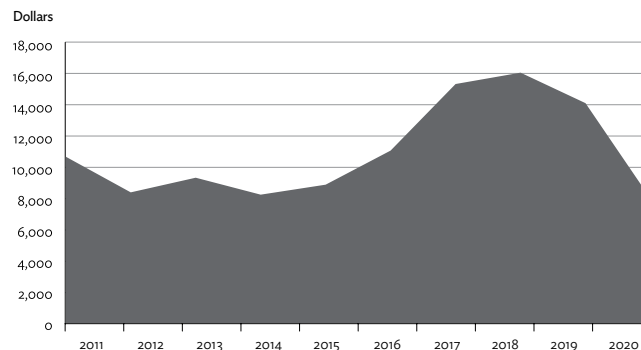
##### Average annual total returns (percent)

1 Yr	3 Yrs	5 Yrs	10 Yrs
-43.38	-16.94	2.48	0.06

##### Average annual total returns (percent)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
7.41	-21.44	11.21	-11.66	7.78	24.64	38.59	4.75	-12.18	-43.38
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
-2.27	12.14	-15.94	11.17	29.59	-14.82	35.39	69.46	31.78	36.35

##### Growth of a \$10,000 initial investment





## Lesson 7—Assessment 1

### Investment Role-Play

#### Role-play scenario

You will assume the role of a certified financial planner working for Building Wealth Investment Corp. As an investment adviser, you advise your clients on retirement and investment planning, which can include asset selection, allocation and diversification. Next week, you have a meeting scheduled with two of your clients, Reyna and Martin. During this meeting, you will present recommendations for adjusting their retirement portfolios to meet their retirement goals and risk profile.

#### Instructions

- Review your clients' needs and risk tolerance.
- Pick either Reyna or Martin and prepare a presentation for adjusting the client's investment portfolio.
- Use Handout 3: Building a Portfolio with Building Wealth Funds to balance the risk and return to meet your client's goals.
- Use the template starting on the second page of Assessment 1 to outline and prepare your presentation.

### Reyna, 45

**Years to retirement:** 20

**Risk tolerance:** Moderate—balanced investments between risky and safe.

**Investment goals:** Reyna began saving for retirement in her late 30s. She would like to retire by the age of 65. However, she is not on track to reach that goal given the current projected growth of her investment portfolio. Reyna is willing to take more risk in the market to meet her goals. Develop a plan to adjust the allocation of Reyna's investment portfolio to meet her needs and risk tolerance. Below is the current allocation of her investment portfolio.

BWLCF 5%    BWMCF 5%    BWSCF 5%  
BWIIF 70%    BWBIF 15%

### Martin, 62

**Years to retirement:** 3

**Risk tolerance:** Conservative—prioritize avoiding losses above making gains.

**Investment goals:** Martin has enough money set aside to retire by the age of 65. However, he is concerned about fluctuations in the market during the next three years and how those fluctuations might affect his money saved for retirement. Develop a plan to adjust the allocation of Martin's investment portfolio to meet his needs and risk tolerance. Below is the current allocation of his investment portfolio.

BWLCF 25%    BWMCF 25%    BWSCF 5%  
BWIIF 10%    BWBIF 35%



## Lesson 7—Assessment 1

### Investment Role-Play (cont.)

#### Instructions

Follow the steps below to create a script for your role-play presentation.

1. Review the scenario that includes the purpose of the meeting and your client's investment goal and risk tolerance.
2. Review how your client's investment portfolio is currently allocated.
3. Explain the portfolio breakdown and performance of each Building Wealth fund.



## Lesson 7—Assessment 1

### Investment Role-Play (cont.)

4. Propose a new allocation breakdown for the client's investments.
  
  
  
  
  
  
  
  
  
  
5. Explain why you recommended the allocation suggested.
  
  
  
  
  
  
  
  
  
  
6. Explain how the allocation suggested meets your client's investment goals and aligns with the client's risk tolerance. Use specific examples from the Handout 3: Building a Portfolio with Building Wealth Funds to support your recommendations.
  
  
  
  
  
  
  
  
  
  
7. Generate a list of next steps your client will need to take to authorize the recommended changes.

# Build Credit—Understanding Credit Reports & Scores

## Lesson Overview

### Description

Students will begin this lesson by brainstorming similar characteristics between a grade-point average (GPA) and a credit score. Following this activity, students will receive an overview of credit scores, credit reports and the information potential lenders, landlords and employers might look at to determine a person's creditworthiness. They will then explore the elements of a credit report, the importance of checking your credit report, how to access your credit report and how to build credit. Students will review a sample credit report and identify the different sections within it. They will also discuss how character, capacity and collateral can impact a credit rating and the ability to obtain credit. Students will conclude the lesson by creating a public service announcement (PSA) video on credit scores or reports.

### Standards

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

### Instructional Objectives

- Distinguish between a credit report and credit score.
- Describe the importance of monitoring credit reports.
- Describe how to access and interpret a sample credit report and score.
- Describe how to build credit.
- Discuss how character, capacity and collateral can impact a credit rating and the ability to obtain credit.

### Time Required

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

## Materials Required

- PDF slides
- Copies of Handout 1: Guided Notes
- Copies of Handout 2: Personal Credit Report
- Copies of Assessment 1: Public Service Announcement Video

## Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is understanding credit reports and credit scores.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Have students brainstorm answers to the question: “Are there similar characteristics between a grade-point average (GPA) and a credit score?”

*Classroom response strategy:*

- Have students record their responses in their guided notes and share with the class. This question is intended to gauge students’ prior knowledge of credit scores. It is OK if they do not know the answer.
4. **Display slides 4–7.** Ask students to share what score they think is better. When you display the answers, explain to students that credit scores are like GPAs. The higher the score, the better.
    - Answers:
      - Cheyenne’s GPA of 3.8 is better.
      - Luis’ credit score of 750 is better.
  5. **Display slides 8–9.** Explain to students that GPAs and credit scores have another similar characteristic. They both represent one piece of information about a person.
    - A GPA is one piece of information colleges use to determine admissions. Colleges can also consider: courses taken, test scores, achievements, extracurricular activities in and out of school, essays, auditions and admissions interviews.
    - A credit score is one piece of information lenders look at to determine a borrower’s ability and willingness to repay a loan. Other considerations can include: information found in a credit report and the borrowers’ occupation, income, expenses, assets, payment history, length of employment and potential collateral.



*Suggested questions for student discussion:*

- Ask students if they were to lend money or rent housing to someone, what information would they like to know about the individual. Answers will vary but might include: how well do they know the person, the quality of their character and their ability to repay.
- Ask students if they have friends or family members to whom they would feel comfortable or uncomfortable lending money? What information do they know about these individuals that would characterize their response?

*Classroom response strategy:*

- Have students add the similar characteristics between credit scores and GPAs to their guided notes.

6. **Display slides 10–11.** Review the definition of a credit score.

- **Credit score** is a number that predicts the likelihood that a debt will be repaid on time.

*Classroom response strategies:*

- Have students fill in the blanks in their guided notes on credit score.

7. **Display slides 12–13.** Use the graphics to explain credit score ranges and what information in your credit report is used to calculate your score.

- Credit scores are used to determine the creditworthiness of an individual.
- Credit scores range from 350 to 850.
- Tell students that a tech company called Fair Isaac Corp. (FICO) created a credit-scoring algorithm to calculate standardized FICO credit scores.
- The FICO score is the most widely used type of credit score. However, each company, lender and credit reporting agency (Equifax, Experian and TransUnion) can use its own statistical model to determine their score.

*Classroom response strategy:*

- Ask students what category is weighted most in credit scores. Answer: payment history.

8. **Display slide 14.** Tell students that lenders also look at additional information such as credit report, capacity, character and collateral when determining a borrower's creditworthiness. Explain that it is difficult to pay cash for your car, home and college education, so these are typically bought using credit.

- It is important to have a plan to build and maintain a good credit history.

*Suggested question for student discussion:*

- Ask students if they were to lend their money to a stranger, what additional information would they like to know about the borrower. Examples will vary but might include: job, income, debts and monthly expenses.

9. **Display slides 15–19.** Review credit report.

- Explain to students that credit scores, which were explained in the previous slides, are derived from information contained within the credit report.
- A **credit report** shows your bill payment history, current debt and other financial information.
- A credit report that includes late payments, delinquencies or defaults will result in a low credit score and could cause an individual to pay higher interest rates or be declined credit altogether.
- Credit reports include information reported to credit agencies. Credit reporting agencies collect and maintain information in your credit reports.
- Each agency manages its own records and might not have the information about all your accounts. Even though there are differences between each credit report, no agency is more important than another.
- Credit reports do not include your credit score. However, the longer your credit history, the more favorable the impact will be on your credit score.
- It's important to check your credit reports regularly to make sure that your personal and financial information is accurate.

*Classroom response strategy:*

- Have students describe the three ways credit reports are used (and the three credit reporting agencies) in their guided notes.

10. **Display slide 20.** Have students brainstorm answers to the question: “Do you have a credit report?” Ask students to share their thoughts with the class.

- After students have shared, tell them that not everyone has a credit report.

11. **Display slides 21–22.** Tell students a credit report is first created when you open a credit account for the first time and when the creditor reports that information to a credit bureau.

- If you have never opened any credit accounts, then you will not have a credit report.
- There can be instances of identity theft/fraud where a credit report could exist. Additional information regarding credit fraud and identity theft will be covered in slide 22.

12. **Display slide 23.** Review ways to build credit.

**Secured credit card:**

- You can open a secured credit card at a bank or credit union by paying a security deposit. The security deposit serves as collateral.
- The bank or credit union will then provide a credit card for the amount deposited in the bank.

- The security deposit must remain in an account at the bank.
- If consistent payments are made on time, credit records will improve over time.
- After you have used the secured credit card for a year or more, never maxing out your credit and always paying on time, the credit card provider will typically offer an unsecured card.

#### **Credit-builder loan:**

- A credit-builder loan isn't a traditional loan. When you apply for the loan, the money is saved in an account and the borrower makes fixed payments toward the loan.
- The money borrowers pay is not available until the loan term is up.
- When the loan is paid off, the lender will return the total balance.
- It is designed to help establish and build credit.

#### **Retail store credit card:**

- You can also open a retail credit card to build credit. Retail credit cards are also referred to as closed-loop cards—meaning they are only approved to be used at specific stores.
- To apply for a retail credit card or any other credit card, you must be at least 18 years old.

#### *Classroom response strategy:*

- Have students answer the following question in their guided notes. If you were ready to start building your credit, which of the mentioned options would you prefer and why?

#### **13. Display slide 24.** Distribute copies of Handout 2: Personal Credit Report.

- Use the information contained in the handout to guide students through the sections found in a credit report. After you have discussed the sections and students have had a chance to read the information in their handout, give them the opportunity to answer the questions on page 2.

#### **14. Display slide 25.** Review the importance of checking your credit report. Explain that a good credit history will result in getting the lowest interest rates for loans and other services.

- Remind students that it is important for them to check their free credit report annually. Even if they have never used credit, it is possible that they have been a victim of credit fraud or identity theft. This can happen if someone has taken credit out in their name or used their Social Security card without their knowledge.
- Review how to access a free credit report on [annualcreditreport.com](https://annualcreditreport.com).
- Share with your students the following warnings from the website:
  - “Only one website is authorized to fill orders for the free annual credit report you are entitled to under law—[annualcreditreport.com](https://annualcreditreport.com). Other websites that claim to offer ‘free credit reports,’ ‘free credit scores’ or ‘free credit monitoring’ are not part of the legally mandated free annual credit report program. In some cases, the ‘free’ product comes with strings attached. For example, some sites sign you up for a supposedly ‘free’ service that converts

to one you have to pay for after a trial period. If you don't cancel during the trial period, you may be unwittingly agreeing to let the company start charging fees to your credit card."

- "Some 'imposter' sites use terms like 'free report' in their names; others have URLs that purposely misspell [annualcreditreport.com](https://annualcreditreport.com) in the hope that you will mistype the name of the official site. Some of these 'imposter' sites direct you to other sites that try to sell you something or collect your personal information."
- "[Annualcreditreport.com](https://Annualcreditreport.com) and the nationwide credit reporting companies will not send you an email asking for your personal information. If you get an email, see a pop-up ad or get a phone call from someone claiming to be from [annualcreditreport.com](https://annualcreditreport.com) or any of the three nationwide credit reporting companies, do not reply or click on any link in the message. It's probably a scam."

*Classroom response strategy:*

- Have students write reasons why it is important to check your credit report in their guided notes.

15. **Display slides 26–27.** Review ways to improve your credit.

16. **Display slides 28–31.** Review character, capacity and collateral.

- Character is information that lenders gather about a borrower's willingness to repay a loan.
- Character information includes previous repayment history, how often and how much you borrow, and stability, such as length of time at your current employer or at your current address.
- Capacity is information that lenders gather about a borrower's ability to repay a loan. Questions about capacity will deal with earnings, monthly expenses or obligations or other debts that consume a borrower's income.
- Collateral is protection for lenders in the event they are not repaid. Collateral is real assets that a lender could collect to pay them back such as savings, property or other investments.

*Classroom response strategy:*

- Have students explain how character, capacity and collateral are used to determine a borrower's creditworthiness in their guided notes.

17. **Display slide 32.** Explain to students what cannot be used by creditors to approve credit.

- Tell students that lenders can ask you for this type of information in some situations, but they can't discourage you from applying for credit. They also can't reject your application for any of the reasons on the list—or for exercising your rights under certain consumer protection laws. Lenders are not allowed to charge higher costs, like a higher interest rate or higher fees, for these reasons either.

SOURCE: [Know Your Rights: Credit Discrimination Is Illegal \(consumerfinance.gov\)](https://consumerfinance.gov)

18. **Display slides 33–43.** Using the creditworthiness quiz, have students determine whether the statement would reflect positively or negatively on a person’s credit score.
19. **Display slides 44–46.** Review learning objectives with students.
20. **Distribute Assessment 1: Public Service Announcement Video.**
  - Have students create a public service announcement video and share/upload. If your students do not have access to technology, they can turn in their script using the template found in assessment 1.
21. **Additional Resources:**
  - The Federal Reserve Bank of Atlanta: [Infographic: Why Is Good Credit Important?](#)
  - Consumer Financial Protection Bureau: [Credit video.](#)
  - Consumer Financial Protection Bureau: [How Can I Improve My Credit Scores? video.](#)
  - Consumer Financial Protection Bureau: [Three Ways to Build Your Credit Score video.](#)
  - Federal Deposit Insurance Corp.: [Understanding Your Credit Score podcast.](#)



## Lesson 8—Handout 1

# Guided Notes

### Lesson 8 Vocabulary

**Credit score**—A number that predicts the likelihood that a debt will be repaid on time.

**Credit report**—Shows your bill payment history, current debt and other financial information.

**Secured credit card**—Requires a cash deposit that becomes the credit line.

**Credit-builder loan**—A loan where the amount you borrow is held in an account while you make payments.

**Retail store credit card**—Offered by stores such as gas stations, retail chains and department stores.

**Character**—Information that lenders gather about a borrower's willingness to repay a loan.

**Capacity**—Information lenders gather about a borrower's ability to repay a loan.

**Collateral**—Protection for creditors in the event they are not repaid.

### Brainstorm

Are there similar characteristics between grade-point average (GPA) and a credit score?



## Lesson 8—Handout 1

### Guided Notes (Cont.)

#### Fill in the blank

\_\_\_\_\_ is a number that predicts the likelihood that a debt will be repaid on time.

#### Define credit score in your own word

Describe the three ways credit reports are used.



## Lesson 8—Handout 1

### Guided Notes (Cont.)

You can get a free report at the official site **annualcreditreport.com**.

List the three credit reporting agencies below:

1.

2.

3.

You can start to build your credit by either using a secured credit card, a credit-builder loan or opening a retail store credit card. If you were ready to start building your credit, which would you prefer and why?

Why is it important to check your credit report?

Explain how character, capacity and collateral are used to determine a borrower's creditworthiness.





## Lesson 8—Handout 2

# Personal Credit Report

### Personal Consumer Credit Report

This section contains the person's name and address, along with the Social Security number and date of birth. It also shows the previous address and employment information.

#### Personal Identification Information

Name Social Security #: 123-45-6789

1234 Any Street Date of Birth: 07/01/1992

Dallas, TX 75000

Previous Address Employer: ABC, Inc.

456 Other Rd. Location: Dallas, TX

Houston, TX 77000

This section contains publicly available information about legal matters related to credit. It includes bankruptcy history.

#### Public Record Information

None



## Lesson 8—Handout 2

# Personal Credit Report (Cont.)

This section lists information about each credit account opened in the person's name. It identifies the lender and contains balance and payment information for the loan.

### Credit Account Information

ABC Auto Finance                      Account Number: 123456789  
 1000 Exchange Street              Date Opened: 5/2017  
 San Antonio, TX 78000              Loan Type: Installment–Auto

Balance	\$7,600
Credit limit/original amount	\$15,000
High balance	NA
Terms	60 months
Monthly payment	\$297
Past due	0

My Bank                                      Account Number: 123456789  
 5000 Main Street                      Date Opened: 8/2012  
 El Paso, TX 79000                      Loan Type: Revolving credit card

Balance	\$845
Credit limit/original amount	\$3,000
High balance	\$2,100
Terms	NA
Monthly payment	\$20
Past due	0



## Lesson 8—Handout 2

# Personal Credit Report (Cont.)

Gas Card of America

Account Number: 123456789

9999 Petroleum Street

Date Opened: 2/2016

Fort Worth, TX 76000

Loan Type: Revolving credit card

Balance	\$7,600
Credit limit/original amount	\$15,000
High balance	NA
Terms	60 months
Monthly payment	\$297
Past due	0

Account history:

60 days as of 6/2018

30 days as of 5/2018

This section lists information about anyone who has accessed this credit report.

### Recent Credit Inquiries

01/2020

ABC Auto Finance

10/2019

Department Store, Inc.

8/2019

Home Loan Mortgage Company



## Lesson 8—Handout 2

# Personal Credit Report (Cont.)

1. What is the total credit limit on the two revolving credit card accounts?
2. What is the person's current debt?
3. Are there any accounts that are past due?



## Lesson 8—Assessment 1

### Public Service Announcement Video

**Directions:**

Choose one of the suggested topics and create a 30-to-60-second public service announcement video. Use the template below to research, create an outline and write a script for your video.

**Topics:**

- How to access your credit report.
- How to improve your credit score.
- Difference between credit report and credit score.
- Importance of monitoring credit reports.
- How to build credit.

Choose your topic: \_\_\_\_\_

Research the topic and write facts from your research below.

Who will be your audience?



## Lesson 8—Assessment 1

### Public Service Announcement Video (Cont.)

Create an outline for your video.

Write a script to use in your video.



## Lesson 8—Handout 1

# Guided Notes Answer Key

### Fill in the blank

**Credit score** \_\_\_\_\_ is a number that predicts the likelihood that a debt will be repaid on time.



## Lesson 8—Handout 2

# Personal Credit Report Answer Key

1. What is the total credit limit on the two revolving credit card accounts?

**\$18,000**

2. What is the person's current debt?

**\$16,045**

3. Are there any accounts that are past due?

**No. There are no past due balances on any accounts.**



# Take Control of Debt – The Cost of Credit

## Lesson Overview

### Description

Students begin this lesson exploring the connection between credit and debt. After examining types of credit, peer-to-peer lending and high-cost credit, students analyze credit scenarios and determine which they would choose and why. The lesson concludes with understanding the language of loans such as annual percentage rate, finance charge, principal and prepayment penalty.

### Standards

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

### Instructional Objectives

- Identify the types of credit available to a consumer.
- Compare and contrast the different sources of credit.
- Examine the cost of borrowing.
- Analyze the impact of purchases financed with credit.

### Time Required

- One 45-minute class period.

### Materials Required

- PDF slides
- Copies of Handout 1: Guided Notes
- Copies of Handout 2: Cost of Credit
- Copies of Assessment 1: High-Cost Credit Essay
- Copies of Assessment 2: Quiz

# Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is the cost of credit and understanding loan terms.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slides 3-5.** Explain the connection between credit and debt.

## Credit:

- The granting of money or something else of value in exchange for a promise of future repayment.

Tell students that when a person cannot pay cash for a car, house or college, they can finance the purchase using credit.

## Debt:

- Represents money owed.

Remind students that the net worth is the value of the assets minus the money you owe. Driving an expensive car doesn't make you automatically wealthy. It depends on how much money you owe.

Tell students that taking on debt decreases your wealth and net worth since debt is considered a liability.

4. **Display slide 6.** Give students time to observe the graph on the slide and answer the following questions in their guided notes.
  - What is the first thing that stands out to you?
  - What else did you observe?
  - What new questions do you have?

After students are finished writing their questions in their guided notes, ask them to share with the class.

Tell students that this graph represents the total U.S. household debt, which was \$15.6 trillion in fourth quarter 2021.

Mortgage balances—the largest component of household debt—rose by \$258 billion and totaled \$10.9 trillion at the end of December 2021.

5. **Display slides 7-11.** Review the types of credit and characteristics of revolving and installment credit.
  - Explain to students that household debt is accumulated when people use credit.
  - Review the types of credit.

- **Revolving credit** is when people can access a capped limit of funds that may be used repeatedly after partial or total repayments have been made:
  - Home equity line of credit.
  - Credit card.
- **Installment credit** is when people borrow funds with a fixed payment and schedule for a specified time:
  - Car loan.
  - Student loan.
  - Home loan.
- **Service credit** includes types of credit with service providers and requires full payment for each period:
  - Cellphone service bill.
  - Gym membership bill.
  - TV subscription bill.

*Suggested questions for student discussion:*

- Ask students if they currently use any source of credit. Answers will vary but might include: gym membership, streaming service subscription, gaming subscription. If students share that they have a car loan, remind them that a loan is a legally binding contract, and you need to be at least 18 years old to sign a contract. Other options can include having a co-signer over the age of 18 such as a parent.

*Classroom response strategy:*

- Have students fill in the blanks on their guided notes for revolving, installment and service credit.
6. **Display slides 12-13.** Tell students that there are additional sources of credit such as peer-to-peer lending and high-cost credit.
- **Peer-to-peer lending** involves lending money through online services by matching borrowers with investors. The borrower never deals directly with the investor; rather a peer-to-peer provider handles all the transactions. Features of peer-to-peer lending include:
    - Online platform.
    - Fast application process.
    - Alternative source of credit.
  - Peer-to-peer lending often attracts borrowers who are credit constrained and lack collateral and the capacity to take on more debt.

SOURCE: [balyuk-paper.pdf \(fdic.gov\)](#)

- Tell students that interest rates for peer-to-peer lending compare favorably to credit card rates with a median rate of 17.1 percent. However, a significant portion of peer-to-peer borrowers pay rates well above 20 percent.

SOURCE: [balyuk-paper.pdf \(fdic.gov\)](#)

*Classroom response strategy:*

- Have students fill in the blanks on their guided notes.

7. **Display slides 14–15.** Review high-cost credit.

**Payday loan:**

- A type of short-term loan taken out against the borrower’s paycheck. In exchange for money, the borrower writes a post-dated check.
  - Small-dollar loan.
  - Typically, due by the next payday.
  - High interest rate and fee(s).

**Auto title loan:**

- A type of short-term loan that requires your car as collateral to borrow money. If you don’t pay the loan back, the lender can repossess (take) your car.
  - High interest rate and fee(s).
  - Small-dollar loan.
  - Requires using auto title as collateral for the loan.
  - Must be 18 years old to take out the loan.

8. **Display slide 16.** Tell students that it is up to each state to determine interest rate and fee rules and whether payday and auto title lenders can operate within each state.

*Suggested questions for student discussion:*

- Why would someone want to use a high-cost credit option like a payday loan or auto title loan? Answers will vary but might include: no or low credit score, unbanked, emergency situation or to meet basic needs.
- How does the interest rate compare to traditional loans? Answers will vary but might include: interest rates are higher than traditional loans.

*Classroom extension activities:*

- To extend students’ understanding of payday loans, print copies or direct students to the PDF available online, [Fast Cash and Payday Loans](#) (Page One Economics, Focus on Finance). This short overview of payday lending covers payment plan options, how to calculate the cost of

payday loans, and state and federal regulation. Have students read the short essay and answer questions provided.

- Play the following six-and-a-half-minute video, [Understanding Payday Loans](#), from the National Credit Union Association.

9. **Display slide 17.** Distribute Handout 2: The Cost of Credit.

- Group students into pairs or small groups.
- Give students time to read through each scenario and determine which they would choose and why in their handout.

10. **Display slides 18–28.** After students complete their handout, review the scenarios and the cost of each option with students.

**Student loan:**

- Tell students that calculations for payments and interest paid assumes the federal loans were subsidized and interest didn't accrue during college enrollment.
- Payments and interest would be higher if the loan examples included a combination of subsidized and unsubsidized loans.
- For additional details on federal loan amounts and how much a student can borrow, visit [Subsidized and Unsubsidized Loans | Federal Student Aid](#).
- To view current federal student loans interest rates, visit [Federal Interest Rates and Fees | Federal Student Aid](#).
- Tell students the difference between slide 20 and slide 21 is the length of the loan term.
- Ask students what happened to the payment from a 10-year to a 20-year loan term.  
SOURCE: [Payment Calculator for Mortgages, Car Loans and Other Term Loans – Dallasfed.org](#)

**Medical bill:**

- Tell students that medical providers often offer payment plans to patients who are unable to pay for services in full.
- Leaving medical bills unpaid for too long could impact their credit.  
SOURCE: [Credit Card Calculator](#).

**Car loan:**

- Tell students that interest rates are typically lower for shorter-term loans. In addition, interest rates are also typically lower for new versus used cars.
- Sales tax and fees can vary from state to state. Example fees can include: license, registration, title, inspection fees and/or inventory tax.
- Have students use the information on the slide and the formula to calculate the total cost of each car.

- Answers:
  - The total cost of purchasing the \$14,000 car is \$17,000.08.
  - The total cost of purchasing the \$20,000 car is \$26,343.66.

SOURCE: Auto Loan Calculator.

*Suggested questions for student discussion:*

- What are the advantages and disadvantages of your choice?
- Which option has the highest cost?
- What are the consequences of borrowing more than you need?
- After reviewing each scenario and the costs, ask students if they would change their choice and if so, why?

11. **Display slide 29.** Have students brainstorm answers to the question “What additional costs should you consider before purchasing a car?” Answers will vary but might include: yearly registration fees, toll charges, gas, oil changes and tires.

*Classroom response strategy:*

- Have students record their answers in their guided notes before sharing.

12. **Display slides 30–32.** Tell students that it is important to choose loans carefully, which includes understanding the following terms:

**Loan:**

- A sum of money lent with interest. It is a liability or debt and decreases your wealth.

**Principal:**

- The unpaid balance on a loan. Tell students that the principal on a loan decreases over the term of the loan.

**Interest:**

- A fee for the use of money over time.

**Interest rate:**

- The percentage charged for a loan. Interest rates can be fixed or variable.
  - Fixed rate means the interest rate on your loan does not change over the term of the loan.
  - Variable rate means the interest rate on your loan can change.

**Annual percentage rate (APR):**

- The annual rate that is charged for borrowing.
  - The APR represents the actual yearly cost of funds over the term of a loan.
  - The APR includes any fees or additional costs associated with the loan.

**Finance charge:**

- A fee charged for the use of credit. It may be a flat fee or a percentage of borrowings. It can include: transaction fees, account maintenance fees or late fees.

**Prepayment penalty:**

- A fee charged for paying back the loan before the end of its term.
- Lenders are not allowed to charge you a prepayment penalty if you pay your student loans off early.

*Suggested question for student discussion:*

- Why would a lender charge a repayment penalty? Answers will vary but might include: lenders make money from the interest they charge on loans. When you pay off the loan early, the lender doesn't earn as much interest.

13. **Display slides 33–35.** Review taking on debt tips.

14. **Display slide 36.** Review learning objectives with students.

15. **Distribute Assessment 1:** High-Cost Credit Essay.

- Play the eight-minute video, [The Surprising Logic Behind the Use of Check Cashers and Payday Loans](#), for students in class. Then review the instructions with students.
- Give students time to research their topic and complete their essay.

16. **Distribute Assessment 2:** Quiz.

17. **Additional Resource:**

- The Federal Reserve Bank of New York: [Household Debt and Credit Report](#).



## Lesson 9—Handout 1

# Guided Notes

### Vocabulary

**Credit**—The granting of money or something else of value in exchange for a promise of future repayment.

**Debt**—A liability and represents money owed.

**Revolving credit**—Access to a capped limit of funds that may be used repeatedly after partial or total repayments have been made.

**Installment credit**—Borrowing of funds with a fixed payment and schedule for a specified time.

**Service credit**—A type of credit with service providers and requires full payment for each period.

**Peer-to-peer lending**—Lending money through online services by matching borrowers with investors.

**Payday loan**—A type of short-term loan taken out against the borrower's paycheck. In exchange for money, the borrower writes a post-dated check.

**Auto title loan**—A type of short-term loan that requires your car as collateral to borrow money. If you don't pay the loan back, the lender can repossess (take) your car.

**Loan**—A sum of money lent with interest.

**Principal**—The unpaid balance on a loan.

**Interest**—A fee for the use of money over time.

**Interest rate**—The percentage charged for a loan.

**Annual percentage rate (APR)**—Annual rate that is charged for borrowing. The APR includes any fees or additional costs associated with the loan.

**Finance charge**—A fee charged for the use of credit. It may be a flat fee or a percentage of borrowings. It can include: transaction fees, account maintenance fees or late fees.

**Prepayment penalty**—A fee charged for paying back the loan before the end of its term.

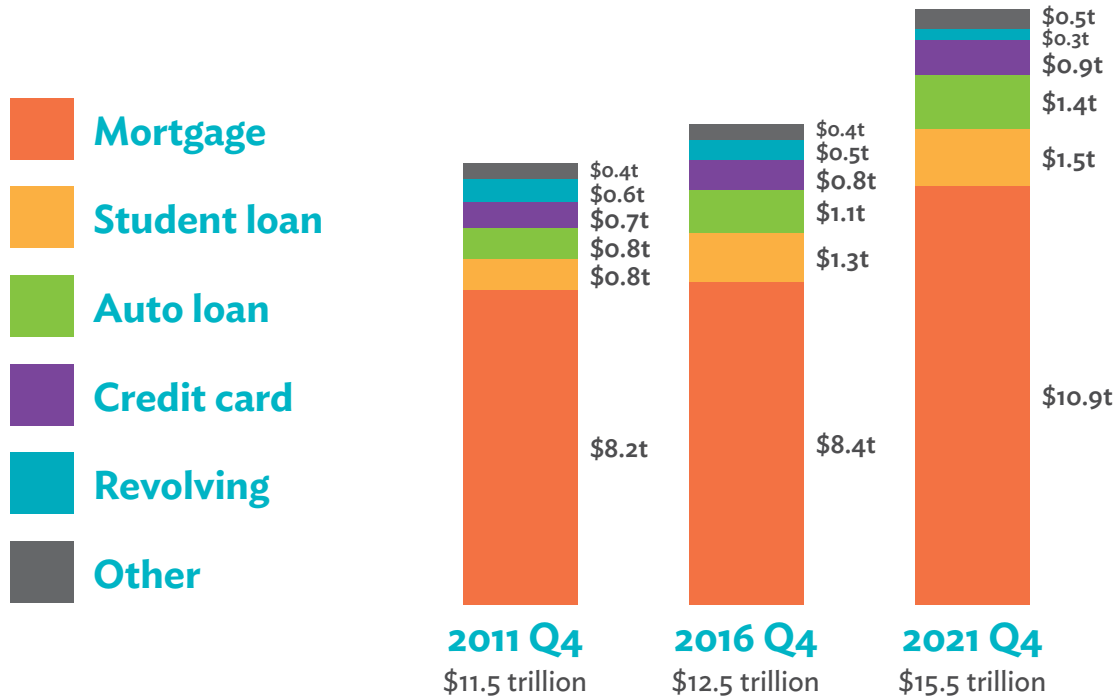




## Lesson 9—Handout 1

### Guided Notes (Cont.)

Household debt and its composition:



What is the first thing that stands out to you?

What else did you observe?

What new questions do you have?



## Lesson 9—Handout 1

### Guided Notes (Cont.)

#### Fill in the blank:

**Revolving credit** is when people can access a capped limit of funds that may be used repeatedly after partial or total repayments have been made.

- \_\_\_\_\_
- \_\_\_\_\_

**Installment credit** is when people borrow funds with a fixed payment and schedule for a specified time.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Service credit** includes types of credit with service providers and requires full payment for each period.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Peer-to-peer lending** involves lending money through online services by matching borrowers with investors. The borrower never deals directly with the investor; rather a peer-to-peer provider handles all the transactions. Features of peer-to-peer lending include:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**What additional costs should you consider before purchasing a car?**



## Lesson 9—Handout 2

# Cost of Credit

### **Shiloh,** 19, High School Senior

Shiloh just graduated high school and has been accepted to a state university 300 miles from home. The cost of tuition, room and board are covered by grants and scholarships, but the meal plan, which is \$3,000 per year, books and additional living expenses are not covered.

The financial aid offer Shiloh received gives the option of taking a federal student loan up to \$9,500 per year to help cover the additional costs.

**\$3,000 per year**

**\$5,000 per year**

**\$9,500 per year**

**Which would you choose? List the advantages and disadvantages of your choice.**



## Lesson 9—Handout 2

### Cost of Credit (Cont.)

#### **Reece,** 19, Guest Services Clerk

Reece is currently working part time as a guest services clerk at a local hotel. As a part-time employee, Reece doesn't qualify for health insurance. After an accident in the kitchen at home, Reece received stitches at a local urgent care. The final bill was \$800, and Reece couldn't afford to pay the bill with cash nor has any family or friends to borrow money from. The three options Reece is considering are below.

**Option 1: Pay the bill on a credit card and make fixed monthly payments for a year.**

**Option 2: Pay the bill on a credit card and make minimum monthly payments until the debt is paid off.**

**Option 3: Apply for a payment plan (loan) with the urgent care and make fixed monthly payments for 2 years.**

**Which would you choose? List the advantages and disadvantages of your choice.**



## Lesson 9—Handout 2

### Cost of Credit (Cont.)

#### **Avery,** 22, Social Media Strategist

Avery recently moved to Houston, Texas, for a new job and is currently using a ride-sharing app to commute to work. The cost of using the ride-sharing app is about \$600 per month. Avery is considering purchasing a car and has budgeted \$500 per month for the payment and insurance. Below are the estimated costs of each choice.

	4-year loan	6-year loan
Auto price:	\$14,000	\$20,000
Loan term:	48 months	72 months
Interest rate:	5.3%	6.7%
Down payment:	\$2,000	\$2,000
Monthly payment:	\$312.50	\$338.11

**Which would you choose? List the advantages and disadvantages of your choice.**



## Lesson 9—Assessment 1

# High-Cost Credit

### Instructions:

- After watching the PBS Newshour video, “[The Surprising Logic Behind the Use of Check Cashers and Payday Loans](#),” choose a position to support or not support the use high-cost credit services such as check cashing, payday loans and other high-cost credit services.
- Find at least three additional sources to support your position.
- Write a five-paragraph argumentative essay on your position using the research you found.

Choose your position: \_\_\_\_\_

**After your research is complete, use the space below to draft your essay.**

Introduction

Body (include supporting evidence from your research)

Name \_\_\_\_\_ Date \_\_\_\_\_



## Lesson 9—Assessment 1

# High-Cost Credit (Cont.)

Body (include supporting evidence from your research)

Body (include supporting evidence from your research)

Conclusion



## Lesson 9—Assessment 2

### Quiz

**Directions: Match the following terms to the correct definition:**

1. ____ Finance charge	A. Unpaid balance on a loan
2. ____ Revolving credit	B. The percentage charged for a loan
3. ____ Peer-to-peer lending	C. Borrowing of funds with a fixed payment and schedule for a specified time
4. ____ Principal	D. Lending money through online services by matching borrowers with investors
5. ____ Installment credit	E. A fee charged for the use of credit
6. ____ Interest rate	F. Access to a capped limit of funds that may be used repeatedly after partial or total repayments have been made

**Select the correct answer below.**

7. Increase/ Decrease What happens to the total finance charge as a loan term lengthens?
8. Increase/ Decrease What happens to the monthly payment as a loan term lengthens?
9. Increase/ Decrease What is the effect of a higher APR on a monthly payment?

**Write a short response to the following question:**

10. What is the difference between an auto title loan and a payday loan?





## Lesson 9—Handout 1

# Guided Notes Answer Key

### Fill in the blank:

**Revolving credit** is when people can access a capped limit of funds that may be used repeatedly after partial or total repayments have been made.

- **Home equity line of credit.**
- **Credit card.**

**Installment credit** is when people borrow funds with a fixed payment and schedule for a specified time.

- **Car loan.**
- **Student loan.**
- **Home loan.**

**Service credit** includes types of credit with service providers and requires full payment for each period.

- **Cellphone service bill.**
- **Gym membership bill.**
- **TV subscription bill.**

**Peer-to-peer lending** involves lending money through online services by matching borrowers with investors. The borrower never deals directly with the investor; rather a peer-to-peer provider handles all the transactions. Features of peer-to-peer lending include:

- **Online platform.**
- **Fast application process.**
- **Alternative source of credit.**



## Lesson 9—Assessment 2

# Quiz Answer Key

**Directions: Match the following terms to the correct definition:**

1. <u>  E  </u> Finance charge	A. Unpaid balance on a loan
2. <u>  C  </u> Revolving credit	B. The percentage charged for a loan
3. <u>  D  </u> Peer-to-peer lending	C. Borrowing of funds with a fixed payment and schedule for a specified time.
4. <u>  A  </u> Principal	D. Lending money through online services by matching borrowers with investors.
5. <u>  F  </u> Installment credit	E. A fee charged for the use of credit.
6. <u>  B  </u> Interest rate	F. Access to a capped limit of funds which may be used repeatedly after partial or total repayments have been made.

**Select the correct answer below.**

7. **Increase**/Decrease      What happens to the total finance charge as a loan term lengthens?
8. Increase/**Decrease**      What happens to the monthly payment as a loan term lengthens?
9. **Increase**/Decrease      What is the effect of a higher APR on a monthly payment?

**Write a short response to the following question:**

10. Explain the difference between an auto title loan and a payday loan?

**An auto title loan requires a car as collateral to borrow money, and a payday loan is a loan taken out against a future paycheck.**