# Building Wealth

## in the Classroom


**Federal Reserve Bank of Dallas**
**Economic Education**
**www.dallasfed.org**

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# Preface

*Building Wealth* is a personal finance education resource that can be used individually or in the classroom to help young people develop a plan for building personal wealth. It contains information about budgeting, saving and investing, controlling debt, and protecting wealth with insurance. *Building Wealth* has been used in a wide variety of settings, reaching a diverse audience of more than one million people.

Three *Building Wealth* resources are available from the Federal Reserve Bank of Dallas.

- The revised and expanded print edition of *Building Wealth* is available in English and Spanish.

- An interactive CD-ROM highlights important personal finance concepts with animated characters from the print edition. It also contains introductory remarks that feature Ben Bernanke, chairman of the Board of Governors of the Federal Reserve System, and Richard Fisher, president of the Federal Reserve Bank of Dallas.

- *Building Wealth in the Classroom* is a collection of lesson plans designed to accompany the other resources and facilitate their use in high school classes. The lessons use a variety of instructional techniques and include student activities, handouts and presentation visuals.

These materials are available online at dallasfed.org/educate/pubs/wealth.cfm.

Teachers can order the following materials at dallasfed.org/educate/pubs/wealth.cfm or by calling 1-800-333-4460, extension 25254:
- *Building Wealth* print edition in English or Spanish (available as a classroom set of 45 copies)
- *Building Wealth* interactive CD-ROM
- *Building Wealth in the Classroom* CD-ROM (available summer 2009)

Lesson 7 uses another Dallas Fed publication, *Everyday Economics: Entrepreneurs and the Economy*. It is available to order or download at dallasfed.org/educate/everyday/.

Visit dallasfed.org/educate/ to find the latest information about economic education at the Federal Reserve Bank of Dallas.

# Personal Finance Education in Texas

In 2005, the Texas Legislature passed two bills mandating personal financial literacy training in Texas high schools. One of those bills requires that all economics classes contain instruction in personal finance.

*Building Wealth* has been approved by the Texas State Board of Education (SBOE) for use in economics classes for the instruction in personal finance. These lesson plans were originally developed to assist teachers as they used *Building Wealth* in their classrooms to teach the following Required Areas of Instruction identified by the SBOE.

| | **Lessons** | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Required Areas of Instruction*** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
| 1. Understanding interest, avoiding and eliminating credit card debt | | | ✓ | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Understanding the rights and responsibilities of renting or buying a home | | | | | | | | | | | | | |
| 3. Managing money to make the transition from renting a home to homeownership | ✓ | ✓ | | | | | | | | | | ✓ | |
| 4. Starting a small business | | | | | | | ✓ | | | | | | |
| 5. Being a prudent investor in the stock market and using other investment options | | | | | ✓ | ✓ | | ✓ | | | | | |
| 6. Beginning a savings program and planning for retirement | ✓ | ✓ | | ✓ | | | | ✓ | | | | | |
| 7. Bankruptcy | | | | | | | | | | | | | |
| 8. Types of bank accounts available to consumers and the benefits of maintaining a bank account | | | | ✓ | | | | | | | | | |
| 9. Balancing a checkbook | | | | | | | | | | | | | |
| 10. Types of loans available to consumers and becoming a low-risk borrower | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Understanding insurance | | | | | | | | | | | | | |
| 12. Charitable giving | | | | | | | | | | | | | |

# Lesson 1
# Budget to Save: What Does It Mean to Be Wealthy?

## Lesson Description

In an introductory brainstorming activity, students are challenged to define wealth and recognize the personal nature of the definitions. A basic balance sheet is introduced to concretely measure financial wealth, and students create balance sheets for fictitious characters. Finally, students compare assets that grow in value with assets that depreciate over time and complete an activity based on the assets and liabilities of a hypothetical teenager.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)

*Planning and Money Management*
Standard 1: Develop a plan for spending and saving.
Standard 2: Develop a system for keeping and using financial records.
Standard 6: Develop a personal financial plan.

## Instructional Objectives

Students will:

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

## Time Required

One 50-minute class period

## Materials Required

- Class set of *Building Wealth* books
- Copies of classroom visuals
  - *Visual 1: The Typical Millionaire*
  - *Visual 2: Net Worth*
  - *Visual 3: The Value of Assets*
- Copy of the following classroom activity, cut into sections
  - *Activity 1: Balance Sheets of the Rich and Famous*
- Copies of the following handouts for each student
  - *Handout 1: Sandra's Balance Sheet*
  - *Handout 2: What Does It Mean to Be Wealthy?*

## Procedure

*Building Wealth – A Beginner's Guide to Securing Your Financial Future*, pages 1–3, and the **Wealth Creation** section of the *Building Wealth* CD-ROM contain information and visuals related to this lesson.

1. Display *Visual 1: The Typical Millionaire*. Ask students to decide if each statement is true or false and write their answer on a piece of paper. After students have answered all the questions, use the information below to discuss each statement and the misconceptions that many people have about wealth. [1]

    - Most millionaires inherited their wealth.
      **False—**About 80 percent of millionaires are first-generation affluent.
    - Most millionaires earn more than $500,000 per year.
      **False—**Less than 15 percent of millionaires have income over $500,000 per year.
    - College graduates earn about twice what high school graduates earn over a 40-year work life.
      **False—**In fact, according to 2007 Census Bureau statistics, the average college graduate earned 78 percent more than the average high school graduate. People with professional degrees earned 255 percent more than high school graduates.
    - People who are self-employed rarely become millionaires.
      **False—**More than half of the millionaires are self-employed.
    - All millionaires wear expensive clothes.
      **False—**Fifty percent of millionaires have never paid more than $400 for a suit; 90 percent of millionaires have never paid more than $1,000 for a suit.
    - Millionaires usually drive new cars.
      **False—**Less than 25 percent of millionaires drive a current-year car and more than half drive a car that is more than two years old.
    - Many millionaires drop out of college to start work.
      **False—**Four of five millionaires are college graduates. Eighteen percent have master's degrees, 8 percent law degrees, and 6 percent Ph.D's.
    - It is impossible to save enough to be a millionaire.
      **False—**For example, if a 22-year-old saves just $50 per week ($2,600 per year) during his or her entire working life and earns a 9 percent rate of return on the investments, the saver would have more than $1 million by age 63.

2. Write the phrase "Wealth is…" on the board. Have students work in groups of two or three to brainstorm ways to finish the sentence.

3. Ask student groups to share their responses with the class. Collect responses on the board. Affirm the variety of responses and emphasize that individuals define wealth in many different ways. (See *Building Wealth* book, p. 1.) Tell students that these lessons will examine a systematic approach to measuring and building wealth.

4. Ask students to read pages 1 – 3 in the *Building Wealth* book.

5. Display *Visual 2: Net Worth*. Use the following questions to introduce the concepts of assets and liabilities.
   - What are assets?
     *Anything an individual or business owns that has commercial or exchange value*
   - What are some examples of assets?
     *House, car, computer, furniture, savings accounts, stocks*
   - What are liabilities?
     *Money an individual or organization owes; same as debt*
   - What are some examples of liabilities?
     *Loans, balances on credit cards, mortgage, student loans*

6. Tell students that a person's net worth is the difference between the person's assets (what they own) and liabilities (what they owe). Net worth is an important way to measure wealth. Analyze the concept of net worth using the following questions:
   - What happens to a person's net worth as he or she acquires more assets?
     *Net worth increases.*
   - What happens to a person's net worth as he or she acquires more liabilities?
     *Net worth decreases.*
   - What would happen to net worth if a loan is used to purchase an asset, like a house?
     *Both assets and liabilities increase. The market value of the home is an asset, but the mortgage is a liability. Net worth increases if the market value increases and/or as the loan is paid off.*
   - Does a high income automatically make a person wealthy (increase their net worth)?
     *Not automatically. If the income is used to purchase assets, net worth will increase, but if the income is consumed, the balance sheet does not change.*

7. Divide students into eight small groups and give each group one of the scenarios from *Activity 1: Balance Sheets of the Rich and Famous*. Ask each group to create a fictional balance sheet that shows the net worth of the person described. Students should create additional items for the balance sheet beyond those described in the profile. Each balance sheet should include at least four assets and four liabilities. After they are finished, ask students to share some of their answers. Draw a balance sheet on the board and collect student responses as examples of assets and liabilities. Reinforce the following critical points:
   - How do assets and liabilities affect the balance sheet?
     *Assets add to net worth and wealth. Liabilities reduce net worth and wealth.*
   - Is income an asset?
     *Income is not an asset. Income allows a person to purchase assets.*

8. Display *Visual 3: The Value of Assets*. Explain the difference between wealth-creating assets and assets that can depreciate in value. Ask students the following questions:
   - What are some examples of wealth-creating assets?
     *Examples include stocks, bonds, real estate and savings accounts.*
   - How does ownership of a wealth-creating asset affect a person's balance sheet?
     *The total value of the asset side of the balance sheet increases as wealth-creating assets grow in value. If additional liabilities are not incurred, wealth increases.*
   - What are some items that depreciate?
     *Examples include cars, computers, gaming systems and televisions.*

- How does depreciation affect wealth (or net worth)?
  *As an asset loses value, total assets and wealth decrease.*
- Why is a house considered a wealth-creating asset, while a car is not?
  *Over time, a house that is maintained will usually retain its value or increase in value. While some collectable cars might increase in value, most cars lose resale value rapidly.*

9. Distribute a copy of *Handout 1: Sandra's Balance Sheet* to each student and ask them to complete the activity. Review the suggested answers after student work is collected.

[1]Procedure #1 is based on Lesson 1 in *Financial Fitness for Life: Bringing Home the Gold*, published by the National Council on Economic Education. The information for the quiz is drawn from *The Millionaire Next Door*, by Thomas J. Stanley and William D. Danko, Atlanta: Longstreet Press, 1996.

## Closure

10. Review the major concepts of this lesson using these questions:
    - What are assets and liabilities?
      *Assets can include anything an individual or business owns that has commercial or exchange value. Liabilities are made up of the money that an individual or organization owes. Liabilities are the same as debt.*
    - What is net worth?
      *It is the value of a person's assets less the amount of their liabilities. It is "what you own" less "what you owe."*
    - How are wealth-creating assets different from other assets? What are some examples?
      *Wealth-creating assets appreciate in value over time while other assets depreciate. A car is not a wealth-creating asset, but a savings bond is.*
    - How can a person use a personal balance sheet as he or she seeks to build wealth?
      *A balance sheet is the tool that one can use to measure wealth. As net worth on the balance sheet increases, wealth increases.*

## Assessment

11. Have students work independently to complete *Handout 2: What Does It Mean to Be Wealthy?*

## Dig Deeper

To reinforce the idea of depreciating assets, have students research the cost of new cars and the resale price of cars that are one, two and five years old. Pricing information is available online at websites such as www.kbb.com (Kelley Blue Book®) or at www.edmunds.com. Also, students could compare the cost of new and used video games at a retail store that sells used games, such as Gamestop®, or online at a website such as amazon.com.

## Visual 1: The Typical Millionaire

1. Most millionaires inherited their wealth.

2. Most millionaires earn more than $500,000 per year.

3. College graduates earn about twice what high school graduates earn over a 40-year work life.

4. People who are self-employed rarely become millionaires.

5. All millionaires wear expensive clothes.

6. Millionaires usually drive new cars.

7. Many millionaires drop out of college to start work.

8. It is impossible to save enough to be a millionaire.

**Visual 2: Net Worth**

# Assets – Liabilities = Net Worth

## Assets

Anything an individual or business owns that has commercial or exchange value

## Liabilities

Money an individual or organization owes; same as *debt*

## Net Worth

The difference between the total assets and total liabilities of an individual

## Visual 3: The Value of Assets

***Wealth-creating assets*** are possessions that generally increase in value over time or provide a return.

***Depreciation*** is the decrease in an asset's value over time. Items that wear out or have a falling price *depreciate.*

*Lesson 1 – Budget to Save: What Does It Mean to Be Wealthy?*

## Activity 1: Balance Sheets of the Rich and Famous

John is the president and CEO of the software company he founded three years ago. He owns 60% of the stock in the company. He loves helicopters and built a pad next to his house so he could land his new helicopter on the property. He has a mortgage on the house and a loan for the helicopter. Create a balance sheet that shows John's assets and liabilities.

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Gwen is an up-and-coming movie star. She just completed her first major role and received a multimillion-dollar paycheck. She invested a significant portion of her income from the movie in a stock portfolio. She is renting her house in California right now but plans to buy in the future. She still has some student loans from her days as a drama major in college. Create a balance sheet that shows Gwen's assets and liabilities.

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Sam was a highly paid professional athlete until he was injured at the end of last season. He had taken a loan to purchase a large house because of his high salary as long as he played. In addition, he used a credit card to furnish the house with expensive art and collectibles. He bought a sports car, but he owes more on the loan than the car is worth. Create a balance sheet that shows Sam's assets and liabilities.

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Steve is a local musician who has become popular around the state. A few years ago, he took a loan from a bank to purchase the amps, speakers and other audio equipment for his band. He has one year of payments left. He is still making payments on the truck that he bought to haul the equipment. He has been renting a house but is saving money for a down payment. Create a balance sheet that shows Steve's assets and liabilities.

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Judy has authored a series of very successful books and has recently moved to New York to be closer to her publisher. She used her book royalties to buy a condo but took out a home improvement loan to completely renovate the space. She is collecting fine art for her new home and has purchased several pieces. After her last book was delivered to the editor, she decided to treat herself to a luxury trip to Europe that she paid for with her credit card. Create a balance sheet that shows Judy's assets and liabilities.

*Lesson 1 – Budget to Save: What Does It Mean to Be Wealthy?*

# Activity 1: Balance Sheets of the Rich and Famous

## Page 2

Jason is a freelance sports photographer. His pictures are regularly featured in newspapers and magazines. He has purchased camera equipment over the years and has an extensive collection. While all his cameras are paid for, he recently financed a new graphics computer and printer that he can use for work. He purchased his house six years ago with a 30-year mortgage and just bought a new hybrid car with a five-year loan so that he can drive to more games. He has some credit card debt from his travels to games around the country. Create a balance sheet that shows Jason's assets and liabilities.

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Christine is the host of a popular television talk show that has just been syndicated across the country. She used her credit card to travel around the country to promote the show to television stations in the major markets, and she also charged a new wardrobe for the trip. She bought her house 10 years ago with a 15-year mortgage. Her car is paid for, but she recently took out a business loan to develop a new line of products that relate to her show. She is the sole owner of this new business. Create a balance sheet that shows Christine's assets and liabilities.

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Sarah just accomplished her life goal of climbing the highest mountain on each of the seven continents. She has reached the summit of Mount Everest twice. She has a keen eye for art and bought a 50% stake in a gallery that features works that she collected from her travels. Now she is embarking on a new career as a motivational speaker and has a full schedule for the next year. She has to pay off a loan from her last trip to Asia, but she has sold her house and has invested the money in a money market mutual fund until she is done with her travels. She took a 10-year loan to buy a small plane to fly to her speaking engagements, and she used her credit card to buy professional clothes for her new job. Create a balance sheet that shows Sarah's assets and liabilities.

Name: ________________________________________ Date: ___________________

*Lesson 1 – Budget to Save: What Does It Mean to Be Wealthy?*

# Handout 1: Sandra's Balance Sheet

Sandra is a high school senior. By paying off her car and starting a savings account, Sandra believes that she is well on the way to wealth creation. Use the balance sheet below to discover Sandra's net worth. Put the items below in the appropriate section of the chart and use the formula Assets – Liabilities = Net Worth to compute her wealth.

| Description | Amount |
|---|---|
| *Owed to her mother for extra cell phone charges* | *$250* |
| *Present value of a savings bond that her uncle gave her* | *$150* |
| *Balance on a car loan* | *$1,500* |
| *Savings account from summer job* | *$750* |
| *DVD collection* | *$200* |
| *1999 car* | *$3,500* |
| *Balance due on prom dress* | *$200* |

## Sandra's Balance Sheet

| Wealth-creating assets | Amount |
|---|---|
| | |
| | |
| | |
| | |
| **Other assets** | **Amount** |
| | |
| | |
| **Total assets** | |

| Liabilities | Amount |
|---|---|
| | |
| | |
| | |
| **Total liabilities** | |

| | |
|---|---|
| **Total assets** | |
| **Total liabilities** | |
| **Assets – Liabilities = Net Worth** | |

*Lesson 1 – Budget to Save: What Does It Mean to Be Wealthy?*

# Handout 1: Sandra's Balance Sheet
# Suggested Answers

| ***Sandra's Balance Sheet*** | |
|---|---|
| **Wealth-creating assets** | **Amount** |
| *Present value of a savings bond that her uncle gave her* | *$150* |
| *Savings account from summer job* | *$750* |
| | |
| | |
| **Other assets** | **Amount** |
| *DVD collection* | *$200* |
| *1999 car* | *$3,500* |
| **Total assets** | ***$4,600*** |

| **Liabilities** | **Amount** |
|---|---|
| *Owed to her mother for extra cell phone charges* | *$250* |
| *Balance on a car loan* | *$1,500* |
| *Balance due on prom dress* | *$200* |
| **Total liabilities** | ***$1,950*** |

| | |
|---|---|
| **Total assets** | ***$4,600*** |
| **Total liabilities** | ***$1,950*** |
| **Assets – Liabilities = Net Worth** | ***$2,650*** |

Name: ________________________________________ Date: __________________

*Lesson 1 – Budget to Save: What Does It Mean to Be Wealthy?*

# Handout 2: 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-creating Asset | f. Money an individual or an organization owes |

Is this a wealth-creating asset?
Circle Y for yes or N for no.

| | | |
|---|---|---|
| 7. | Y or N | 47" Flat Screen TV |
| 8. | Y or N | Fishing Boat |
| 9. | Y or N | A house |
| 10. | Y or N | A retirement plan |

What happens to net worth if you do the following action?
Circle I for increase and D for decrease.

| | | |
|---|---|---|
| 11. | I or D | Invest in a 401(k) plan (retirement) |
| 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 Treasury security |

*Lesson 1 – Budget to Save: What Does It Mean to Be Wealthy?*

## Handout 2: What Does It Mean to Be Wealthy? Suggested Answers

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

| | | |
|---|---|---|
| 7. | N | 47” flat screen TV |
| 8. | N | Fishing boat |
| 9. | Y | A house |
| 10. | Y | A retirement plan |

| | | |
|---|---|---|
| 11. | I | Begin saving for retirement |
| 12. | D | Buy a car and make a small down payment |
| 13. | D | Buy concert tickets with your credit card |
| 14. | D | Spend money on your fall wardrobe |
| 15. | I | Buy a Treasury security |

# Lesson 2
# Budget to Save: Developing a Budget

## Lesson Description

In the weeks prior to the start of the unit, students track their expenditures during a two-week period. In class, students create a group presentation about personal and financial goals. Individually, students identify four personal goals and describe the related financial goals. With financial goals in mind, students work in pairs to complete a budget analysis for a fictitious high school senior who needs to save money for prom. The lesson concludes with a personal budget development activity that uses the information on expenditures that was collected during the two-week data gathering period.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)

*Financial Responsibility and Decisionmaking*
Standard 4: Make financial decisions by systematically considering alternatives and consequences.
*Planning and Money Management*
Standard 1: Develop a plan for spending and saving.
Standard 6: Develop a personal financial plan.

## Instructional Objectives

Students will:

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

## Time Required

- Two weeks of data collection outside of class (time frame for data collection can be modified as appropriate)
- One to two 50-minute class periods

## Materials Required

- Class set of *Building Wealth* books
- Copies of classroom visuals
  - *Visual 1: Personal Goals*
  - *Visual 2: Financial Personality Types*
  - *Visual 3: Sam's New Budget*
- Copies of the following handouts for each student
  - *Handout 1: Tracking Your Expenses*
  - *Handout 2: Where Am I Going? A Goal-Setting Exercise*
  - *Handout 3: Sam's Budget*
  - *Handout 4: Budget Worksheet*
- Flip chart paper and markers for eight groups

## Procedure

Remember: Two weeks prior to the classroom portion of the lesson, distribute a copy of *Handout 1: Tracking Your Expenses*. Review the instructions with students. Teachers could consider an intermediate check for progress at the midpoint of the period.

*Building Wealth – A Beginner's Guide to Securing Your Financial Future*, pages 4–9, and the **Budget to Save** section of the *Building Wealth* CD-ROM contain information and visuals related to this lesson.

1. Introduce goal setting by asking students to brainstorm steps that would be required to achieve an academic goal, such as an A in economics for the semester. Record student responses on the board. Suggested answers might include:
    - Reading the textbook every night
    - Forming a study group
    - Attending tutorials
    - Reduce extracurricular commitments
    - Answering end-of-chapter questions in the textbook
    - Setting aside time to study before exams

    Tell students that, in order to achieve goals, a person has to devise a plan, and that those plans often have a financial or monetary component.

2. Display *Visual 1: Personal Goals*. Divide the class into eight small groups. Assign each group one of the personal goals listed on the visual and have students use flip chart paper and a marker to make a poster that contains the following information:
    - Brief description of the goal
    - Time frame for achieving the goal
    - Financial resources required to achieve the goal (For example, the purchase of a car could require savings for a down payment and sufficient income for monthly payments and gas.)

    Have each group present the information to the class. Some assumptions will be necessary. Presentations should focus on the relationship of personal goals and financial goals.

3. Distribute a copy of *Handout 2: Where Am I Going? A Goal-Setting Exercise* to each student. Review the instructions on the handout and answer questions. Ask students to complete the handout independently.

4. Have students share responses from the goal-setting exercise with the class. As students describe goals, reinforce the following ideas:
    - To achieve most personal goals, a person must develop a plan
    - The plan usually includes financial goals, such as saving money

    Alternative: Rather than using the handout, students could be asked to make a poster with four sections labeled with the four time frames from the handout. Each section would contain a picture or visual representation of a personal goal and a statement of the related financial goal.

5. Display *Visual 2: Financial Personality Types*. Have two different students read the information about Betty and Lynne. Ask students to think about these characters and the way they approach financial goals.
   - Does Lynne seem to have a goal or a plan? What is the result?
     *She does not seem to have a goal or a plan. She lives paycheck to paycheck and is getting into debt. She does not own many assets.*
   - What is Betty's goal?
     *She wants to pay for her son's college education.*
   - What steps is Betty taking to achieve her goal?
     *She is tracking her expenses, saving every month, starting a mutual fund.*
   - Ask students to think about their friends. Do they know "planners"? Do they know "impulsives" or "strugglers"? How would they characterize themselves?
     *Answers will vary.*

   Tell students that planners like Betty use a budget worksheet to plan their income and expenditures. An effective budget allows a person to save money to meet personal and financial goals.

   Note: These characters are animated in brief vignettes on the *Building Wealth* CD-ROM in the **Budget to Save** section. Refer to the descriptions of the financial personality types on page 5 in the *Building Wealth* book for additional information.

6. Ask students to read pages 4 – 9 in the *Building Wealth* book. Students should look for information related to the process of developing a budget to save.

7. Divide students into pairs and distribute the handout entitled *Handout 3: Sam's Budget*. Have students work together to complete the activity using the directions on the handout.

8. Ask students to share ideas of ways to reduce Sam's expenditures. *Visual 3: Sam's New Budget* provides some suggestions for budget modifications. In the discussion of Sam's budget, reinforce these basic economic concepts.
   - **Wants and needs—**Sam needs to eat lunch, but he wants to eat out with his friends.
   - **Marginal decisionmaking—**the incremental process of making choices using cost-benefit analysis. One author draws a helpful distinction between "how much" decisions and "either–or" decisions.[1] In Sam's case, his decision is not a choice of either not eating lunch or not eating out. His choice is "how much" he should eat at restaurants rather than bringing a lunch from home. If budgeting decisions are cast as all or nothing, the process is not likely to succeed. However, a marginal approach of "how much" can a person sacrifice is less threatening. This type of marginal analysis is the heart of economic decisionmaking.
   - **Marginal cost / marginal benefit analysis—**considering the additional costs incurred and the benefits gained from a particular choice. The marginal benefit of eating out or soda from a vending machine is lower than the marginal cost of sacrificing part of his savings goal. Also, the marginal benefit of achieving a financial goal (like the limousine) is higher than the marginal cost of the forgone consumption. In his budgeting process, Sam decided that the marginal satisfaction

(or utility) of his current expenditures was not as high as the marginal satisfaction (or utility) of his ability to achieve his financial goals.

9. Have students review their personal expense tracking sheet and name types of expenses from the two-week data collection periods. Write student responses on the board. Ask students to suggest spending categories, such as entertainment, meals and transportation, which could be used to group similar expenses. Students should use these categories and others as appropriate to categorize their own personal expenses in the fourth column of the expense tracking sheet.

[1] *Microeconomics*, by Paul Krugman and Robin Wells, New York: Worth Publishers, 2005, p. 165.

## Closure

10. Review the major concepts of the lesson using the following questions:
    - What is marginal decisionmaking?
      *It involves making "how much" decisions, not "either–or" decisions. It is an incremental process in which some costs are incurred or some current benefit is sacrificed to gain some other benefit. It is not all or nothing.*
    - What is the difference between needs and wants?
      *A need is something necessary for a person's survival. Often needs are centered on food, clothing, shelter, transportation, etc. A want is something that is desirable but not necessary.*
    - How is the budget sheet from this lesson related to the balance sheet from the previous lesson?
      *As a person begins to save, those savings can be saved or invested. The savings account or financial assets increase the total assets on the balance sheet, resulting in higher net worth.*
    - How do personal goals relate to financial goals?
      *Financial goals describe the resources needed to pay for personal goals. If someone sets the goal of buying a new car, the accompanying financial goal might be saving the amount of the down payment.*
    - How do financial goals create incentives for budgeting?
      *Goals clarify the benefit that can be realized in the future if sacrifices are made in the present.*

### Assessment

11. Distribute the *Handout 4: Budget Worksheet.* Ask students to develop a personal budget using the instructions on the handout. Challenge students to consider ways to revise their budget to reduce expenses and increase income to allow them to save. Remind students of the following points:
    - Financial goals for the future require delayed gratification. Current spending patterns must be changed to allow saving to meet future goals.
    - Distinguish between needs and wants.
    - Use marginal analysis. Don't concentrate on either–or decisions. Focus on how much.
    - Frame decisions on the marginal satisfaction (or utility) that will be gained.
    - Consider the marginal costs and marginal benefits of budgeting decisions.

    To evaluate student work on their personal budget, consider the following criteria:
    - Did the student describe reasonable goals that are appropriate for the time period indicated? Are the related financial goals relevant and thorough?
    - Did the student accurately track all expenditures? Was the record-keeping complete and thorough?
    - Did the student effectively categorize personal expenditures to develop a clear budget? Are the categories appropriate for the student's individual budget and useful for the process of revision for savings?
    - Did the student analyze personal spending in a realistic way to create a savings goal?

### Alternative Activity

The West Virginia Office of the State Treasurer has a downloadable lesson plan called "The Budget Game." The activity allows students to make choices about housing, insurance, recreation and other budget categories within the constraints of a household budget. It provides an excellent way to reinforce the ideas of want vs. needs and marginal decisionmaking that were introduced in the discussion of Sam's budget (see #10 above). It can be found at: http://www.wvsto.com/Financial+Education/Teachers+and+Youth.htm

**Visual 1: Personal Goals**

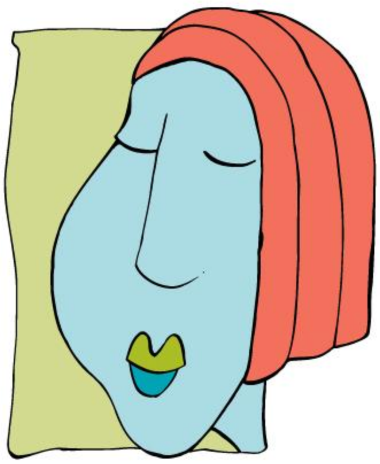
- Buy a new car
- Go to college
- Buy a used car
- Go to the senior prom
- Rent an apartment
- Take a trip
- Buy a house
- Buy a new HDTV

Each group should:

- Describe the assigned goal.
- Anticipate the time frame required to achieve the assigned goal.
- List the financial resources (savings and income) that will be required to achieve the assigned goal.

**Visual 2: Financial Personality Types**

# Financial Personality Types



Betty

Hi, I'm Betty. I'm a single parent. I have to budget in order to live on my income. I have a little notebook that I use to track where every dime goes. Saving is very important to me. When my son was born, I started investing every month in a mutual fund for his college education. I am proud to say that I control my future. I bought my own home and have provided for my son, and I've never bounced a check. You must have common sense regarding money!

Hi, I'm Lynne. I guess you could call me a struggler, or maybe an impulsive, or maybe a little of both. I've got a good job, make good money and enjoy a pretty comfortable life. But I will admit my bank statement tells a different story. I don't have any savings or investments, don't own any property and haven't really planned for retirement. Plus, I've got a lot of credit card debt and, now that I think about it, I'm basically living from paycheck to paycheck.

Lynne

*Lesson 2 – Budget to Save: Developing a Budget*

# Visual 3: Sam's New Budget

| Sources of Income | Current Income | Income Changes | New Income |
|---|---|---|---|
| Part-time job (20 hours per week at $6/hr) | $240 | | $240 |
| Lunch money from parents ($20 per week) | 40 | | 40 |
| *Total Income* | $280 | | $280 |

| Spending Categories | Current Expenses | Spending Changes | New Expenses |
|---|---|---|---|
| Eating out at lunch ($6 per day for 10 days) | 60 | Take lunch 3 days per week | 24 |
| Movie night with friends (once a week) | 40 | Every other week | 20 |
| Dinner with friends (twice in 2 weeks) | 20 | Eat out once | 10 |
| Football game and snacks | 10 | | 10 |
| Music purchases (CDs or downloads) | 20 | Reduce purchases | 10 |
| New clothing | 50 | Only one item | 25 |
| Gas | 70 | | 70 |
| Soft drink from vending machine ($1 each) | 10 | Only one | 1 |
| *Total Expenses* | $280 | | $170 |

| | Current Savings | | New Savings |
|---|---|---|---|
| *Available to Save (Income – Expenses)* | None | | $110 |

***Remember, this is one way for Sam to make choices that will allow him to save. It is not the only way!***

Name: ________________________________________ Date: ____________

*Lesson 2 – Budget to Save: Developing a Budget*

# Handout 1: Tracking Your Expenses

Use this chart to write down EVERYTHING you spend in the next two weeks. Whether it is a $75 item of clothing or a 75¢ candy bar, write it down. This is the first step of budgeting. Do not complete the category column until instructed to do so during class discussion.

| Date | Description | Amount | Category |
|---|---|---|---|
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Name: ______________________________ Date: ____________

*Lesson 2 – Budget to Save: Developing a Budget*

## Handout 2: Where Am I Going? A Goal-Setting Exercise

To build wealth, you must establish goals. Think about your life for the time periods listed below. Write down your age at that point in the future. Think about your life at that age. Will you be in school or will you have a job? Will you be single or married? Will you have children? Where will you live? How will you pay for the lifestyle that you picture?

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 buy a car in five years, how much will you need to save for the down payment? In preparing your goals:

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

### *In six months ...*

Personal goal ... ______________________________

Financial goal ... ______________________________

### *In one year ...*

I will be _______ years old.

Personal goal ... ______________________________

Financial goal ... ______________________________

### *In five years ...*

I will be _______ years old.

Personal goal ... ______________________________

Financial goal ... ______________________________

### *In ten years ...*

I will be _______ years old.

Personal goal ... ______________________________

Financial goal ... ______________________________

Name: ______________________________ Date: ____________

*Lesson 2 – Budget to Save: Developing a Budget*

# Handout 3: Sam's Budget

Sam is a high school senior. He has a job, and he gets some money from his parents. He would like to start saving money so that he can take a limousine to prom and have more spending money next year at college, but right now, he is spending all his income. The tables below show his income and expenses for two weeks. Sam does not have time to work any more hours, and his parents are not going to give him any more money.

Can you help Sam find ways to cut his expenses? He has decided that he needs to save at least $100 every two weeks to achieve his goals.

| Sources of Income | Current Income | Income Changes | New Income |
|---|---|---|---|
| Part-time job (20 hours per week at $6/hr) | $240 | | $240 |
| Lunch money from parents ($20 per week) | 40 | | 40 |
| *Total Income* | $280 | | $280 |

| Spending Categories | Current Expenses | Spending Changes | New Expenses |
|---|---|---|---|
| Eating out at lunch ($6 per day for 10 days) | 60 | | |
| Movie night with friends (once a week) | 40 | | |
| Dinner with friends (twice in 2 weeks) | 20 | | |
| Football game and snacks | 10 | | |
| Music purchases (CDs or downloads) | 20 | | |
| New clothing (two $25 items) | 50 | | |
| Gas | 70 | | |
| Soft drink from vending machine ($1 each) | 10 | | |
| *Total Expenses* | $280 | | |

| | Current Savings | | New Savings |
|---|---|---|---|
| *Available to Save (Income – Expenses)* | None | | |

Name: ___________________________________ Date: ___________________

*Lesson 2 – Budget to Save: Developing a Budget*

# Handout 4: Budget Worksheet

- Document the sources and amounts of income that allowed you to make purchases while tracking your expenditures.
- Use the record of your expenses and the categories you developed on *Handout 1: Tracking Your Expenses* sheet to complete the spending section of this worksheet. Remember to use general categories like "eating out" or "entertainment" to group expenses.
- Look for ways to increase income and 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? If you increase your savings, what could you do in the future?
- Remember, keep your budget realistic. Include everything. Make your plan one you can live with week after week.

| Sources of Income | Current Income | Income Changes | New Budget |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| ***Total Income*** | | | |

| Spending Categories | Current Expenses | Spending Changes | New Budget |
|---|---|---|---|
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| | | | |
| ***Total Expenses*** | | | |

| | Current Savings | | New Savings |
|---|---|---|---|
| ***Available to Save (Income – Expenses)*** | | | |

# Lesson 3
# Save and Invest: Interest

## Lesson Description
This lesson defines the concept of interest as the fee for the use of money over time. Students differentiate between simple and compound interest and use the Rule of 72 to estimate the length of time required for savings to double in value.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Saving and Investing*
Standard 3: Evaluate investment alternatives.

## Instructional Objectives
Students will:
- Define and describe interest.
- Compare the 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 50-minute class period

## Materials Required
- Copies of classroom visuals
  - *Visual 1: Simple and Compound Interest*
  - *Visual 2: Watch a Penny Grow in Value!*
  - *Visual 3: Rule of 72*
- Copies of the following handout for each student
  - *Handout 1: Interest*

## Procedure
1. Write the following definition of interest on the board.
   **Interest** is a fee for the use of money over time.

2. Introduce the concept of interest using the following questions:
   - What are some items that you might loan to a friend?
     *Answers will vary but might include school supplies, clothing, media, car, etc.*
   - What is the opportunity cost associated with loaning something to someone else?
     *The owner does not get to use the item for a period of time.*
   - What is a rental payment? How does it compensate the owner for the opportunity cost of loaning the item?
     *When someone rents an item, the original owner maintains a claim on the item, but the renter pays a fee to use the item for a period of time. During that time, the owner does not get to use the item. A wide range of assets, from DVDs to cars to houses and apartments, can be rented. The owner allows someone to use the asset in exchange for the rental payment.*
   - How is interest that is paid on savings similar to rent?

*Refer to the definition written on the board. A saver is paid when they allow someone to use their money for a period of time.*

- Who pays interest? Who receives interest?
  *Interest is paid by a borrower and received by a lender or a saver. Often this transaction occurs through an intermediary like a bank.*

3. Display *Visual 1: Simple and Compound Interest*. Discuss simple interest using the following questions and the simple interest table from the visual. Fill in the blank cells on the table with the information from the completed table below.
   - How does a saver know how much interest he or she will receive?
     *Interest is stated as a percentage rate. It is computed as a percentage of the saver's deposit and paid on a regular schedule.*
   - How is simple interest computed?
     *The interest payment is computed as a percentage of the original deposit amount.*
   - How much interest will a saver receive each year on a $100 deposit that earns 5% simple interest? Use the visual to illustrate. Complete the table with student responses.
     *The saver will receive $5 in interest each year.*
   - How much interest will the saver earn in 10 years with simple interest?
     *Over 10 years, the saver would earn $50 in interest.*

| **Simple Interest** | | | |
|---|---|---|---|
| **Year** | **Beginning Balance** | **Interest Paid** | **Year-End Balance** |
| **1** | **$100.00** | **$5.00** | **$105.00** |
| **2** | **$105.00** | **$5.00** | **$110.00** |
| **3** | **$110.00** | **$5.00** | **$115.00** |
| **4** | **$115.00** | **$5.00** | **$120.00** |
| **5** | **$120.00** | **$5.00** | **$125.00** |
| **6** | **$125.00** | **$5.00** | **$130.00** |
| **7** | **$130.00** | **$5.00** | **$135.00** |
| **8** | **$135.00** | **$5.00** | **$140.00** |
| **9** | **$140.00** | **$5.00** | **$145.00** |
| **10** | **$145.00** | **$5.00** | **$150.00** |

4. Display *Visual 1: Simple and Compound Interest*. Introduce the idea of compound interest using the following questions and the compound interest table from the visual. Fill in the blank cells on the table with the information from the completed table below.
   - What would happen if each interest payment was deposited in the account and future interest payments were calculated on the new total?
     *Interest payments would grow larger.*
   - How could annual compounding change the simple interest example above?
     *Since compound interest allows interest to be paid on the original deposit amount as well as on accumulated interest from previous periods, the interest payments grow in each period.*
   - How much will the saver receive if the interest is compounded? Use the visual to illustrate. Complete the table with student responses. Emphasize that in each year,

the interest payment is computed on the sum of the principal (the original $100) and the interest received up to that point.

| Compound Interest | | | |
|---|---|---|---|
| **Year** | **Beginning Balance** | **Interest Paid** | **Year-End Balance** |
| 1 | $100.00 | $5.00 | $105.00 |
| 2 | $105.00 | $5.25 | $110.25 |
| 3 | $110.25 | $5.51 | $115.76 |
| 4 | $115.76 | $5.79 | $121.55 |
| 5 | $121.55 | $6.08 | $127.63 |
| 6 | $127.63 | $6.38 | $134.01 |
| 7 | $134.01 | $6.70 | $140.71 |
| 8 | $140.71 | $7.04 | $147.75 |
| 9 | $147.75 | $7.39 | $155.14 |
| 10 | $155.14 | $7.76 | $162.90 |

5. Ask students to consider the following offer:

   Would you rather receive $100,000 today or 1 cent with the promise that if you hold all of the money that you are given, the amount will be doubled each day for a month (30 days)?

   Discuss the options with the class. Although the $100,000 seems generous, the penny that is doubled each day represents a promise of more than $5.3 million. Display *Visual 2: Watch a Penny Grow in Value!* Tell students that this is an extreme example of the power of allowing money to grow at a compounded rate. While savings will not double in value daily, the Rule of 72 is a tool to estimate how long it will take for the doubling to occur.

6. Display *Visual 3: Rule of 72*. Describe the Rule of 72. This shortcut allows a saver to use the annual rate of return (whether it is an interest rate or a rate of growth in value) to estimate the length of time required for savings to double in value. The answers from the visual are:
   - At 4%, the savings will double in approximately 18 years. (72 ÷ 4 = 18)
   - At 6%, the savings will double in approximately 12 years. (72 ÷ 6 = 12)
   - At 9%, the savings will double in approximately 8 years. (72 ÷ 9 = 8)
   - At 12%, the savings will double in approximately 6 years. (72 ÷ 12 = 6)

## Closure

7. Review the concepts of this lesson using the following questions:
    - Why do savers demand interest?
      *Savers want to be compensated for forgone consumption.*
    - Why does a saver earn more with compound interest than with simple interest?
      *Interest is paid on accumulated interest, not just on the original deposit.*
    - How can a saver use the Rule of 72?
      *A saver can estimate the time required for savings to double in value at a given interest rate.*

8. Preview Lesson 4, *Put It in the Bank*. Banks and other financial institutions are sometimes called financial intermediaries. These institutions bring together savers who are willing to loan money and borrowers who are willing to pay interest for a loan.

## Assessment

9. Distribute the *Handout 1: Interest* to each student. Allow students to answer the questions in class or assign as homework.

*Lesson 3 – Save and Invest: Interest*

**Visual 1: Simple and Compound Interest**

## If a saver deposits $100 in an account that earns 5% interest, how will the balance grow over 10 years?

| Year | Beginning Balance | Simple Interest Paid | Year-End Balance |
|---|---|---|---|
| 1 | $100.00 | $5.00 | $105.00 |
| 2 | $105.00 | $5.00 | |
| 3 | $110.00 | $5.00 | |
| 4 | | $5.00 | |
| 5 | | $5.00 | |
| 6 | | $5.00 | |
| 7 | | $5.00 | |
| 8 | | $5.00 | |
| 9 | | $5.00 | |
| 10 | | $5.00 | $150.00 |

| Year | Beginning Balance | Compound Interest Paid | Year-End Balance |
|---|---|---|---|
| 1 | $100.00 | $5.00 | $105.00 |
| 2 | $105.00 | $5.25 | |
| 3 | $110.25 | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | $162.90 |

## Why is compound interest better for the saver?

*Lesson 3 – Save and Invest: Interest*

## Visual 2: *Watch a Penny Grow in Value!*

| Day | Amount | Day | Amount |
|---|---|---|---|
| 1 | $0.01 | 16 | $327.68 |
| 2 | $0.02 | 17 | $655.36 |
| 3 | $0.04 | 18 | $1,310.72 |
| 4 | $0.08 | 19 | $2,621.44 |
| 5 | $0.16 | 20 | $5,242.88 |
| 6 | $0.32 | 21 | $10,485.76 |
| 7 | $0.64 | 22 | $20,971.52 |
| 8 | $1.28 | 23 | $41,943.04 |
| 9 | $2.56 | 24 | $83,886.08 |
| 10 | $5.12 | 25 | $167,772.16 |
| 11 | $10.24 | 26 | $335,544.32 |
| 12 | $20.48 | 27 | $671,088.64 |
| 13 | $40.96 | 28 | $1,342,177.28 |
| 14 | $81.92 | 29 | $2,684,354.56 |
| 15 | $163.84 | 30 | $5,368,709.12 |

**Visual 3: Rule of 72**

## The Rule of 72 is a shortcut that can be used to find out how many years it will take an investment to double in value using compound interest.

$$\text{Number of years to double} = \frac{72}{\text{Annual Rate of Return}}$$

If you invest $50,000, how many years will it take for it to grow to $100,000?

– At 4% annual interest
– At 6% annual interest
– At 9% annual interest
– At 12% annual interest

Name: ______________________________ Date: ___________________

*Lesson 3 – Save and Invest: Interest*

# Handout 1: Interest

## Simple and Compound Interest

**If you save $100 in an account that pays 10% simple interest, how will your original investment grow over 10 years? Round all values to a whole dollar amount.**

| Year | Beginning Balance | Interest Paid | Ending Balance |
|---|---|---|---|
| 1 | $100 | $10 | $110 |
| 2 | $110 | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

**If you save $100 in an account that pays 10% interest and is compounded annually, how will your original investment grow over 10 years? Round all values to a whole dollar amount.**

| Year | Beginning Balance | Interest Paid | Ending Balance |
|---|---|---|---|
| 1 | $100 | $10 | $110 |
| 2 | $110 | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

# Handout 1: Interest

## Page 2

In the space provided, answer the following questions.

1. Define "interest" in your own words.

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

Use the Rule of 72 to answer the following questions.

3. If you save $500 in an account that pays 3% annual interest, how many years will it take for your savings to double in value?

   ________________

4. For your 10th birthday, your aunt gave you $4,000. You decide that you would like to save the money to buy a car when you turn 18, but by then you think you will need $8,000. What interest rate is required to allow you to reach your goal?

   ________________

*Lesson 3 – Save and Invest: Interest*

# Handout 1: Interest
# Suggested Answers

## Simple and Compound Interest

**If you save $100 in an account that pays 10 percent simple interest, how will your original investment grow over 10 years? Round all values to a whole dollar amount.**

| Year | Beginning Balance | Interest Paid | Ending Balance |
|---|---|---|---|
| 1 | $100 | $10 | $110 |
| 2 | $110 | $10 | $120 |
| 3 | $120 | $10 | $130 |
| 4 | $130 | $10 | $140 |
| 5 | $140 | $10 | $150 |
| 6 | $150 | $10 | $160 |
| 7 | $160 | $10 | $170 |
| 8 | $170 | $10 | $180 |
| 9 | $180 | $10 | $190 |
| 10 | $190 | $10 | $200 |

**If you save $100 in an account that pays 10 percent interest compounded annually, how will your original investment grow over 10 years? Round all values to a whole dollar amount.**

| Year | Beginning Balance | Interest Paid | Ending Balance |
|---|---|---|---|
| 1 | $100 | $10 | $110 |
| 2 | $110 | $11 | $121 |
| 3 | $121 | $12 | $133 |
| 4 | $133 | $13 | $146 |
| 5 | $146 | $15 | $161 |
| 6 | $161 | $16 | $177 |
| 7 | $177 | $18 | $195 |
| 8 | $195 | $19 | $214 |
| 9 | $214 | $21 | $235 |
| 10 | $235 | $24 | $260 |

*Lesson 3 – Save and Invest: Interest*

# Handout 1: Interest
# Suggested Answers
# Page 2

In the space provided, answer the following questions.

1. Define "interest" in your own words.

   *Student answers will vary, but should include some of the following ideas:*
   - *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.*

2. 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 <u>and</u> all accrued interest.*

Use the Rule of 72 to answer the following questions.

3. If you save $500 in an account that pays 3% annual interest, how many years will it take for your savings to double in value?

   <u>It will take 24 years.</u>

4. For your 10th birthday, your aunt gave you $4,000. You decide that you would like to save the money to buy a car when you turn 18, but by then you think you will need $8,000. What interest rate is required to allow you to reach your goal?

   <u>9% annual interest</u>

# Lesson 4
# Save and Invest: Put It in the Bank

### Lesson Description
Students read a passage on "Banking Basics" and assess the role of banks as financial intermediaries that bring together savers and borrowers. After learning about different account types, students research information about various products from a bank and design a poster that shows the benefits and drawbacks of various accounts.

### National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Saving and Investing*
Standard 1: Discuss how saving contributes to financial well-being.

### Instructional Objectives
Students will:
- Describe the benefits of using a bank.
- Evaluate the role of banks as financial intermediaries between savers and borrowers.
- Compare various accounts offered by commercial banks.

### Time Required
One 50-minute class period

### Materials Required
- Copies of the classroom visuals
  - *Visual 1: Banking Basics – Reading Anticipation Guide*
  - *Visual 2: Fast Facts about the FDIC*
- Copies of the following handouts for each student
  - *Handout 1: Banking Basics*
  - *Handout 2: Thinking about Banks*
  - *Handout 3: Comparing Accounts*

### Procedure
1. Introduce the lesson using the following questions:
   - Why should savers not keep their money in a piggy bank or a mattress?
     *Answers will vary, but might include a lack of safety and missed opportunities to earn interest*
   - Besides keeping money at home, where can savers keep money?
     *Savers can deposit their money in a bank.*
   - What are the benefits of using a bank?
     *Student answers might include:*
     - *Keeping money safe from loss or theft*
     - *Making payments easily and inexpensively*
     - *Maintaining records of financial transactions*
     - *Depositing paychecks directly*
     - *Building savings and earning interest*
     - *Establishing credit*

2. Display *Visual 1: Banking Basics – Reading Anticipation Guide*. Read each statement individually to the class and ask them if they know any facts to support each statement. Briefly discuss each statement with the class in light of the students' prior knowledge.

3. Distribute *Handout 1: Banking Basics* to each student. Have each student read the selection independently. Have students engage in a think-pair-share activity in which they:
   - *Think* about the reading and the statements on the anticipatory guide. What new information has the reader learned about each of the statements? As they read, have students write the number of the anticipatory statement in the margin next to the text that supports or describes the statement.
   - *Pair* with another reader. Discuss each of the six anticipatory statements with the partner. Each of students should note information from the reading that supports each statement.
   - *Share* the supporting statements and information from the reading with the entire class. Ask students to describe the supporting evidence for each statement found in the reading.

4. Display *Visual 2: Fast Facts about the FDIC*. Review the facts about Federal Deposit Insurance with students. Emphasize that deposits are automatically covered, up to the legal limit, at any insured bank.

## Closure

5. Review the major concepts of the lesson using the following questions:
   - How did early lending lead to the creation of banks?
     *Institutions developed that efficiently brought together savers and borrowers.*
   - How do banks serve as intermediaries between savers and borrowers?
     *By pooling savers' money and loaning it to borrowers who are judged to be good credit risks, banks create income for savers in the form of interest and provide a source for borrowers to access funds.*
   - What are the major benefits of placing savings in a bank?
     *Bank accounts are good for short-term financial needs and goals. They provide* safety *and liquidity while offering interest payments.*
   - What are some potential drawbacks of placing savings in a bank?
     *Some accounts limit access (at least for a period of time) and the interest rate may be lower than the return possible on other investments.*

## Assessment

6. Distribute the student activity entitled *Handout 2: Thinking about Banks*. Allow students to answer the questions in class or assign the activity as homework.

7. Remind students of the last statement from *Visual 1: Banking Basics – Reading Anticipation Guide*:

   **Different types of bank accounts have advantages and disadvantages for depositors.**

   Tell students that in order to compare types of bank accounts, a saver must conduct research. Distribute *Handout 3: Comparing Accounts*. Have students complete the research and create the poster that is described on the activity outside of class.

   Evaluate student work by considering the completeness and accuracy of information in the table and the poster, as well as the design and clarity of the presentation of information in the visual.

## Visual 1: Banking Basics – Reading Anticipation Guide

1. Banks are businesses that sell products and try to make a profit.

2. Banks bring together savers and borrowers.

3. The financing of merchant voyages in the ancient world provided the basis for the modern banking industry.

4. All borrowers pay interest for loans, but risky borrowers pay more.

5. Depositing money in a bank is one of several options for savers.

6. Banks provide safety and potential earnings to depositors.

7. Different types of bank accounts have advantages and disadvantages for depositors.

*Lesson 4 – Save and Invest: Put It in the Bank*

## Visual 2: Fast Facts about the FDIC

- The *Federal Deposit Insurance Corporation* (FDIC) is an independent agency of the U.S. government and is backed by the full faith and credit of the federal government.
- FDIC protects against the loss of insured deposits if an FDIC-insured bank or savings association fails. No depositor has ever lost a single penny of FDIC-insured funds.
- FDIC insurance covers funds in deposit accounts, including checking and savings accounts, money market deposit accounts and certificates of deposit (CDs).
- FDIC insurance does not cover other financial products and services that insured banks may offer, such as stocks, bonds, mutual fund shares, life insurance policies, annuities or municipal securities.

| Basic FDIC Deposit Insurance Coverage Limits* | |
|---|---|
| Single Accounts (owned by one person) | $250,000 per owner |
| Joint Accounts (two or more persons) | $250,000 per co-owner |
| IRAs and certain other retirement accounts | $250,000 per owner |
| Trust Accounts | $250,000 per owner per beneficiary subject to specific limitations and requirements |
| Corporation, Partnership and Unincorporated Association Accounts | $250,000 per corporation, partnership or unincorporated association |
| Employee Benefit Plan Accounts | $250,000 for the non-contingent, ascertainable interest of each participant |
| Government Accounts | $250,000 per official custodian |
| Non-interest-Bearing Transaction Accounts | Unlimited coverage—only at participating FDIC-insured banks and savings associations ** |

* On January 1, 2010, the standard coverage limit will return to $100,000 for all deposit categories except IRAs and certain retirement accounts, which will continue to be insured up to $250,000 per owner.
** Unlimited deposit insurance coverage is available through December 31, 2009, for non-interest-bearing transaction accounts at institutions participating in FDIC's Temporary Liquidity Guarantee Program.

Source: http://www.fdic.gov/news/news/financial/2008/fil08102a.html

*Lesson 4 – Save and Invest: Put It in the Bank*

# Handout 1: Banking Basics

Some young savers stash their cash in shoe boxes or jelly jars. Others use "piggy banks," which today look more like spaceships or cartoon characters. In any case, the same problem arises. Sooner or later, the piggy bank or jelly jar fills up, and you have to make a decision: Should I spend the money or continue to save? And if I continue to save, should I open a bank account or just find a bigger jar?

Maybe you've had to face such a decision yourself. If you decide to keep your money at home, it will just sit there and won't earn any extra money for you. You also run the risk that a burglar, a fire, or some other disaster will wipe out your savings in the wink of an eye. Then again, if you open a bank account, you can't "visit" your money as easily as you can when it sits in your dresser drawer. You can't just walk into a bank in the middle of the night to count your cash. You can't run the coins through your fingers or toss the bills in the air and let them rain down on your head. Opening a bank account is a big step because you are putting your money in someone else's hands. You're counting on someone else to handle your money responsibly. Before you do that, it might be a good idea to understand how banks operate.

**What is a bank?**
A bank is a business. But unlike some businesses, banks don't manufacture products or extract natural resources from the earth. Banks sell financial services such as car loans, home mortgage loans, business loans, checking accounts, credit card services, certificates of deposit, and individual retirement accounts.

Some people go to banks in search of a safe place to keep their money. Others are seeking to borrow money to buy a house or a car, start a business, expand a farm, pay for college, or do other things that require borrowing money.

Where do banks get the money to lend? They get it from people who open accounts. Banks act as go-betweens for people who save and people who want to borrow. If savers didn't put their money in banks, the banks would have little or no money to lend. Your savings are combined with the savings of others to form a big pool of money, and the bank uses that money to make loans. The money doesn't belong to the bank's president, board of directors, or stockholders. It belongs to you and the other depositors. That's why bankers have a special obligation not to take big risks when they make loans.

**How did banking begin?**
Imagine for a moment that you are a merchant in ancient Greece or Phoenicia. You make your living by sailing to distant ports with boatloads of olive oil and spices. If all goes well, you will be paid for your cargo when you reach your destination, but before you set sail you need money to outfit your ship. And you find it by seeking out people who have extra money sitting idle. They agree to put up the money for your voyage in exchange for a share of your profits when you return . . . if you return.

The people with the extra money are among the world's first lenders, and you are among the world's first borrowers. You complain that they're demanding too large a share of the profits. They reply that your voyage is perilous, and they run a risk of losing their entire investment. Lenders and borrowers have carried on this debate ever since. Today, people usually borrow from banks rather than wealthy individuals. But one thing hasn't changed: Lenders don't let you have their money for nothing. Lenders have no guarantee that they will get their money back. So why do they take the risk? Because lending presents an opportunity to make even more money.

For example, if a bank lends $50,000 to a borrower, it is not satisfied just to get its $50,000 back. To make a profit, the bank charges interest on the loan. Interest is the price borrowers pay for using someone else's money. If a loan seems risky, the lender will charge more interest to offset the risk. (If you take a bigger chance, you want a bigger payoff.)

# Handout 1: Banking Basics

## Page 2

But the opportunity to earn lots of interest won't count for much if a borrower fails to repay a loan. That's why banks often refuse to make loans that seem too risky. Before lending you money, they look at:

- how much and what types of credit you use, such as credit cards, auto loans, or other consumer loans;
- whether or not you have a history of repaying your loans, and
- how promptly you pay your bills.

Banks also use interest to attract savers. After all, if you have extra money, you don't have to put it in the bank. You have lots of other choices:

- You can bury it in the backyard or stuff it in a mattress. But if you do that, the money will just sit there. It won't increase in value, and it won't earn interest.
- You can buy land or invest in real estate. But if the real estate market weakens, buildings and land can take a long time to sell. And there's always the risk that real estate will drop in value.
- You can invest in the stock market. But like real estate, stocks can also drop in value, and the share price might be low when you need to sell.
- You can buy gold or invest in collectibles such as baseball cards, but gold and collectibles fluctuate in value. Who knows what the value will be when it's time to sell? (In 1980, gold sold for $800 an ounce. By 1983, the price had sunk below $400.)

Or you can put the money in a bank, where it will be safe and earn interest. Many types of bank accounts also offer quick access to your money.

**What types of accounts do banks offer?**
People use banks for different purposes. Some have extra money to save; others need to borrow. Some need to manage their household finances; others need to manage a business. Banks help their customers meet those needs by offering a variety of accounts.

**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.

**Certificates of deposit (CDs)** are savings deposits that require you to keep a certain amount of money in the bank for a fixed period of time (example: $1,000 for two years). As a rule, you earn a higher rate of interest if you agree to keep your money on deposit longer, and there is usually a penalty if you withdraw your money early.

**Checking accounts** offer safety and convenience. You keep your money in the account and write a check when you want to pay a bill or transfer some of your money to someone else. If your checkbook is lost or stolen, all you need to do is close your account and open a new one so that nobody can use your old checks. (When cash is lost or stolen, you rarely see it again.) Another attractive feature of a checking account is that your bank sends you a monthly record of the checks you have written, and you can use that record if you ever need to prove that you've made a payment. Banks sometimes charge a fee for checking accounts, because check processing is 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. But these accounts are limited to non-business customers. Banking laws almost always require businesses to use regular checking accounts that do not pay interest.

**Money market deposit accounts** are similar to 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.

Name: ________________________________________ Date: __________________

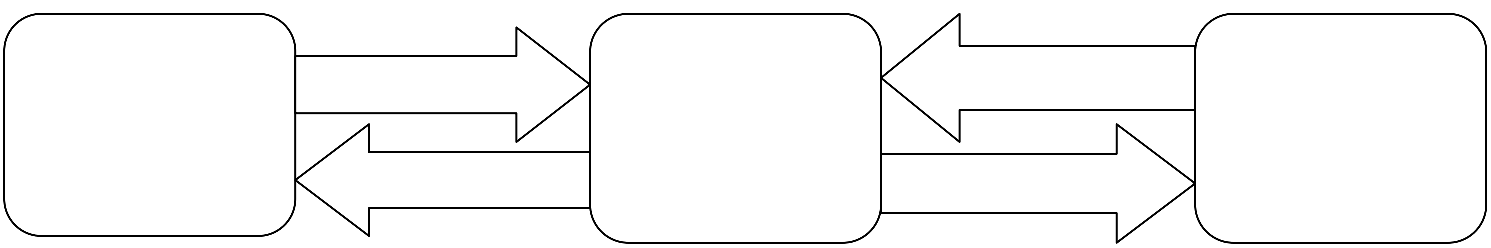
*Lesson 4 – Save and Invest: Put It in the Bank*

# Handout 2: Thinking about Banks

1. Use information from *Handout 1: Banking Basics* to complete the table below.

| How do banks and other financial institutions serve savers? | How do banks and other financial institutions serve borrowers? |
|---|---|
| | |

2. Use the terms below to complete this flowchart, labeling all boxes and arrows.



Banks and other financial institutions
Borrowers
Deposits
Interest payments (use twice)
Loans
Savers

3. How does the riskiness of a loan affect the interest charges that the borrower must pay? Explain your answer.

4. What factors should a saver consider when choosing an account at a bank?

*Lesson 4 – Save and Invest: Put It in the Bank*

# Handout 2: Thinking about Banks
## Suggested Answers

1. Complete the table below.

| How do banks and other financial institutions serve savers? | How do banks and other financial institutions serve borrowers? |
|---|---|
| *Answers will vary but should include:*<br>• *Provide safety for deposits*<br>• *Allow access to funds*<br>• *Pay interest on deposits* | *Answers will vary but should include:*<br>• *Allow borrowers access to loan funds without having to borrow from individuals*<br>• *Pool savings from many individual savers to allow larger loans* |

2. Use the terms below to complete this flowchart, labeling all boxes and arrows.


Banks and other financial institutions
Borrowers
Deposits
Interest payments (use twice)
Loans
Savers

3. How does the riskiness of a loan affect the interest charges that the borrower must pay? Explain your answer.

   *As the riskiness of a loan increases, the saver demands a higher rate of return to compensate for the possibility of a loss due to default.*

4. What factors should a saver consider when choosing an account at a bank?

   *Savers should consider the deposit insurance, the interest rate promised and the limitations on withdrawal. Usually, accounts that offer higher interest rates have more restrictions on withdrawals, while accounts that have fewer restrictions on access to the deposits offer a lower rate of return.*

Name: ___________________________________________ Date: ___________________

*Lesson 4 – Save and Invest: Put It in the Bank*

## Handout 3: Comparing Accounts

Choose a bank or other financial institution that has an office close to your home or school. Visit the office or the website to find information about the five accounts listed on the table below. Complete the table and record the name of the institution and the source of your information.

| | Checking | Saving | CD (3-month) | CD (36-month or longer) | Money Market Deposit Account |
|---|---|---|---|---|---|
| Interest rate | | | | | |
| Minimum deposit | | | | | |
| Account fees | | | | | |
| Transaction limits | | | | | |
| Deposit insurance limits | | | | | |
| Penalties for withdrawal | | | | | |

Name of institution: ________________________________

Source of information: ________________________________

Using the information from your research, make a poster that shows the benefits and the drawbacks of each account.

# Lesson 5
# Save and Invest: Stocks

## Lesson Description

This lesson introduces students to basic concepts about the stock market. In a bingo game, students become aware of the wide variety of companies that are publicly traded and are included in the Dow Jones Industrial Average. After reading a short selection from *Building Wealth*, students familiarize themselves with terms related to the stock market by completing a crossword puzzle. Components of a typical stock market table are discussed, and students work in pairs to analyze data from a fictitious stock market table. Outside of class, students research companies from the Dow Jones Industrials to create "Investor Information Sheets" that organize and analyze information about the companies.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)

*Saving and Investing*
Standard 3: Evaluate investment alternatives.

## Instructional Objectives

Students will:

- Define capital gains and losses in terms of changing stock prices.
- Compute the return on investment for a stock that pays a dividend.
- Describe factors that affect the market value of a company's stock.
- Use varied information sources to assess the performance of an individual stock or group of stocks.

## Time Required

One 50-minute class period

## Materials Required

- Class set of *Building Wealth* books
- Copies of classroom visuals
    - o *Visual 1: Companies of the Dow Jones Industrial Average*
    - o *Visual 2: Understanding a Stock Table*
    - o *Visual 3: Stock Market Terms*
- Copy of the following classroom activity, to be used by teacher
    - o *Activity 1: Bingo Call Outs*
- Copies of the following handouts for each student:
    - o *Handout 1: Dow Jones Bingo Card*
    - o *Handout 2: Stock Market Terms Crossword Puzzle*
    - o *Handout 3: Reading a Stock Table*
    - o *Handout 4: Stock Market Research*

## Procedure

1. Display *Visual 1: Companies of the Dow Jones Industrial Average*. Tell students that these 30 companies are part of the Dow Jones Industrial Average (DJIA). These companies are a small, but very important, sample of the hundreds of companies that have sold

ownership shares to the public. The various markets for these shares are together called the stock market. To familiarize students with the companies that make up the DJIA, play Dow Jones Bingo.

- Distribute *Handout 1: Dow Jones Bingo Card* to each student.
- Have students use ticker symbols from the list of DJIA stocks at the bottom of the page to fill in the 24 blank squares on the card. The center square is a free space.
- Tell students that they will hear a description of companies on the list. When they hear a description that matches a company on their card, they should circle the ticker symbol.
- Read company descriptions from the list on *Activity 1: Bingo Call Outs*. Read descriptions in a random order. Teacher should mark off descriptions that have been read on the list in order to verify a student's winning card.
- Students win when they have marked the squares in a horizontal, vertical or diagonal line. (Alternatively, the teacher could elect to play blackout, where all squares would need to be marked for a win.)

2. Have students read the section on stocks and mutual funds in the *Building Wealth* book, pages 14-15. Review the reading by emphasizing the following points:
   - When an investor buys stock, he or she is buying ownership in the company.
   - Stock owners can earn a return in two ways: dividends and capital gains.
   - Dividends are a portion of a company's profit paid to stock owners. Not all companies (even profitable ones) pay dividends.
   - Over time, the price of a stock can rise or fall. If an investor sells the stock for more than the purchase price, the profit is called a capital gain. If the stock is sold for less than the purchase price, the loss is called a capital loss.
   - Every day, millions of shares of stock are bought and sold. The price of the stock at any point is determined by the actions of sellers and buyers.
   - Stocks can be purchased individually or as part of a mutual fund.

3. Distribute *Handout 2: Stock Market Terms Crossword Puzzle*. Have students complete the puzzle using terms from the *Building Wealth* reading or the *Building Wealth* glossary.

4. Display *Visual 2: Understanding a Stock Table*. Tell students that investors need to be informed about a company before purchasing shares of stock. Important information about current stock prices and dividends, along with other information, is found in a stock table published online or in a newspaper. Use the labels on the visual and the following questions to describe the parts of a typical stock table.
   - What parts of the stock table would tell an investor about the opportunity to earn dividend income with the purchase of this stock?
     *Last price, % change, dividend, % yield and the price/earnings ratio*
   - What parts of the stock table would tell an investor about the opportunity to earn capital gains with the purchase of this stock?
     *Last price, previous day closing price, % change, high and low price today, year high and low*

5. Distribute *Handout 3: Reading a Stock Table* to each student. Allow students to complete the questions while working in pairs. After groups have completed the questions, review the correct answers using the suggested responses provided.

## Closure

6. Display *Visual 3: Stock Market Terms*. Review stock market terms from the crossword puzzle. Hide the terms and read the definitions. Have students name the term.

7. Review the major concepts from the lesson using the following questions:
   - What are the two ways a stock can provide a return for an investor?
     *Capital gains from increased price or dividends that are paid by the company*
   - What is a capital gain or loss from a stock purchase?
     *The difference between the purchase and the sale price of a share of stock*
   - What is a dividend?
     *A portion of the company's profit that is paid to certain stock owners*
   - What is the yield on a stock?
     *The dividend or capital gain as a percentage of the purchase price*
   - Where can an investor find information about a stock?
     *Answers will vary, but should include newspapers, online news sources and corporate websites*

## Assessment

8. Use the list of companies on *Visual 1: Companies of the Dow Jones Industrial Average* to remind students of the 30 companies included in the Dow Jones Industrial Average. Distribute *Handout 4: Stock Market Research*. Assign each student two companies from the list and allow them to conduct research outside of class.

   *Note to teacher: This research could be completed in pairs or groups. In addition, the teacher might consider assigning companies to each student that represent different industries.*

   Assess student research using the following criteria:
   - Does the student include accurate and complete information about the company?
   - Is the information about stock performance, including the price graph, complete and accurate?
   - In the summary, has the student identified reasonable and relevant considerations about the future growth and profitability of the company?
   - Is the information sheet well designed and visually appealing? Does it use appropriate grammar and punctuation?

*Lesson 5 – Save and Invest: Stocks*

## Visual 1: Companies of the Dow Jones Industrial Average

| | |
|---|---|
| 3M Co. | Home Depot Inc. |
| Alcoa Inc. | Intel Corp. |
| American Express Co. | International Business Machines Corp. |
| AT&T Inc. | Johnson & Johnson |
| Bank of America Corp. | JPMorgan Chase & Co. |
| Boeing Co. | Kraft Foods Inc. |
| Caterpillar Inc. | McDonald's Corp. |
| Chevron Corp. | Merck & Co. Inc. |
| Citigroup Inc. | Microsoft Corp. |
| Coca-Cola Co. | Pfizer Inc. |
| E.I. DuPont de Nemours & Co. | Procter & Gamble Co. |
| Exxon Mobil Corp. | United Technologies Corp. |
| General Electric Co. | Verizon Communications Inc. |
| General Motors Corp. | Wal-Mart Stores Inc. |
| Hewlett-Packard Co. | Walt Disney Co. |

Charles H. Dow first published an industrial stock average on May 26, 1896, and began publishing the average daily in the *Wall Street Journal* on Oct. 7, 1896.

The stocks in the Dow Jones Industrial Average have changed over time. The current list includes 30 companies that are publicly traded and important within their industries.

Source: www.djindexes.com and www.dowjones.com

## Visual 2: Understanding a Stock Table

**Vol**

The total volume of a company's stock traded the previous day – usually stated in 100s

**52 Week High and Low**

The highest and lowest price paid for the stock during the last 52 weeks

**Yld%**

The rate of return on the stock – calculated as dividend divided by current stock price

**Close**

The last price paid for the stock during the previous trading day

| 52 Week High | 52 Week Low | Stock | Div | Yld % | P/E | Vol 00's | Previous Day High | Previous Day Low | Close | Change |
|---|---|---|---|---|---|---|---|---|---|---|
| 77.40 | 58.20 | BCR | 1.54 | 2.2 | 16 | 1890 | 71.20 | 68.76 | 70.00 | -0.20 |

**Stock**

The symbol that represents the company's name

**P/E**

Price/Earnings Ratio – price of a stock divided by the company's annual earnings

**Change**

Difference between the last trade and the previous trading day's price

**Dividend**

A share of profits paid to a stockholder

**Previous Day High and Low**

The highest and lowest price paid for the stock during the last trading session

*Lesson 5 – Save and Invest: Stocks*

# Visual 3: Stock Market Terms

| | |
|---|---|
| **Asset** | Anything an individual or business owns that has commercial or exchange value |
| **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 |
| **Diversification** | The distribution of investments among several companies to lessen the risk of loss |
| **Dividend** | A share of profits paid to a stockholder |
| **Equity** | Ownership interest in an asset after liabilities are deducted |
| **Investing** | The act of using money to make more money |
| **Investor** | An organization, corporation, individual or other entity that acquires an ownership position in an investment, assuming risk of loss in exchange for anticipated returns |
| **Leverage** | The ability to use a small amount of money to attract other funds, including loans, grants and equity investments |
| **Load** | The fee a brokerage firm charges an investor for handling transactions |
| **Management fee** | The fee paid to a company for managing an investment portfolio |
| **Market value** | The amount a seller can expect to receive on the open market for merchandise, services or securities |
| **Mutual fund** | A pool of money managed by an investment company |
| **Return** | The profit made on an investment |
| **Stock option** | The right to buy or sell a corporation's stock at a predetermined price or calculable formula; sometimes used as part of employee compensation |
| **Stockholder** | A person who owns stock in a company and is eligible to share in profits and losses; same as shareholder |

*Lesson 5 – Save and Invest: Stocks*

# Activity 1: Bingo Call Outs

| Ticker Symbol | Company Description | Used in Game |
|---|---|---|
| MMM | 3M Co. is based in St. Paul, Minnesota, and produces a variety of products including Scotch Tape and Post-It Notes. | |
| AA | Alcoa Inc. produces a wide range of aluminum products and is active in mining, refining, smelting, fabricating and recycling. | |
| AXP | American Express Co. is best known for its flagship green charge card. It is a global financial services and travel company. | |
| T | AT&T Inc. provides a variety of telecommunications services worldwide, including wireless communications, local and long-distance services, Internet and broadband, as well as directory advertising and publishing. | |
| BAC | Bank of America Corp. is a bank holding company. Through its subsidiaries it provides a wide range of financial services and products for consumers, small businesses and corporations. | |
| BA | The Boeing Co. designs, develops and manufactures commercial jetliners and military aircraft. | |
| CAT | Caterpillar Inc. manufactures and sells construction, mining and forestry machinery. It also produces engines and has a financial services division. | |
| CVX | 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. | |
| C | Citigroup Inc. is a diversified financial services company focused on consumer banking, global cards, institutional clients and global wealth management. | |
| KO | 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. | |
| DD | E.I. DuPont de Nemours & Co. (DuPont) is a science and technology company with products and services for agriculture, nutrition, electronics, communications, safety and protection, home and construction, transportation and apparel. | |
| XOM | Exxon Mobil Corp. is the world's largest oil and gas company. The company explores for crude oil and natural gas, manufactures petroleum products and transports and sells crude oil, natural gas and petroleum products. | |
| GE | General Electric Co. has a variety of businesses including technology and energy infrastructure, as well as consumer and industrial services. It also owns NBC Universal. | |
| GM | General Motors Corp. sells vehicles through eight brands in North America and twelve brands outside North America. Chevrolet and Cadillac are two of its brands. | |
| HPQ | Hewlett-Packard Co. manufactures and sells information technology products and services to businesses and consumers worldwide. The company's products include computers and printers. | |

*Lesson 5 – Save and Invest: Stocks*

# Activity 1: Bingo Call Outs

## Page 2

| | | |
|---|---|---|
| HD | The Home Depot Inc. is a home-improvement retailer. It operates more than 2,200 full-service, warehouse-style stores that sell building materials, home improvement, and lawn and garden products. | |
| INTC | Intel Corp. produces semiconductor chips, boards and other products that are integral to computers, servers and other electronic products. | |
| IBM | International Business Machines Corp. (IBM) is an information technology company that offers technology and business services, as well as system architecture and financing. | |
| JNJ | 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. | |
| JPM | 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, asset management and private equity. | |
| KFT | Kraft Foods Inc. is an international food company that owns familiar brand names like Oscar Mayer and Oreo, as well as its namesake line of cheeses. | |
| MCD | 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. | |
| MRK | Merck & Co. Inc. is a global pharmaceutical company that was established in 1891. It discovers, develops, manufactures and markets vaccines and medicines. | |
| MSFT | Microsoft Corp. developed the Windows operating system and the Office suite of productivity software. This company also makes the Xbox. | |
| PFE | Pfizer Inc. is a research-based, global pharmaceutical company that develops, manufactures and markets prescription medicines for humans and animals. | |
| PG | Procter & Gamble Co. makes and sells consumer products in 180 countries around the world. Its brands include Tide, Gillette, Duracell and Crest. | |
| UTX | United Technologies Corp. is a conglomerate that provides high-tech products and services to the building systems and aerospace industries. Among its six brands are Otis (elevators), Carrier (air conditioning) and Sikorsky (helicopters). | |
| VZ | Verizon Communications Inc. provides communication services both domestically through its wireless network and internationally with voice, Internet, broadband, long distance and other services. | |
| WMT | 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. | |
| DIS | 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. | |

## Handout 1: Dow Jones Bingo Card

| B | I | N | G | O |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

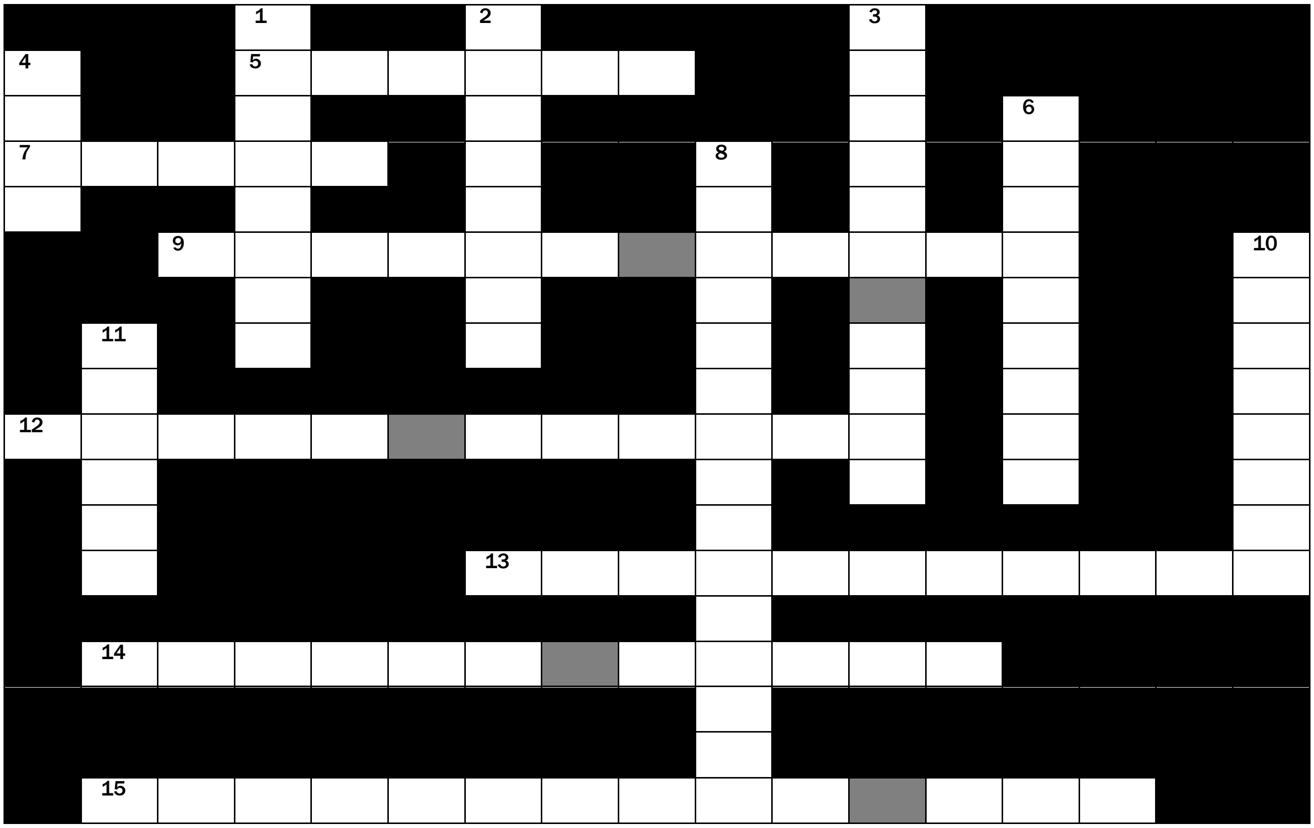
Use the symbols of the companies listed below to fill in the squares on your bingo card.

| Company Name | Symbol | Company Name | Symbol |
|---|---|---|---|
| 3M Co. | MMM | Home Depot Inc. | HD |
| Alcoa Inc. | AA | Intel Corp. | INTC |
| American Express Co. | AXP | International Business Machines Corp. | IBM |
| AT&T Inc. | T | Johnson & Johnson | JNJ |
| Bank of America Corp. | BAC | JPMorgan Chase & Co. | JPM |
| Boeing Co. | BA | Kraft Foods Inc. | KFT |
| Caterpillar Inc. | CAT | McDonald's Corp | MCD |
| Chevron Corp. | CVX | Merck & Co. Inc. | MRK |
| Citigroup Inc. | C | Microsoft Corp. | MSFT |
| Coca-Cola Co. | KO | Pfizer Inc. | PFE |
| E.I Dupont de Nemours & Co. | DD | Procter and Gamble Co. | PG |
| Exxon Mobil Corp. | XOM | United Technologies Corp. | UTX |
| General Electric Co. | GE | Verizon Communications Inc. | VZ |
| General Motors Corp. | GM | Wal-Mart Stores Inc. | WMT |
| Hewlett-Packard Co. | HPQ | Walt Disney Co. | DIS |

Name: ______________________________ Date: __________

*Lesson 5 – Save and Invest: Stocks*

# Handout 2: Stock Market Terms Crossword Puzzle




| | ***Across*** | | ***Down*** |
|---|---|---|---|
| 5 | Ownership interest in an asset after liabilities are deducted | 1 | The ability to use a small amount of money to attract other funds, including loans, grants and equity investments |
| 7 | Anything an individual or business owns that has commercial or exchange value | 2 | A share of profits paid to a stockholder |
| 9 | The amount a seller can expect to receive on the open market for merchandise, services or securities | 3 | A pool of money managed by an investment company |
| 12 | The right to buy or sell a corporation's stock at a predetermined price or calculable formula | 4 | The fee a brokerage firm charges an investor for handling transactions |
| 13 | A person who owns stock in a company and is eligible to share in profits and losses; same as a shareholder | 6 | The act of using money to make more money |
| 14 | A kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met | 8 | The distribution of investments between several companies to lessen the risk of loss |
| 15 | The fee paid to a company for managing an investment portfolio | 10 | An organization, corporation, individual or other entity that acquires an ownership position in an investment, assuming the risk of loss in exchange for anticipated returns |
| | | 11 | The profit made on an investment |

*Lesson 5 – Save and Invest: Stocks*

# Handout 2: Stock Market Terms Crossword Puzzle Suggested Answers

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | L | | | D | | | | | M | | | | | |
| L | | | E | Q | U | I | T | Y | | | U | | | | | |
| O | | | V | | | V | | | | | T | | I | | | |
| A | S | S | E | T | | I | | | D | | U | | N | | | |
| D | | | R | | | D | | | I | | A | | V | | | |
| | | M | A | R | K | E | T | | V | A | L | U | E | | | I |
| | | | G | | | N | | | E | | | | S | | | N |
| | R | | E | | | D | | | R | | F | | T | | | V |
| | E | | | | | | | | S | | U | | I | | | E |
| S | T | O | C | K | | O | P | T | I | O | N | | N | | | S |
| | U | | | | | | | | F | | D | | G | | | T |
| | R | | | | | | | | I | | | | | | | O |
| | N | | | | | S | T | O | C | K | H | O | L | D | E | R |
| | | | | | | | | | A | | | | | | | |
| | C | O | M | M | O | N | | S | T | O | C | K | | | | |
| | | | | | | | | | I | | | | | | | |
| | | | | | | | | | O | | | | | | | |
| | M | A | N | A | G | E | M | E | N | T | | F | E | E | | |

Name: ________________________________ Date: ___________

*Lesson 5 – Save and Invest: Stocks*

# Handout 3: Reading a Stock Table

| Company | Last Price | Previous Day Closing Price | % change | Annual Dividend per Share | % Yield |
|---|---|---|---|---|---|
| A | $55.50 | $56.05 | -0.98% | NA | NA |
| B | $14.08 | $13.50 | 4.30% | $0.75 | 5.33% |
| C | $34.99 | $38.50 | -9.12% | $0.81 | 2.31% |
| D | $17.25 | $15.65 | 10.22% | $0.25 | 1.45% |
| E | $30.69 | $29.85 | 2.81% | $2.00 | 6.52% |
| F | $23.19 | $23.15 | 0.17% | $1.03 | 4.44% |
| G | $11.00 | $14.90 | -26.17% | $0.10 | 0.91% |
| H | $19.18 | $19.50 | -1.64% | NA | NA |
| I | $11.78 | $8.50 | 38.59% | $0.34 | 2.89% |
| J | $16.15 | $14.80 | 9.12% | $0.42 | 2.60% |

1. What stocks have gone down in value (depreciated) since yesterday's close?
2. What stocks have gone up in value (appreciated) since yesterday's close?
3. What stock has depreciated the most since yesterday's close?
4. What stock has appreciated the most since yesterday's close?
5. If you had purchased one share of stock in Company A for $43.00 several years ago and sold the stock at the last price, would the sale result in a capital gain or a capital loss? How much?

For the next three questions, assume that you own 10 shares of each stock listed above.

6. What is the total value of your portfolio of stocks at the last price listed?
7. What is the total amount of dividend payments that you would receive in one year if dividends are paid at the stated amounts?
8. If you had paid $1,700 for the stocks in your portfolio and sold them all today at the current price, what is the total amount of your capital gain or loss?

*Lesson 5 – Save and Invest: Stocks*

# Handout 3: Reading a Stock Table
# Suggested Answers

1. What stocks have gone down in value (depreciated) since yesterday's close?
   *A,C,G,H*

2. What stocks have gone up in value (appreciated) since yesterday's close?
   *B,D,E,F,I,J*

3. What stock has depreciated the most since yesterday's close?
   *G*

4. What stock has appreciated the most since yesterday's close?
   *I*

5. If you had purchased one share of stock in Company A for $43.00 several years ago and sold the stock at the last price, would the sale result in a capital gain or a capital loss? How much?
   *Capital gain of $12.50 per share*

6. What is the total value of your portfolio of stocks at the last price listed?
   *$2,338.10*

7. What is the total amount of dividend payments that you would receive in one year if dividends are paid at the stated amounts?
   *$57*

8. If you had paid $1,700 for the stocks in your portfolio and sold them all today at the current price, what is the total amount of your capital gain or loss?
   *$638.10 capital gain*

Name: ____________________________________ Date: ____________

*Lesson 5 – Save and Invest: Stocks*

# Handout 4: Stock Market Research

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

    a. ________________________

    b. ________________________

2. Use newspapers, corporate websites and online news sources to research information about both of the companies you selected. Information should include:
    a. Name of company
    b. Description of the company and its business
    c. Major products or services that the company produces
    d. Name of president and CEO (may be the same person) along with other leaders that you feel are important.
    e. Information about the performance of the stock, including price, dividends and yield over the past year.

3. 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:
    a. Information about the company that you gathered in your research
    b. Graph of the stock price for the last year
    c. Major competitors or related companies
    d. 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
# Save and Invest: Bonds

## Lesson Description

This lesson introduces bonds as an investment option that dates back many years. Using a series of classroom visuals, students will identify the three main parts of a bond and describe why a bond might sell at a price different from its stated price. After learning the formulas for market price and bond yield, students will complete a case study about a fictional company.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)

*Saving and Investing*
Standard 2: Explain how investing builds wealth and helps meet financial goals.
Standard 3: Evaluate investment alternatives.

## Instructional Objectives

Students will:

- Explain the purpose of a public or private bond
- Define face value, coupon rate and maturity date
- Distinguish between bond yield (or rate of return) and the bond's coupon rate
- Analyze factors that influence a bond's yield and market price

## Time Required

One to two 50-minute class periods

## Materials Required

- Class set of *Building Wealth*
- Copies of the following classroom visuals
    - *Visual 1: World War II Bonds*
    - *Visual 2: Parts of a Bond*
    - *Visual 3: The Coupon Rate*
    - *Visual 4: Shopping for the Best Return*
    - *Visual 5: Yield on a Bond*
    - *Visual 6: Bond Prices and the Rate of Return*
    - *Visual 7: Falling Bond Yields*
    - *Visual 8: The Big Picture*
    - *Visual 9: Buy, Sell or Hold*
    - *Visual 10: Market Value*
    - *Visual 11: Yields, Returns and Market Prices*
- Copies of the following handouts for each student
    - *Handout 1: Case Study – Franklin Kite Company*
    - *Handout 2: What's Your Bond Knowledge?*

## Procedure

1. Ask students to read the section called **Bonds—Lending Your Money** in the *Building Wealth* booklet on pages 12–14.

2. Display *Visual 1: World War II Bonds*. Use the following questions to introduce bonds and explain their function as debt instruments or IOUs for public and private entities.
   - Does the U.S. government ever spend more than it receives in tax revenue?
     *Yes, since 2002, the U.S. has run a deficit (expenditures are greater than revenues).*
   - How does the government spend more than it receives?
     *It borrows money by selling bonds.*
   - Can other entities sell or issue bonds?
     *State or local governments as well as private businesses issue bonds.*

3. Display *Visual 2: Parts of a Bond*. Identify the parts of a bond using information from the visual. Discuss the features of bonds using the following information:
   - Bonds are a written promise by the borrower to repay the amount borrowed plus interest.
   - The three main parts of a bond are:
     - Face value (or par value) – the amount being borrowed
     - Maturity date – the date when the principal of the bond is repaid
     - Coupon rate – the rate of interest paid to the bond holder
   - A person who buys a bond becomes a lender and assumes the risk that the bond seller might not repay the debt. Nonpayment is called default.
   - The riskiness of bonds varies widely. U.S. Treasury bonds are traditionally considered to be the safest of all bonds.

4. Display *Visual 3: The Coupon Rate*. Use the information on the visual to discuss the coupon rate. Tell students that interest on this type of bond is computed by multiplying the coupon rate and the face value of the bond. This annual or semi-annual interest payment is a significant benefit of bond ownership. Ask students about this specific bond.
   - What is the face value (par value) of this bond?
     *$1,000*
   - What is the coupon rate of this bond?
     *5%*
   - What will the annual interest payment be on this bond?
     $50 (5% × $1,000)

5. Display *Visual 4: Shopping for the Best Return*. Discuss the information on the visual. Emphasize the idea that bonds can be bought and sold.

6. Display *Visual 5: Yield on a Bond*. Discuss the information on the visual. Emphasize the difference between the stated coupon rate and the yield. The yield changes as the market price varies, but the coupon rate is fixed.

7. Display *Visual 6: Bond Prices and the Rate of Return*. Review the three components of the equation. Remind students that sellers drive down the market price of a bond. Check for student understanding by asking student to compute the coupon payment and the yield on a bond with a face value (par) of $1,000 and coupon rate of 3%.
   - What is the coupon payment?
     *$30*
   - What is the yield if the market price of the bond is $800?
     *3.75% ($30 ÷ $800 = 3.75%)*

8. Display *Visual 7: Falling Bond Yields*. Tell students that if new and otherwise similar bonds have a lower coupon rate, the older bonds become more attractive. As demand for these bonds rises, the yield on the bonds will fall. Discuss the information on the visual.

9. Display *Visual 8: The Big Picture*. Review the concepts of coupon rate and payment, market price and bond yield.

10. Display *Visual 9: Buy, Sell or Hold*. Ask students to decide if they would buy, sell or hold a bond paying a 5% coupon rate if similar investments in the market offered the coupon rates listed on the table. Given the decision to buy, sell or hold, what do they anticipate will happen to the price of the bond? Use the information below for reference.

| Current Yields for Similar Bonds | Stated Coupon Rate | Buy, Sell or Hold? | Will the price rise, fall or stay the same? |
|---|---|---|---|
| 8% | 5% | Sell | Fall |
| 5% | 5% | Hold | Stay the same |
| 10% | 5% | Sell | Fall |
| 1% | 5% | Buy | Rise |

11. Display *Visual 10: Market Value*. Discuss the information and the formula with students.

12. Display *Visual 11: Yields, Returns and Market Prices*. Ask the students to work in pairs to compute the market values in their notes. Review the correct answers using the information below.

| Current Yields for Similar Bonds | Stated Coupon Rate and Payment | Formula | What should the market price be? |
|---|---|---|---|
| 8% | 5% and $50 | $50 ÷ .08 | $ 625 |
| 5% | 5% and $50 | $50 ÷ .05 | $1,000 |
| 10% | 5% and $50 | $50 ÷ .10 | $ 500 |
| 1% | 5% and $50 | $50 ÷ .01 | $5,000 |

13. Distribute *Handout 1: Case Study – Franklin Kite Company*. Have students work in pairs to complete the information. Use the suggested answers to discuss student responses.

## Closure

14. Review the major concepts of the lesson using the following questions:
    - What is a bond and what are the three parts of the bond?
      *A bond is a way for a business or the government to raise money. It is basically an IOU. The three parts of a bond are the face value, par, the coupon rate, and the maturity, term*
    - What is the difference between the yield and the coupon rate?
      *The yield is a rate of return based on the market value of the bond, while the coupon rate is the rate of return based on the stated, par value of the bond.*
    - What impact does a change in interest rates on similar investments have on the yield of a bond?
      *An increase in interest rates on similar investments will lower the yield of the bond, while a decrease in interest rates on similar investments will increase the yield of the bond.*
    - What effect does a change in market rates have on the coupon rate of a bond?
      *The coupon rate is unaffected by market interest rates*
    - What impact does a change in interest rates on similar investments have on the price of the bond?
      *Since the coupon rate can't change, the market price of the bond must change to bring its yield in line with market rates. A fall in interest rates relative to a bond's coupon rate will drive up the price of the bond. The increase in the price of the bond drives down the yield of the bond. An increase in interest rates relative to a bond's coupon rate will drive down the price of the bond and thus increase the yield of the bond. The yield and price of the bond move in opposite directions.*

## Assessment

15. Distribute *Handout 2: What's Your Bond Knowledge*. Have students complete the assessment independently.

## Optional Extension

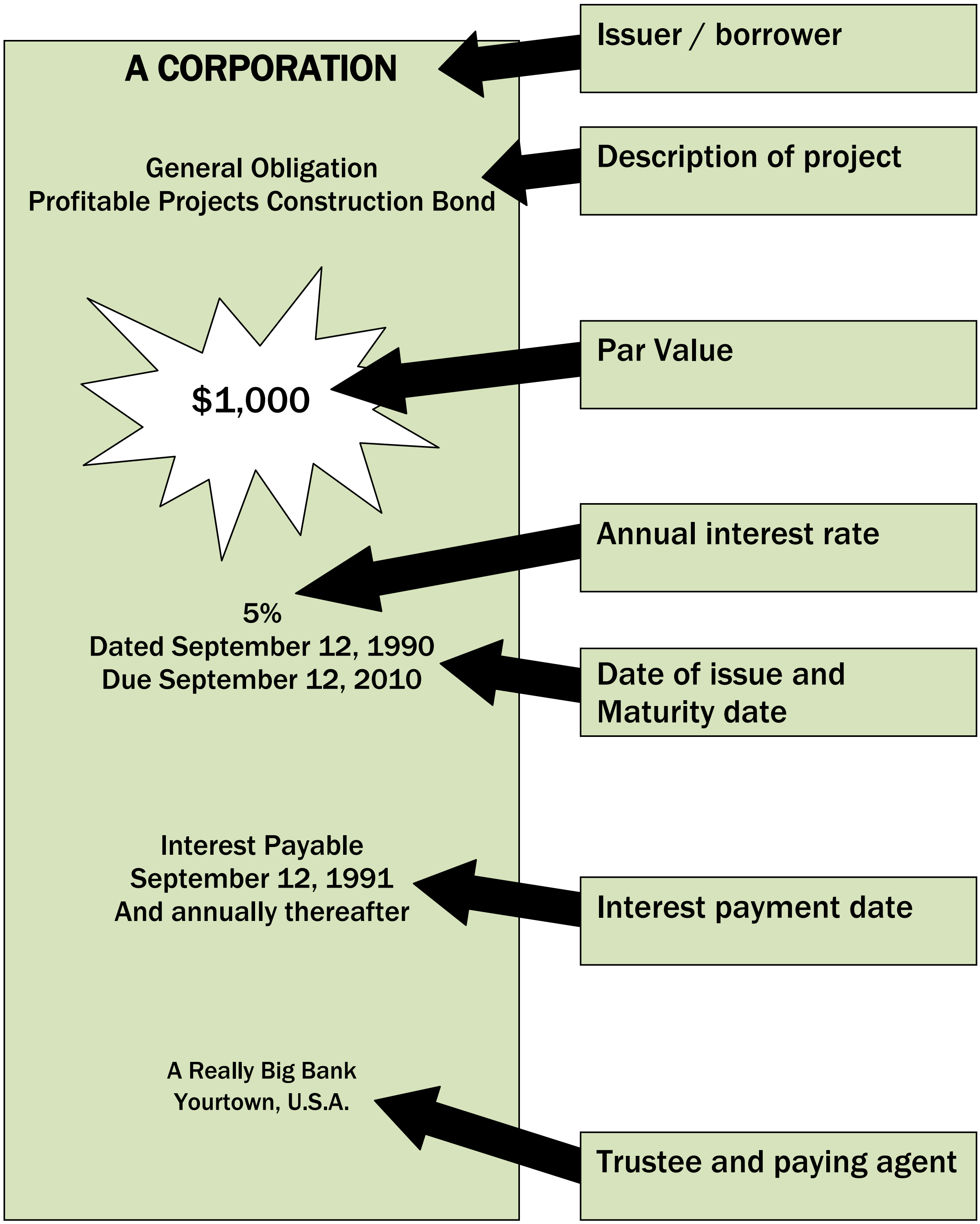
Have students research historic war bond posters at using the Archival Research Catalog that is found on the National Archives website at http://www.archives.gov/research/arc/. Numerous digital copies of historic war bond posters can be viewed online. Have students create a new poster advertising bonds in a similar style. The poster should include a picture and a slogan as well as reasons why buying bonds is a good investment.

*Lesson 6 – Save and Invest: Bonds*

# Visual 1: World War II Bonds


Source: www.nasm.si.edu/blackwings/hdetail/detailbw.cfm?bwID=BW0039

## Visual 2: Parts of a Bond



## Visual 3: The Coupon Rate

**Coupon bonds have a stated coupon rate. The owner of the bond is entitled to a regular interest payment based on the coupon rate and the face (or par) value of the bond.**

**For this bond, the coupon rate of return is 5%, and coupon payment is $50 per year.**

***Coupon payment = Face (Par) value × Coupon rate***

***$50 = $1,000 × 5%***

### A CORPORATION

*General Obligation*
*Profitable Projects Construction Bond*


**5%**
Dated September 12, 1990
Due September 12, 2010

Interest Payable
September 12, 1991
And annually thereafter

A Really Big Bank
Yourtown, U.S.A.

*Lesson 6 – Save and Invest: Bonds*

## Visual 4: Shopping for the Best Return

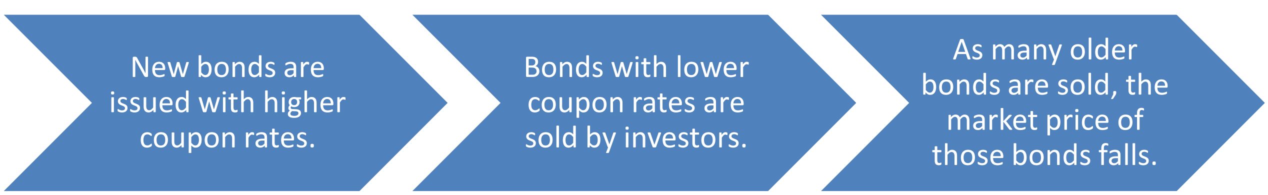
Everybody loves a deal. Bond investors are no different!

Investors buy bonds to earn a rate of return. They seek a return that is at least as good as other investments with similar risk characteristics.

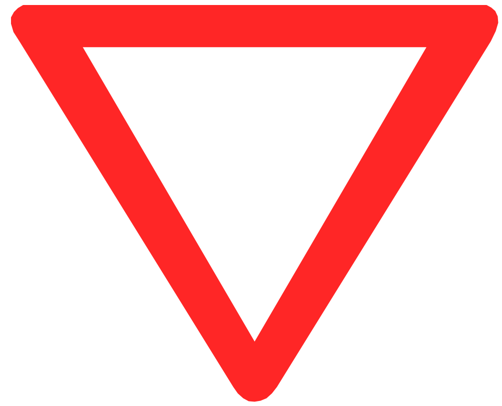
What would happen if an investor owned a bond that had a 5% rate of return, but new bonds that are otherwise similar, offered a coupon rate of 8%? The old bond is not as desirable.

Since bonds can be bought and sold, the investor that owns a bond with a 5% coupon rate is inclined to sell the bond and use the money to buy the bond that pays a higher coupon rate.

With more people trying to sell the bonds than buying the bonds, the market price falls.



**Visual 5: Yield on a Bond**



The yield (or rate of return) on interest-bearing assets is based on the market price of the asset and the annual interest payment(s).

*Coupon payment ÷ Market value of bond = Rate of return*

If the bond sells for its face (or par) value, the rate of return is the same as the coupon rate. Consider the bond from Visual 3:

*$50 ÷ $1,000 = 5%*

But the bond does not have to sell at face value. If the bond sells for less than its face value, the rate of return rises. Selling the bond for less than its face value is called selling at a ***discount***.

If the bond price falls from $1,000 to $920, the rate of return rises from 5% to 5.43%.

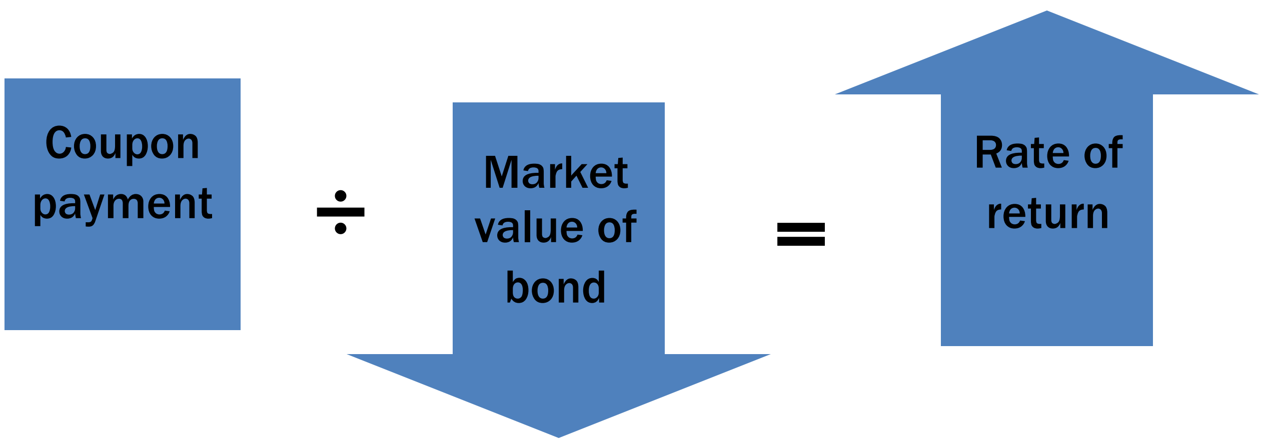
*$50 ÷ $920= 5.43%*

## Visual 6: Bond Prices and the Rate of Return

The formula for the rate of return on a bond is:

***Coupon payment ÷ Market value of bond = Rate of return***

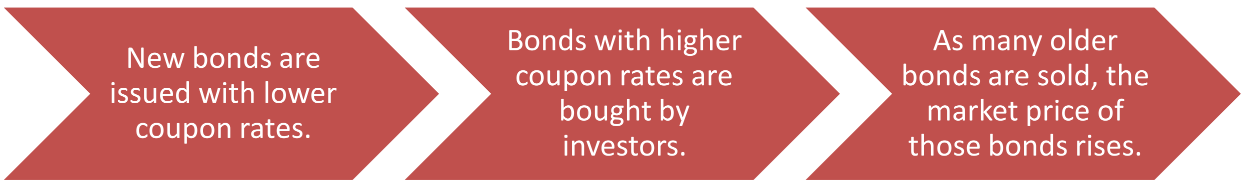
The coupon payment is fixed, but the market price changes as the bonds are bought and sold. Therefore, the rate of return can change.




Investors will continue to sell the bonds until the market value falls enough to push the rate of return high enough to match other bond yields.

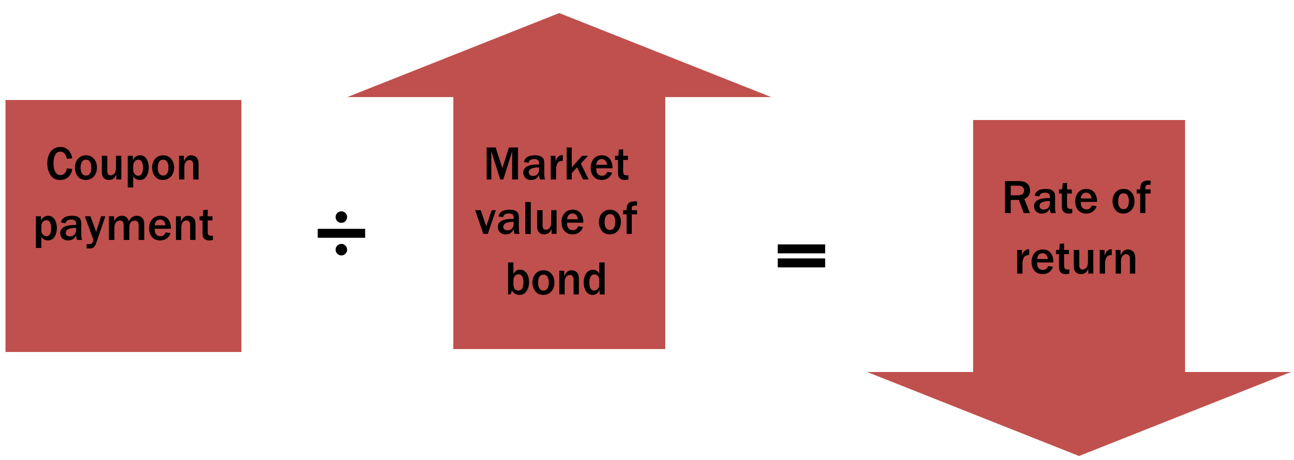
## Visual 7: Falling Bond Yields

### What happens if new bonds have a *lower* coupon rate than the bond held by an investor?




### If a bond is sold for more than its face value, the bond is said to be selling for a ***premium***.

### Since the market price is rising as investors purchase bonds at a premium, the rate of return falls.



## Visual 8: The Big Picture

I get it! Investors want to get the best rate of return possible.

If a bond promises a rate of return lower than others in the market, investors will **SELL** that bond. The price will **fall** and the yield will **rise**.

If a bond promises a return higher than the others in the market, investors will **BUY** that bond. The price will **rise** and the yield will **fall**.

Since the coupon payment is fixed, the market price changes to adjust the rate of return.

## Visual 9: Buy, Sell or Hold

# Let's Play Buy, Sell or Hold!

| Current Yields for Similar Bonds | Stated Coupon Rate | Buy, Sell or Hold? | Will the price rise, fall or stay the same? |
|---|---|---|---|
| 8% | 5% | | |
| 5% | 5% | | |
| 10% | 5% | | |
| 1% | 5% | | |

## Visual 10: Market Value

Think about the formula:

*Coupon payment ÷ Market value of bond = Rate of return*

If the terms are rearranged, we can anticipate the market price of any bond based on a given rate of return found in the market.

*Coupon payment ÷ Market rate of return = Market value of bond*

Think about the bond that had a coupon payment of $50. Other similar bonds have a rate of return of 7%. This bond should sell for $714.29.

$50 ÷ 7% = $714.29

Remember that dividing by *7%* is the same as dividing by *.07*.

## Visual 11: Yields, Returns, and Market Prices

| Current Yields for Similar Bonds | Stated Coupon Rate and Payment | Formula | What should the market price be? |
|---|---|---|---|
| 8% | 5%<br>$50 | $50 ÷ .08 | |
| 5% | 5%<br>$50 | | |
| 10% | 5%<br>$50 | | |
| 1% | 5%<br>$50 | | |

Name: ______________________________ Date: ________________

*Lesson 6 – Save and Invest: Bonds*

# Handout 1: Case Study: Franklin Kite Company

Franklin Kite Company, a kite manufacturer in Philadelphia, Pa., needs $10,000 to retool its assembly line to produce the next generation of the "electric kite."

As a finance officer with the company, you have decided to raise the entire $10,000 by selling 10 bonds with a face value of $1,000 each. You decide to offer an annual coupon rate on the bonds of 6%.

You have been asked to explain the bond program to the board of directors in Philadelphia. Answer these questions to prepare for your presentation.

> **$1000**
>
> **Franklin Kite Company**
>
> General Obligation
> Construction Bond
>
> **6%**
> Dated January 1, 2005
> Due January 1, 2010
>
> Interest Payable
> January 1, 2006 and annually thereafter
>
> National Bank – Anytown, U.S.A.

1. Identify the following features of each of the 10 bonds:

   Length of maturity ____________
   Face value (or par value) ____________
   Coupon rate ____________

2. What will be the amount of annual interest payment on each bond? ____________

3. What is the total interest payment for Franklin Kite Company each year for ALL 10 bonds? ____________

4. If the potential buyers for Franklin Kite Co. bonds are concerned about the future of the company, these bonds might be considered risky. How could the company make the bonds more attractive to buyers?

5. If similar bonds are issued with a coupon rate of 8%, will the value of Franklin Kite Company bonds rise or fall? ____________

# Handout 1: Case Study: Franklin Kite Company
## Page 2

6. If similar bonds are issued with a coupon rate of 2%, will the value of Franklin Kite Company bonds rise or fall? ____________

7. Calculate the market price of Franklin Kite Company bonds if similar bonds have the following yields:

| Other Bonds' Yield | Coupon Payment | Market Price |
|---|---|---|
| 8% | $60 | |
| 5% | $60 | |
| 2% | $60 | |

8. What is the relationship between the price of a bond and the rate of return on the bond?

*Lesson 6 – Save and Invest: Bonds*

# Handout 1: Case Study: Franklin Kite Company

## Suggested Answers

1. Identify the following features of each of the 10 bonds:

| | |
|---|---|
| Length of maturity | <u>5 years</u> |
| Face value (or par value) | <u>$1,000</u> |
| Coupon rate | <u>6%</u> |

2. What will be the amount of annual interest payment on each bond? <u>$60</u>

3. What is the total interest payment for Franklin Kite Company each year for ALL 10 bonds? <u>$600</u>

4. If the potential buyers for Franklin Kite Co. bonds are concerned about the future of the company, these bonds might be considered risky. How could the company make the bonds more attractive to buyers? <u>Offer a higher coupon rate</u>

5. If similar bonds are issued with a coupon rate of 8%, will the value of Franklin Kite Company bonds rise or fall? <u>Fall</u>

6. If similar bonds are issued with a coupon rate of 2%, will the value of Franklin Kite Company bonds rise or fall? <u>Rise</u>

7. Calculate the market price of Franklin Kite Company bonds if similar bonds have the following yields:

| Other Bonds' Yield | Coupon Payment | Market Price |
|---|---|---|
| 8% | $60 | $750 |
| 5% | $60 | $1,200 |
| 2% | $60 | $3,000 |

8. What is the relationship between the price of a bond and the rate of return on the bond? <u>As one rises, the other falls. As one falls, the other rises.</u>

Name: ______________________________ Date: ___________________

*Lesson 6 – Save and Invest: Bonds*

# Handout 2: What's Your Bond Knowledge?

## Matching

Match the following terms using definitions from the lesson and *Building Wealth*.

1. ___ Bond
2. ___ Treasury Note
3. ___ Par value
4. ___ Premium
5. ___ Yield
6. ___ Treasury Bond
7. ___ Treasury Bill
8. ___ Discount
9. ___ U.S. Savings Bond
10. ___ Treasury Inflation-Protected Security
11. ___ Coupon Rate

A. Nominal, or face, value of a bond
B. Debt obligation issued by private or public entity
C. Treasury bond or note that is tied to inflation so that the principal amount of the investment increases or decreases according to the annual inflation rate
D. Calculated as coupon payment ÷ market price of the bond
E. Calculated as coupon payment ÷ face value of the bond
F. Short-term investment issued by the U.S. government for one year or less
G. Bond is sold for a price higher than its face value
H. Bond is sold for a price lower than its face value
I. Nontransferable registered bond issued by the U.S. government in denominations of $50 to $10,000
J. Government security with a term of more than 10 years; interest is paid semiannually
K. Government security with a maturity that can range from two to 10 years; interest is paid every six months

*Lesson 6 – Save and Invest: Bonds*

# Handout 2: What's Your Bond Knowledge? Page 2

You own a bond that has a coupon rate of 6%. Now, similar bonds are being sold with the following coupon rates. Has the value of your bond gone up, down or stayed the same?

12. 2%

13. 4%

14. 6%

15. 8%

16. 10%

17. What is the coupon rate of a $1,000 bond that pays a $60 coupon payment?

18. What is the coupon payment of a $1,000 bond with a 4% coupon rate?

19. What is the yield of a $900 bond with a $40 coupon payment?

20. What is the market price of a $1,000 bond with a 5% coupon when the yield on similar investments is 3%?

21. What is the market price of a $1,000 bond with a 5% coupon when the yield on similar investments is 8%?

*Lesson 6 – Save and Invest: Bonds*

# Handout 2: What's Your Bond Knowledge?

## Suggested Answers

1. B
2. K
3. A
4. G
5. D
6. J
7. F
8. H
9. I
10. C
11. E
12. Increased
13. Increased
14. Stayed the same
15. Decreased
16. Decreased
17. 6%
18. $40
19. 4.4%
20. $1,667
21. $625

# Lesson 7
# Save and Invest: Entrepreneurs and the Economy

## Lesson Description

In this lesson, the introduction describes the four types of productive resources and identifies the unique contributions of the entrepreneur in the productive process. Students complete a graphic organizer about the creative ideas and assumed risks of American entrepreneurs and discuss the role of government in providing competitive markets and property rights. The lesson concludes with an out-of-class assignment to interview a local entrepreneur and write a report about the creativity and risk taking seen during the interview.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)

*Income and Careers*
Standard 1: Explore career options.

## Instructional Objectives

Students will:

- Identify the four types of productive resources.
- Analyze the difference between entrepreneurship and other productive resources.
- Analyze the creativity and risk taking demonstrated by local and nationally known entrepreneurs.
- Evaluate the role of property rights and competitive markets in supporting entrepreneurs.

## Time Required

One 50-minute class period plus student time outside class

## Materials Required

- Class set of *Entrepreneurs and the Economy* (EE) (See Ordering Materials, p. 3)
- Copies of classroom visuals
    - *Visual 1: Entrepreneur*
    - *Visual 2: Productive Resources*
- Copies of the following handouts for each student:
    - *Handout 1: Creativity and Risk*
    - *Handout 2: Interview with an Entrepreneur*

## Procedure

1. Display *Visual 1: Entrepreneur*. Read the definition of the word **entrepreneur** out loud and briefly discuss it. Preview the lesson by focusing on two parts of the definition:
    - The entrepreneur as innovator and risk taker
    - The entrepreneur as the organizer of economic resources

   Have students read "What Is an Entrepreneur?" (*EE*, pages 4–5). Reinforce the two concepts from the definition.

2. Brainstorm items needed for a car wash fundraiser and discuss the role of the entrepreneur as organizer of economic resources.
    - Tell the students to imagine that they are officers in a school club that needs to raise money for a project. The officers decide to organize a car wash. Brainstorm the materials needed for the fundraising car wash. Write student responses on the board. Some typical responses include:
        - Hoses
        - Water
        - Sponges
        - Towels
        - Signs
        - Workers
        - Parking lot or location
    - Display *Visual 2: Productive Resources*. Tell students that resources can be grouped into four categories. Use the following abbreviated definitions to discuss each one. Categorize student responses into four resource categories.
        - Land—Natural resources (water and location)
        - Labor—Human resources (workers)
        - Capital—Manufactured resources (hoses, sponges, signs and towels)
        - Entrepreneurship—A person's ability to organizes other resources to produce a product
    - Student responses typically include examples of the first three types of resources (land, labor and capital) but neglect the role of the entrepreneur. The entrepreneur had the idea, arranged the location, bought the supplies and recruited the workers. Emphasize that the entrepreneur organizes the other productive resources to fulfill his or her idea.

3. Have students read "Entrepreneurs as Vital Resources" (*EE*, pages 6–7) and "Entrepreneurs and Creative Destruction" (*EE*, pages 7 and 10). Discuss the role of entrepreneurs in society as innovators whose new ideas bring change and progress to an economy.
    - Entrepreneurs devise new ways of using land, labor and capital, but those resources could have been used in other ways.
    - The work of the entrepreneur brings new products to the market to meet the demand of the buying public.
    - The entrepreneur has an idea, invests time and money to gather resources, and brings the good or service to the marketplace.

4. Discuss innovation and risk taking, two essential qualities for entrepreneurs.
    - The entrepreneur must be creative to devise the new idea or the innovative use of other resources.
    - The entrepreneur must be willing to assume risk.
        - Financial risk—using savings or taking out a loan to acquire the resources needed for production
        - Opportunity costs—time and energy that the entrepreneur could have devoted to other endeavors; starting a business might mean that other ideas will have to wait

5. Have a student read the information below to the class. Ask students to identify the elements of creativity in Oprah Winfrey's business and the risks she took in her career.

   Oprah Winfrey began her broadcasting career in Nashville while still in high school. She anchored news in Nashville and Baltimore before moving to Chicago to host a morning talk show that was quickly expanded and renamed *The Oprah Winfrey Show*. It entered national syndication and became the highest-rated talk show in television history.

   In 1988, Winfrey established Harpo Studios, making her the third woman in the American entertainment industry (after Mary Pickford and Lucille Ball) to own her own studio. The company has produced movies and telefilms and launched new television shows featuring Dr. Phil and Rachael Ray. With her partners, Oprah has launched a magazine, a cable television network and an XM Satellite Radio station.

6. Distribute *Handout 1: Creativity and Risk*. Have students complete the handout using the information on American entrepreneurs on pages 8–9 of EE.

7. Have students read "Entrepreneurs in the Marketplace" (pages 10–11 of EE). Discuss the reading and emphasize the importance of the market system in the allocation of resources.
   - Entrepreneurs who take their ideas to the marketplace are willing to assume financial risks, along with other types of risk, in the hope of earning a profit.
   - The talents of the entrepreneur are directed to the tasks that are valued by the buying public.
   - Land, labor and capital are efficiently used because entrepreneurs do not buy resources to produce things that will not sell in the marketplace.

8. Have students read "Incentives for Entrepreneurship" (pages 14–15 of EE). Discuss the reading.
   - Property rights give entrepreneurs the assurance that they will retain the profit from their ideas.
   - The government plays an important role in providing the foundations of an efficient economic system through strong property rights and competitive markets.

## Closure

9. Review the major points of class discussion using the following questions.
   - What are the four types of productive resources?
     *Land, labor, capital and entrepreneurship*
   - How is entrepreneurship different from the other three?
     *The entrepreneur organizes the other three resources in the productive process. If the other resources are fuel for production, entrepreneurship represents the "spark" that starts the engine.*
   - Why is creativity an essential quality of an entrepreneur?
     *Entrepreneurs must conceive of a new way to combine land, labor and capital to create an innovative product that is desirable to consumers.*
   - Why is the willingness to assume risk an essential quality of an entrepreneur?
     *Entrepreneurs must acquire the resources necessary to produce a good or service. In doing so, the entrepreneur assumes financial risk if the good does not sell. Also, the entrepreneur invests personal time and energy and incurs the opportunity costs of forgone income and endeavors.*

- How do private property rights create incentives for entrepreneurs?
  *These rights ensure that entrepreneurs will receive the profit from their ideas. Without the assurance that the entrepreneur will receive the profit, the person would be unwilling to assume the risk.*
- How do competitive markets allocate resources efficiently?
  *Entrepreneurs will only buy resources for production that are profitable (or are likely to be profitable in the future). If society does not value a product, the item will not sell and the business will not be profitable. If the business fails, the resources will be used by a different entrepreneur in a different enterprise.*

## Assessment

10. Distribute the *Handout 2: Interview with an Entrepreneur*. Explain to the students that they should identify an entrepreneur who started a business in their community. They should make an appointment with the entrepreneur and conduct a brief interview in person or on the phone. Students could be allowed to conduct these interviews in pairs.

    After the interview, students should write a short expository essay explaining both the creativity demonstrated and the risk assumed by the entrepreneur.

    Student essays should be evaluated by considering the following questions:
    - Does the essay introduce and describe the entrepreneur and the business?
    - Does the essay identify and describe the creativity of the entrepreneur?
    - Does the essay identify and describe the risks assumed by the entrepreneur?
    - Does the essay use correct grammar, spelling and punctuation?

## Optional Extension

Divide students into groups and tell each group that they are in charge of raising money for a student group at school. Each group should devise a business plan for the fundraiser and present the idea to the class. Groups could create posters or other visuals to accompany their presentation. Suggested components of the business plan(s) include:

- Description of product or service
- Retail price
- Advertising plan
- Resources required for production
- Cost of resources or manufacturing cost
- Profit potential
- Source of startup funds
- Market analysis
- Anticipated risks

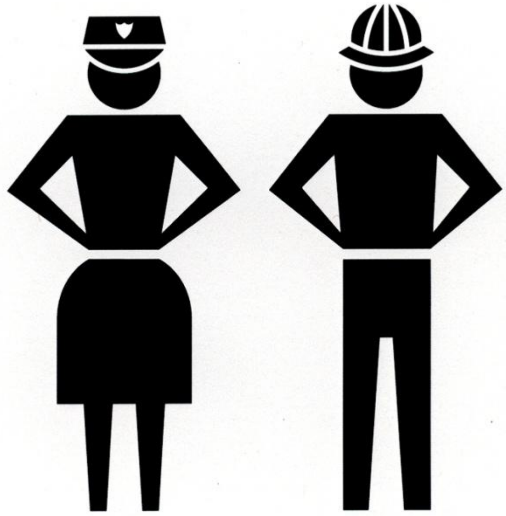
For additional information about creative destruction, see the 1992 Federal Reserve Bank of Dallas Annual Report, *The Churn*, at www.dallasfed.org/fed/annual/index.html.

Students could also research other famous entrepreneurs and develop visuals, presentations and reports using the analytical framework of innovation and risk taking as important qualities for entrepreneurial success.

**Visual 1: Entrepreneur**

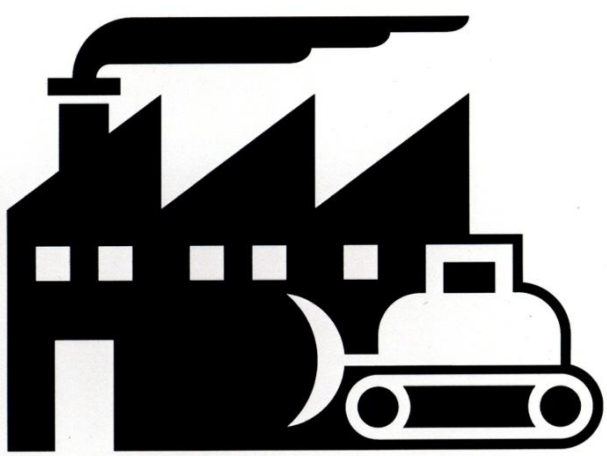
An ***entrepreneur*** is an innovator and risk taker who tries a new way of doing things; a person who develops products and processes and organizes economic resources to please customers.

## Visual 2: Productive Resources

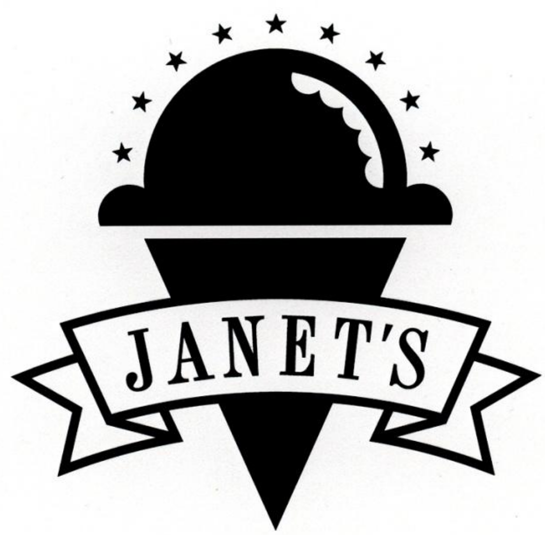


LABOR

LAND



CAPITAL



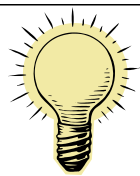
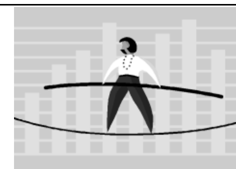

ENTREPRENEURSHIP

Name: ______________________________ Date: ________________

*Lesson 7 – Save and Invest: Entrepreneurs and the Economy*

## Handout 1: Creativity and Risk

**Use the short profiles on pages 8 and 9 of *Entrepreneurs and the Economy* to briefly describe the creative idea of each of these entrepreneurs. Also describe the risk these people assumed when they started their businesses.**

|  **The Idea** | **Great American Entrepreneurs** |  **The Risk** |
|---|---|---|
| | **Ray Kroc** | |
| | **Berry Gordy Jr.** | |
| | **Debbi Fields** | |
| | **Henry Ford** | |
| | **Bill Cosby** | |
| | **Michael Dell** | |
| | **Mary Kay Ash** | |

Name: ______________________________ Date: ________________________

*Lesson 7 – Save and Invest: Entrepreneurs and the Economy*

# Handout 2: Interview with an Entrepreneur

Name of the entrepreneur: ________________________________________________________

Name of the business: ____________________________________________________________

Brief description of the business: ________________________________________________

______________________________________________________________________________

______________________________________________________________________________

When did you have the initial idea for your business? ________________________________

______________________________________________________________________________

______________________________________________________________________________

Where did you get the money required to start your business? _______________________

______________________________________________________________________________

______________________________________________________________________________

What challenges did you face as you started your business? __________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

What is a typical workday like for you? What types of responsibilities do you have? _______

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

# Lesson 8
# Save and Invest: Risk and Return

## Lesson Description
This lesson begins with a brainstorming session in which students identify the risks involved in playing sports or driving a car. From these responses, the concept of risk is defined as the possibility of an unintended outcome. After narrowing the discussion to the concept of financial risk, students work in pairs to analyze case studies to identify the risk factors faced by saver or investor. The lesson concludes with a chart that allows students to evaluate various financial assets for the potential risks and rewards.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Saving and Investing*
Standard 3: Evaluate investment alternatives.

## Instructional Objectives
Students will:
- Describe different types of financial risk
- Analyze a saving or investing scenario to identify financial risk
- Evaluate various financial assets to identify potential risks and rewards

## Time Required
One 50-minute class period

## Materials Required
- Class set of *Building Wealth* books
- Copies of classroom visuals
    - *Visual 1: Everyday Risks*
    - *Visual 2: Growth and Risk*
    - *Visual 3: Types of Financial Risk*
    - *Visual 4: Risk Levels*
- Copy of the following activity, cut into four sections
    - *Activity 1: Risk and Return of Wealth-creating Assets*
- Copies of the following handout for each student
    - *Handout 1: Risk and Return Case Studies*

## Procedure
1. Display *Visual 1: Everyday Risks*. Use the following questions to introduce the concept of risk. Record student answers on the visual or on the board.
    - How would you describe the risks of playing sports?
      *Student answers will vary but might include injury, death and defeat.*
    - How would you describe the risks of driving?
      *Student answers will vary but might include wrecks, repairs, tickets and higher gas prices.*
    - Does the person playing sports or driving the car know that these outcomes are possible? Does the person know that they will happen?
      *While they knew that the negative outcomes are possible, most people think that it will not happen to them.*

   Tell students that risk is the possibility of an unintended or unanticipated outcome.

2. Display *Visual 2*: *Growth and Risk*. Use the following questions to introduce the concept of financial risk.
    - Why does a saver purchase wealth-creating assets?
      *They hope that the asset will grow in value or provide a return*
    - What are some examples of wealth-creating assets?
      *Student answers will vary but might include stocks, bonds, art or collectibles, and houses or other real estate.*
    - When an asset grows in value and is sold for more than its purchase price, what is the profit called?
      *Capital gain*
    - What are two types of return from wealth-creating assets?
      *Some stock ownership provides a dividend payment. Bank deposits and bond ownership provide interest income.*
    - What would be the unintended outcome of owning a wealth-creating asset?
      *The asset will fail to produce a return or will lose value over time*

3. Divide students into four groups. Distribute one section from *Activity 1: Risk and Return Case Studies* to each group. Have each group work together to answer the question on the case study.

4. Display *Visual 3: Types of Financial Risks*. Tell students that there are four specific types of financial risk. Read the four definitions and have each group identify the specific type of financial risk that is faced by the saver in each case study.

5. Have a spokesperson from each group read the case study out loud and explain the type of financial risk that is demonstrated. Use information on the visual and the suggested answers to guide the discussion.

6. Display *Visual 4: Risk Levels*. Review the information on the visual. Tell students that every person might answer these questions differently.

## Closure

7. Review the major concepts of the lesson using the following questions:
    - What outcomes does a saver or investor want?
      *Growth in value and/or a return*
    - What are the four types of risk that a saver might face?
      *Default, capital loss, inflation and liquidity*

## Assessment

8. Distribute *Handout 1: Risk and Return of Wealth-creating Assets*. Allow students to complete the chart independently. Students can refer to *Building Wealth*, pages 12–14, for information.

**Visual 1: Everyday Risks**

## What risks do you take when you play sports?

## What risks do you take when you are driving?

## Visual 2: Growth and Risk

# *Wealth-creating assets* are possessions that provide a return or increase in value over time.

# *Financial risk* is the possibility that an asset will fail to produce a return or will lose value over time.

**Visual 3: Types of Financial Risk**

## *Risk of default*
When a saver loans money or buys a bond, the borrower might not repay the original amount or the promised interest.

## *Risk of capital loss*
When a saver buys an asset hoping for a capital gain, the market price of the asset can fall, resulting in a capital loss.

## *Risk of inflation*
When a saver earns a rate of return that is less than the rate of inflation, purchasing power is lost.

## *Risk of liquidity*
When a saver buys an asset for an investment, the asset must be sold to realize the capital gain. Market conditions affect the saver’s ability to sell the asset.

**Visual 4: Risk Levels**

Here are some things to think about when determining the amount of risk that best suits you.

## Financial goals

How much money do you want to accumulate over a certain period of time? Your investment decisions should reflect your wealth-creation goals.

## Time horizon

How long can you leave your money invested? If you will need your money in one year, you may want to take less risk than you would if you won't need your money for 20 years.

## Financial risk tolerance

Are you in a financial position to invest in riskier alternatives? You should take less risk if you cannot afford to lose your investment or have its value fall.

*Lesson 8 – Save and Invest: Risk and Return*

# Activity 1: Risk and Return Case Studies

**Case 1**
Several years ago, Chelsea was given a painting by a famous artist. She planned to keep it as an investment, hoping its value would increase so that she could sell it and make a profit. Several years later, Chelsea had costly emergency surgery, and she did not have enough money in her savings to pay for the procedure. Fortunately, the painting had substantially increased in value, and she decided to sell it. She found a reputable art dealer who told her that market conditions would make it difficult to sell the painting for its full value in the next six months. Chelsea needed the money immediately, so the art dealer offered to buy the painting at a deep discount.

How would you describe the financial risk that Chelsea faces?

**Case 2**
Paul's friend Gabby had an idea of creating a photography service that went to school functions, such as football games, pep rallies and dances, to take candid pictures. The pictures would be available to purchase the following week. She needed $300 to buy additional equipment and start an advertising campaign, so she asked Paul for a loan. She promised to pay him back the $300 and give him 25% of her profits from the first semester. Gabby sold a few pictures the first week of school but quit going to events to take pictures. She can't repay the loan, and there are no profits. Paul lost $300.

How would you describe the financial risk Paul faces?

**Case 3**
Mike spent every summer during high school mowing yards. He saved the money to pay for his living expenses during college. He decided to keep his money in certificates of deposit at his bank. The deposits earned 3% interest. He anticipated that he would have enough money for two years of living expenses. When he got to his college town, he realized that food and rent, along with many other prices, were much higher than he had originally estimated. Prices rose faster than the value of his savings.

How would you describe the financial risk Mike faces?

**Case 4**
Jennifer decided to buy $1,000 worth of stock in a company that makes very popular products. She believed that the company would grow and be profitable for the next several years. Several months later, she found out that the company lost a major case in court and will no longer be able to sell its most popular product. Jennifer decided to sell all her stock. When she called her stockbroker, she found out that her shares were worth $400.

How would you describe the financial risk that Jennifer faces?

*Lesson 8 – Save and Invest: Risk and Return*

# Activity 1: Risk and Return Case Studies Suggested Answers

**Case 1**
Several years ago, Chelsea was given a painting by a famous artist. She planned to keep it as an investment, hoping its value would increase so that she could sell it and make a profit. Several years later, Chelsea had costly emergency surgery, and she did not have enough money in her savings to pay for the procedure. Fortunately, the painting had substantially increased in value, and she decided to sell it. She found a reputable art dealer who told her that market conditions would make it difficult to sell the painting for its full value in the next six months. Chelsea needed the money immediately, so the art dealer offered to buy the painting at a deep discount.

How would you describe the financial risk that Chelsea faces? ***She cannot sell the painting for its full value as quickly as she needs to do so. Therefore, she faces a liquidity risk.***

**Case 2**
Paul's friend Gabby had an idea of creating a photography service that went to school functions, such as football games, pep rallies and dances, to take candid pictures. The pictures would be available to purchase the following week. She needed $300 to buy additional equipment and start an advertising campaign, so she asked Paul for a loan. She promised to pay him back the $300 and give him 25% of her profits from the first semester. Gabby sold a few pictures the first week of school but quit going to events to take pictures. She can't repay the loan, and there are no profits. Paul lost $300.

How would you describe the financial risk Paul faces? ***Paul has lost the money because Gabby cannot repay him, so he faces the risk of default.***

**Case 3**
Mike spent every summer during high school mowing yards. He saved the money to pay for his living expenses during college. He decided to keep his money in certificates of deposit at his bank. The deposits earned 3% interest. He anticipated that he would have enough money for two years of living expenses. When he got to his college town, he realized that food and rent, along with many other prices, were much higher than he had originally estimated. Prices rose faster than the value of his savings.

How would you describe the financial risk Mike faces? ***Since prices have risen and Mike has lost purchasing power, he faces the risk of inflation.***

**Case 4**
Jennifer decided to buy $1000 worth of stock in a company that makes very popular products. She believed that the company would grow and be profitable for the next several years. Several months later, she found out that the company lost a major case in court and will no longer be able to sell its most popular product. Jennifer decided to sell all her stock. When she called her stock broker, she found out that her shares were worth $400.

How would you describe the financial risk that Jennifer faces? ***The stock has declined in value, so if Jennifer sells the shares today, she will face the risk of a capital loss.***

Name: ___________________________________________ Date: ________________________

*Lesson 8 – Save and Invest: Risk and Return*

# Handout 1: Risk and Return of Wealth-creating Assets

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

| **Reward**<br>Interest<br>Dividend<br>Capital Gain | **Financial Assets** | **Risk**<br>Risk of default<br>Risk of capital loss<br>Risk of inflation<br>Risk of liquidity |
|---|---|---|
| | *Savings accounts* | |
| | *Money market accounts* | |
| | *Certificates of deposit (CDs)* | |
| | *Corporate bonds* | |
| | *Municipal bonds* | |
| | *Savings bonds* | |
| | *Treasury bonds, bills and notes* | |
| | *Stocks* | |
| | *Mutual funds* | |
| | *House and/or real estate* | |
| | *Your own business* | |
| | *Collectables such as rare coins, antiques or art* | |

*Lesson 8 – Save and Invest: Risk and Return*

# Handout 1: Risk and Return of Wealth-creating Assets Suggested Answers

| **Reward**<br>Interest<br>Dividend<br>Capital Gain | **Financial Assets** | **Risk**<br>Risk of default<br>Risk of capital loss<br>Risk of inflation<br>Risk of liquidity |
|---|---|---|
| Interest | **Savings accounts** | Lost purchasing power (if interest is low) |
| Interest | **Money market accounts** | Lost purchasing power (if interest is low) |
| Interest | **Certificates of deposit (CDs)** | Lost purchasing power (if interest is low) and liquidity (because of early withdrawal penalties) |
| Interest<br>Capital gains | **Corporate bonds** | Lost purchasing power (if interest is low), liquidity (because of length of bond term) and default |
| Interest<br>Capital Gains | **Municipal bonds** | Lost purchasing power (if interest is low), liquidity (because of length of bond term) and default |
| Interest | **Savings bonds** | Lost purchasing power (if interest is low) and liquidity (because of length of bond term) |
| Interest | **Treasury bonds, bills and notes** | Lost purchasing power (if interest is low or not indexed to inflation) and liquidity (because of length of bond term) |
| Capital gains<br>Dividend income | **Stocks** | Liquidity, default (if company goes bankrupt) and falling market price |
| Capital gains<br>Dividend income | **Mutual funds** | Liquidity and falling market price |
| Capital gains | **House and/or real estate** | Liquidity and falling market price |
| Capital gains<br>Dividends | **Your own business** | Liquidity, default (if company goes bankrupt) and falling market price |
| Capital gains | **Collectables such as rare coins, antiques or art** | Liquidity and falling market price |

# Lesson 9
# Take Control of Debt: Using Credit Wisely

## Lesson Description
In this lesson, students review the balance sheet (Lesson 1) and the budget worksheet (Lesson 2) and consider ways to use these two documents to analyze a decision to use credit. Working in pairs, students analyze a borrowing scenario and evaluate the wisdom of using credit in the situation.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Credit and Debt*
Standard 1: Identify the costs and benefits of various types of credit.

## Instructional Objectives
Students will:
- Analyze the impact of purchases financed with debt on a balance sheet.
- Describe the effect of debt payments on a budget.

## Time Required
One 50-minute class period

## Materials Required
- Class set of *Building Wealth* books
- Copy of the following activity, cut into five sections
  - *Activity 1: Use Credit Wisely*
- Copies of the following handouts for each student
  - *Handout 1: The Impact of Debt*

## Procedure
*Building Wealth*, pages 19–24, and the **Take Control of Debt** section of the CD-ROM contain information and visuals related to this lesson.

1. Review balance sheet concepts such as assets, liabilities, net worth and wealth using material from *Building Wealth* (pages 2–3). Discuss the impact of using credit on the balance sheet.
   - How does a loan or a purchase made with credit affect the liability side of the balance sheet?
     *When a person assumes a debt by taking out a loan or charging a purchase on a credit card, the debt increases the person's liabilities. Increased liabilities reduce a person's net worth or wealth.*
   - How does a loan or a purchase made with credit affect the asset side of the balance sheet?
     *Debt can be used to purchase items, such as a house or a car, that add value to the asset side of the balance sheet. New assets increase a person's net worth or wealth. If a new liability is matched with an increase in total value of assets, total net worth or wealth is not affected.*
   - What are some consumable items that might be purchased using credit that never add to the asset side of the balance sheet?
     *Answers will vary but might include restaurant meals, entertainment and daily living expenses.*

- What is depreciation? How does it affect net worth or wealth?
  *Depreciation is the loss in value of an asset due to age, wear and tear, or falling market price. As the value of a particular asset falls, total assets on the balance sheet are reduced and net worth falls. For example, a new car is purchased for $20,000. As the car is used, the age and increased mileage reduce the potential resale value. This loss of value reduces net worth.*

2. Review the budget worksheet by discussing Lynne's budget found on pages 8–9 of *Building Wealth*. Also, students could refer to the personal budget that they developed in Lesson 2. Discuss the impact of using credit on the budget worksheet.
   - How does debt affect a person's budget?
     *Credit card purchases and loans obligate a borrower to a series of payments until the loan is paid off.*
   - Look at Lynne's budget on page 8. If she decides to buy a house with a monthly mortgage and insurance payment of $1,100, what must change about her budget?
     *She will not pay rent of $680 or renter's insurance of $20, but the other $400 must come from some other budget line, such as clothing or meals out.*

3. Divide students into five groups and give one scenario from *Activity 1: Use Credit Wisely* to each group. Each group should decide if the person described in the scenario should borrow by considering the impact on the person's balance sheet and/or budget worksheet.

4. Have one member of each group read the scenario to the class. Other members of the group should explain their borrowing decision and the reasons for that decision. The teacher can use information from *Suggested Discussion Points* to guide the discussion and provide additional information.

## Closure

5. Review the major concepts of the lesson using the following questions:
   - How does a loan affect a borrower's balance sheet?
     *The debt increases the person's liabilities, which reduces a person's net worth or wealth.*
   - How does a loan affect a borrower's budget?
     *The loan requires payments. A borrower must decide if the payments are affordable considering all other obligations.*

## Assessment

6. Distribute *Handout 1: The Impact of Debt* to each student. Allow students to complete the activity in class or as homework.

*Lesson 9 – Take Control of Debt: Using Credit Wisely*

# Activity 1: Use Credit Wisely

Patrick is planning for his senior prom. He is taking the girl he has been dating since homecoming. He would like to take her to a nice restaurant before the dance, but he only has enough money in savings to rent his tux and buy the tickets to the dance. Dinner at the dance is included in the price of the prom tickets, but he really wants to go to a fancy dinner. He recently got a credit card to use for emergencies. Should he use the credit card to buy dinner?

> *Think about Patrick's balance sheet and budget. What are some advantages and disadvantages to borrowing? Should Patrick borrow?*

---

Carla graduated from high school and is halfway through a program to become a dental hygienist. She expects to earn about $55,000 after she graduates, but right now she needs a student loan to finish the last year of her associate's degree. She is confident that her summer internship in a dentist's office will lead to a full-time job.

> *Think about Carla's balance sheet and budget. What are some advantages and disadvantages to borrowing? Should Carla borrow?*

---

Joe's car is becoming increasingly unreliable. Twice in the past month, he has paid for expensive repairs. Joe drives almost 20 miles to work each way, and public transportation is not located close to his house or job. He has been saving to buy a more reliable car, but the repair bills have kept him from saving in the past month. He has found a reliable used car. When he talked to the loan officer at his bank, he found that he could get a loan with payments that are well within his budget.

> *Think about Joe's balance sheet and budget. What are some advantages and disadvantages to borrowing? Should he borrow?*

---

Alex has collected comic books for years. He regularly attends conventions and trade shows and is knowledgeable about the books' value on the open market. At the latest show, a dealer that he knows well showed him a particularly rare edition that is in mint condition. The dealer has offered him a fair price, and Alex expects the value to increase steadily over the next several years. Alex does not have the money right now, but if he charges the purchase, he can pay off the balance in three months and pay less than $5.00 in finance charges.

> *Think about Alex's balance sheet and budget. What are some advantages and disadvantages to borrowing? Should he borrow?*

---

Susan graduated from college last month, and she has a great new job. She has just moved into her new apartment and bought some furniture. She has been driving the same car since her freshman year, but it is still in good shape. She would like to buy a new car, but the furniture purchase used up her savings. She could still get a loan, but she will have to finance the car for 72 months, resulting in several thousand dollars in extra finance charges.

> *Think about Susan's balance sheet and budget. What are some advantages and disadvantages to borrowing? Should she borrow?*

*Lesson 9 – Take Control of Debt: Using Credit Wisely*

# Activity 1: Use Credit Wisely
# Suggested Discussion Points

### Should Patrick borrow?

*Advantage—his ability to consume something that he cannot presently afford*
*Disadvantage—negatively impacts his balance sheet by adding a new liability with no new asset*

Considerations:

- He got the credit card for emergency situations, not for consumption. By using the card for dinner, he will be changing his initial strategy. Is this advisable? Why or why not?
- How will he adjust his budget in the future to pay off the credit card? Does he have sufficient income?
- How much will it cost to borrow the money? What interest rate will he pay? How long will it take to pay off the charge? How much will the dinner eventually cost him?

### Should Carla borrow?

*Advantage—the opportunity to complete her degree and possibly earn more money*
*Disadvantage—the burden of the student loan payment if she does not get the expected job*

Considerations:

- Carla should research the terms of the student loan and calculate the total cost of borrowing.
- Can Carla manage the required loan payments with her expected new salary? How will the payments affect her anticipated budget?
- If she fails to get the job that she expects, does she have a plan to make the loan payments in a different employment situation?
- The higher income she expects could allow her to begin to save, thus positively affecting her balance sheet by increasing her assets and net worth.

### Should Joe borrow?

*Advantages—reduction of repair expenses, thus, freeing money for affordable loan payments*
*Disadvantage—obligation of a monthly car payment, which may be burdensome if other expenses arise or his income decreases*

Considerations:

- Has he considered all of the possible budget implications of the car purchase? In addition to the new payment, he should consider other expenses that might change, like insurance or fuel costs.
- Rather than buying a car, could he move closer to work so that he can walk or use public transportation, thus enabling him to continue saving for a car?
- Will the down payment deplete savings that he needs for unexpected expenses? Will the new payment allow him to continue some saving?
- Is his job secure? Could he make the payment if he lost his job?

*Lesson 9 – Take Control of Debt: Using Credit Wisely*

**Activity 1: Use Credit Wisely**

**Suggested Discussion Points**

**Page 2**

**Should Alex borrow?**

*Advantage—the opportunity to purchase an asset that* ***may*** *increase in value over time*
*Disadvantage—the risk of misjudging the market and purchasing an asset that loses value*

Considerations:

- Investing in collectables requires knowledge of the market and careful consideration of purchases. If the asset increases in value, his net worth will increase. However, Alex could have misjudged the market, and the asset could lose value.
- What has Alex done to minimize the finance charges that he will incur? What if he takes longer to repay the loan?
- Investing in collectables can limit liquidity. If he needs cash, could he quickly sell the books? Is this an important consideration for Alex?

**Should Susan borrow?**

*Advantage—ability to buy a car that she probably cannot afford*
*Disadvantage—negatively impacts her balance sheet and adds additional constraints to her ability to handle unexpected expenses*

Considerations:

- Borrowing enables her to buy a new car, but can she reasonably afford such a purchase? How will the new payments affect her budget and her ability to save? How could unanticipated expenses affect her budget if she does not have savings?
- How does the car purchase impact her balance sheet? With no down payment, the entire cost of the car will be added as a liability. While the car is an asset, the value of a new car begins to depreciate immediately.
- To have affordable payments, she has to finance the car for a longer period of time, thus increasing the total cost of purchasing the car.

Name: ______________________________________ Date: ____________________

*Lesson 9 – Take Control of Debt: Using Credit Wisely*

# Handout 1: The Impact of Debt

Use the words below to complete each sentence. Each term is defined in the glossary of *Building Wealth*.

| | | | |
|---|---|---|---|
| Asset | Balance sheet | Debt | Loan |
| Balance | Budget | Debt service | Net Worth |

1. ______________________ is the difference between the total assets and total liabilities of an individual.
2. ______________________ is the amount owed on a loan or credit card or the amount in a savings or investment account.
3. ______________________ is the periodic payment of the principal and interest on a loan.
4. ______________________ is money that is owed. It is also known as a liability.
5. ______________________ is a general name for anything an individual or business owns that has commercial or exchange value.
6. ______________________ is an itemized summary of probable income and expenses for a given period.
7. ______________________ is a sum of money lent at interest.
8. ______________________ is a financial statement showing a "snapshot" of the assets, liabilities and net worth of an individual or organization on a given date.
9. How does the purchase of a car with a loan affect the liability side of a buyer's balance sheet? How does the purchase affect the asset side of the balance sheet? What is the effect on net worth? How does the loan affect the budget?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

10. How does a credit card purchase of a concert ticket affect the buyer's balance sheet?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

11. What is depreciation? How does it affect net worth or wealth?

______________________________________________________________________________

______________________________________________________________________________

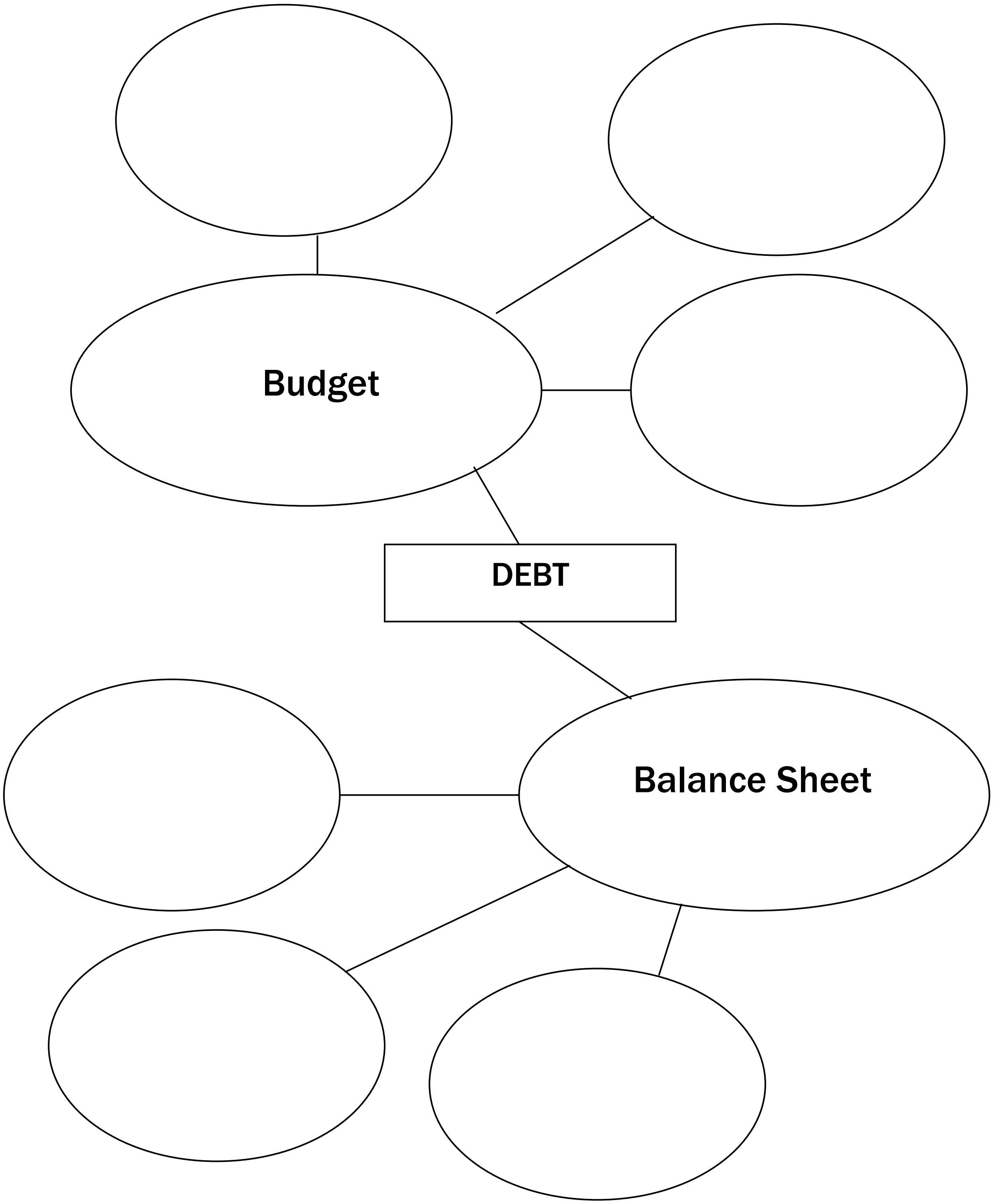
______________________________________________________________________________

*Lesson 9 – Take Control of Debt: Using Credit Wisely*

# Handout 1: The Impact of Debt

## Page 2

**Complete the graphic organizer with information about the impact of debt on a borrower's budget and balance sheet. Add additional cells as needed.**



*Lesson 9 – Take Control of Debt: Using Credit Wisely*

# Handout 1: The Impact of Debt
# Suggested Answers

1. ***_Net worth_*** is the difference between the total assets and total liabilities of an individual.

2. ***_Balance_*** is the amount owed on a loan or credit card or the amount in a savings or investment account.

3. ***_Debt Service _*** is the periodic payment of the principal and interest on a loan.

4. ***_Debt_*** is money that is owed. It is also known as a liability.

5. ***_Asset_*** is a general name for anything an individual or business owns that has commercial or exchange value.

6. ***_Budget _*** is an itemized summary of probable income and expenses for a given period.

7. ***_Loan _*** is a sum of money lent at interest.

8. ***_Balance sheet_*** is a financial statement showing a "snapshot" of the assets, liabilities and net worth of an individual or organization on a given date.

9. How does the purchase of a car with a loan affect the liability side of a buyer's balance sheet? How does the purchase affect the asset side of the balance sheet? What is the effect on net worth? How does the loan affect the budget?
   *The car loan increases the liabilities on the balance sheet, decreasing net worth. The car is an asset, which will increase net worth, but the value of the asset declines as the car gets older and is driven. The payments on the loan will become a new expense in the budget, requiring other adjustments, such as reduced spending or decreased savings.*

10. How does a credit card purchase of a concert ticket affect the buyer's balance sheet?
    *The credit purchase increases the liability side of the balance sheet, but since the concert ticket will be used (or will have no value after the concert), there is no corresponding increase on the asset side.*

11. What is depreciation? How does it affect net worth or wealth?
    *Depreciation is the loss of value in an asset as it becomes older or is used. As assets such as cars or electronics lose value, net worth is decreased.*

Graphic Organizer – student responses will vary in content and organization but should include information related to the following concepts:

- Budget worksheet – revenues, expenses, income, expenditures
- Balance sheet – assets, liabilities, net worth, wealth, depreciation, consumption

# Lesson 10
# Take Control of Debt: Do Your (Credit) Homework

## Lesson Description
In this lesson, students will shop for a loan, choosing from five fictitious credit offers. They will use a chart to record information about the terms of the various offers and will evaluate the terms of each credit option.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Credit and Debt*
Standard 1: Identify the costs and benefits of various types of credit.

## Instructional Objectives
Students will:
- Identify factors that differentiate credit offers and their impact on the total cost of credit.
- Evaluate financing offers for a major purchase.

## Time Required
One 50-minute class period

## Materials Required
- Copies of classroom visuals
  - *Visual 1: Credit Option #1*
  - *Visual 2: Credit Option #2*
  - *Visual 3: Credit Option #3*
  - *Visual 4: Credit Option #4*
  - *Visual 5: Credit Option #5*
  - *Visual 6: Comparing Credit Offers*
- Copies of the following student handouts for each student
  - *Handout 1: Comparing Credit Offers*
  - *Handout 2: Shopping for Credit*

## Procedure
*Building Wealth*, pages 19–24, and the **Take Control of Debt** section of the CD-ROM contain information and visuals related to this lesson.

1. Post *Visuals 1–5* along the front of the classroom. These visuals contain information about five consumer credit offers. Relate the following scenario to the students.

   *Your favorite football team is going to play in the big game next month, and you want to have a party. You have decided to buy a new high-definition television. After doing some research on various brands, you have found the perfect TV. The total cost is $1,000. Now you have to pay for it. You have several options. You are unable to pay cash, but you have seen several ads that offer financing options. You could use your bank credit card, apply for a loan from your bank or apply for one of the credit options at the store.*

   (Note: For large classes, multiple sets of visuals could facilitate students' movement around the room.)

2. Ask five students to quickly look over the five credit offers and do their best 30-second "sales job" to the class. Each salesperson should highlight the attractive features of each offer. After the sales talks, tell the class:

   *Look at the five financing options posted at the front of the room. Choose the one that you think is the best way to buy the TV. When you pick the financing offer, sign on one of the dotted lines at the bottom of the flier. If all of the signature spaces are filled, you must select a different offer. Once you have signed on the dotted line, return to your seat.*

3. Ask students why they chose each offer. Review the five options and briefly discuss the attractive features (low interest, low payment, etc.) of each one.

4. Distribute *Handout 1: Comparing Credit Offers* to each student and have students look at the five financing options that are posted. Students should complete the second and third columns of the chart (interest rate and monthly payment) using information from Visuals 1–5.

5. Display *Visual 6: Comparing Credit Offers*. Have students complete the other sections of the chart. These items can be computed from the information but require the use of a financial calculator or an online debt calculator. Discuss the total finance charges and length of repayment, using *Visual 6* and the following questions:

   - Which option has the lowest finance charges? Is there any drawback to that option?
     *Option #5 is the lowest cost (zero finance charges), but it has the highest monthly payment.*
   - What is attractive about Option #2?
     *It has a low monthly payment (4% of the balance means that payments would start at $40 per month) and low finance charges. However, the low interest rate in that offer is available to only "highly qualified applicants," and that is likely to be a very small percentage of applicants. Borrowers who qualify for this financing offer have demonstrated the capacity and the character to be good borrowers.*
   - How much more expensive is Option #3 than Option #2?
     *While the monthly payment amount is the same, the interest rate (expressed as the APR) is significantly higher. The higher interest rate leads to a more-than-five-year loan payoff (assuming the borrower makes the minimum payment each month) and finance charges that are more than 11 times higher than Option #2.*
   - Why is the total finance charge so much lower on Option #1 than in Option #3?
     *The interest rate is the same as Option #1, but the fixed monthly payment of $50 leads to a faster payoff and lower total finance charges. The required 4 percent minimum payment in #3 decreases the amount due each month as the balance falls, resulting in more monthly payments and higher total finance charges.*
   - What are the advantages to Option #4?
     *Option #4 has a very low monthly payment. The total finance charges could be reduced by opting for a slightly higher payment over a shorter loan term. For example, if the loan was for two years instead of three, the monthly payment would rise to $47.07, but the total finance charges would drop to $129.76. Also, this option is not available at the retail store. It is available at a commercial bank. Finding this option requires planning and research on the part of the consumer.*

- What are the advantages and disadvantages to Option #5?
  *Option #5 allows the borrower to avoid finance charges entirely. However, the monthly payment is higher than the other options. A borrower would need to make sure that this payment would fit his or her monthly budget.*

6. Brainstorm factors to consider when choosing a loan. Collect student responses on the board.
   *Suggested answers include the interest rate, the number of payments required to pay off the loan, the amount of the monthly payment and the total amount of finance charges.*

### Closure

7. Review the major concepts of the lesson using the following questions:
   - What loan terms should a borrower look for on a credit offer?
     *Answers will vary but should include minimum payment, length of loan and annual percentage rate (APR).*
   - Where can a borrower find information about the terms of a credit offer?
     *The terms are found in the disclosure statement that is included in every credit offer.*
   - What factors affect the total finance charges on credit?
     *The total amount of the loan, the interest rate and the length of the loan determine the total cost of credit.*

8. Tell students that to find the dollar amount of the monthly payment and the total amount of the finance charges, people who are considering a loan can use a financial calculator or an online payment calculator like the one found at http://dallasfed.org/educate/calculators/index.cfm.

### Assessment

9. Distribute *Handout 2: Shopping for Credit.* Allow students to complete the assignment as homework.

The television shopping activity is based on a presentation by Tim Shaunty of the Texas Council on Economic Education.

*Lesson 10 – Take Control of Debt: Do Your (Credit) Homework*

## Visual 1: Credit Option #1


**Disclosure:** 0% APR for six months from initial date of purchase; thereafter, 18% APR with a minimum finance charge of $1; minimum monthly payment of $100; no annual fees.

x.................................................... x....................................................

x.................................................... x....................................................

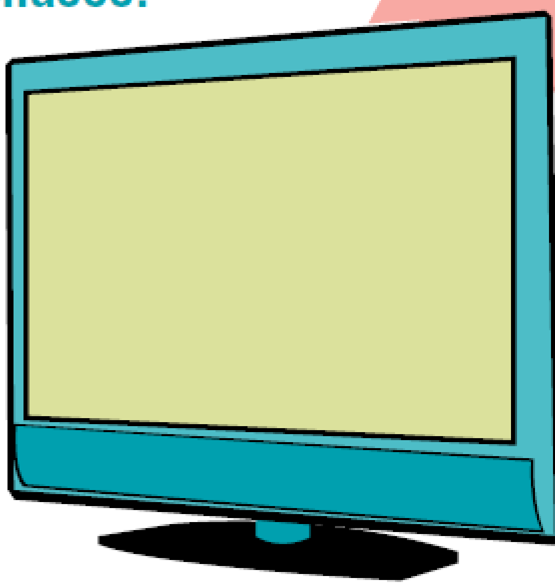
x.................................................... x....................................................

x.................................................... x....................................................

## Visual 2: Credit Option #2

### Do you have good credit?


**Qualified buyers receive 3% interest on all purchases!**



**Disclosure:** Available only to highly qualified applicants. 3% APR with a minimum finance charge of $1; minimum monthly payment of 4% of the balance; no annual fee.

X....................................................... X.......................................................

## Visual 3: Credit Option #3

Dear Customer,

Because you are a valued customer of XYZ Bank, we are pleased to enclose your new credit card with a spending limit of $7,500. It is accepted at merchants worldwide and offers flexible payments with a low minimum payment. You now have the freedom to take that dream trip or buy a new TV for the upcoming game. Thank you for your business.

Sincerely,

Your friends at XYZ Bank


P.S. Minimal monthly payment of 4% of balance required.
See additional terms below.

| | |
|---|---|
| Annual percentage rate (APR) for purchases | 21% |
| Other APRs | Cash-advance APR and Balance-transfer APR: 28%<br>Penalty rate: 32%. See explanation below.* |
| Variable-rate information | Your APR for purchase transactions may vary. The rate is determined monthly by adding 11.9% to the prime rate. ** |
| Grace period for repayment of balances for purchases | 25 days on average |
| Method of computing the balance for purchases | Average daily balance (excluding new purchases) |
| Annual fees | None |
| Minimum finance charge | $.50 |
| Transaction fee for cash advances: 3% of the amount advanced<br>Balance-transfer fee: 3% of the amount transferred<br>Late-payment fee and Over-the-credit-limit fee: $25 | |
| * Explanation of penalty. If your payment arrives more than 10 days late two times within a six-month period, the penalty rate will apply.<br>** The prime rate used to determine your APR is the rate published in the *Wall Street Journal* on the 10th day of the prior month. | |

X........................................................ X........................................................

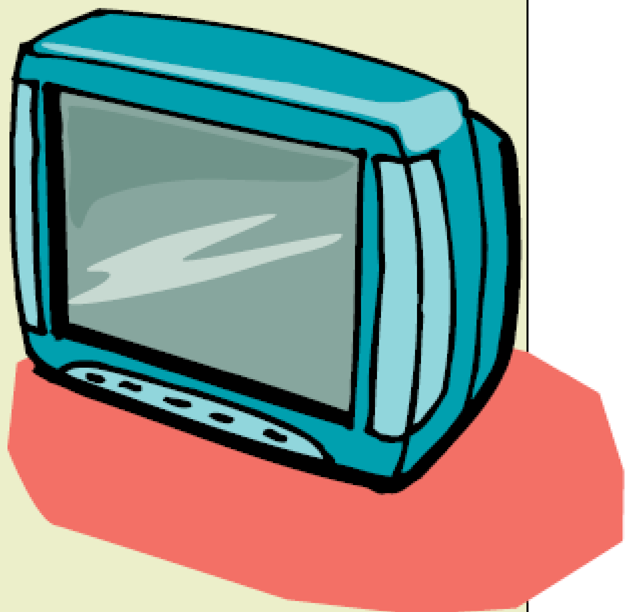
X........................................................ X........................................................

X........................................................ X........................................................

X........................................................ X........................................................

## Visual 4: Credit Option #4

**Get the television you want with a loan from ABC Bank!**



**Nothing down.**

**36 months to pay.**

**See a loan officer to apply!**

**Terms:** Zero down; 12% APR; 36 payments of $33.21 for every $1,000 borrowed.

x................................................... x...................................................

x................................................... x...................................................

x................................................... x...................................................

x................................................... x...................................................

## Visual 5: Credit Option #5

# ***Pay No Interest!***

# ***12 Months Same as Cash****

*Same as Cash offer on approved store card purchases. Subject to credit approval based on your credit worthiness, other terms may apply. No finance charges if purchase paid in full in 12 months. If purchase is not paid in full or your account is not kept current, finance charge will be assessed from purchase date.

*Variable APRs as of 01/01/09:*
*Standard Rate: 23.9%, Default Rate: 25.9%, Minimum Finance Charge $2*

X...................................................... X......................................................

X...................................................... X......................................................

X...................................................... X......................................................

X...................................................... X......................................................

**Visual 6: Comparing Credit Offers**

| | Interest Rate | Monthly Payment | Number of Payments | Total Finance Charges | Total Cost of the TV |
|---|---|---|---|---|---|
| Option #1 | 21% APR | $50 | 25 | $241.61 | $1,241.61 |
| Option #2 | 3% APR | 4% of the balance (Starts at $40 per month) | 63 | $58.48 | $1,058.48 |
| Option #3 | 21% APR | 4% of the balance (Starts at $40 per month) | 95 | $664.98 | $1,664.98 |
| Option #4 | 12% APR | $33.21 | 36 | $195.72 | $1,195.72 |
| Option #5 | 12 months same as cash | $83.33 ($1000/12) | 12 | 0 | $1,000.00 |

Note: All finance charges were computed assuming that the borrower made the minimum payment each month as specified in the credit offer. Finance charges might be lower if the loan is paid off early.

Name: ______________________________________ Date: ____________

*Lesson 10 – Take Control of Debt: Do Your (Credit) Homework*

## Handout 1: Comparing Credit Offers

| | Interest Rate (APR) | Monthly Payment | Number of Payments | Total Finance Charges | Total Cost of the TV |
|---|---|---|---|---|---|
| **Option #1** | | | | | |
| **Option #2** | | | | | |
| **Option #3** | | | | | |
| **Option #4** | | | | | |
| **Option #5** | | | | | |

Name: ______________________________________________ Date: ____________

*Lesson 10 – Take Control of Debt: Do Your (Credit) Homework*

## Handout 2: Shopping for Credit

Find three credit offers in newspaper advertisements. Attach the original ad and use the space below to identify key provisions of the offer.

**Ad #1**

Merchant or Creditor: ____________________________________________________________

Special provisions (such as reduced interest or delayed payments): __________________
__________________________________________________________________________________

Terms of credit (such as minimum payment, interest rates, number of payments, penalties):
__________________________________________________________________________________
__________________________________________________________________________________

**Ad #2**

Merchant or Creditor: ____________________________________________________________

Special provisions (such as reduced interest or delayed payments): __________________
__________________________________________________________________________________

Terms of credit (such as minimum payment, interest rates, number of payments, penalties):
__________________________________________________________________________________
__________________________________________________________________________________

**Ad #3**

Merchant or Creditor: ____________________________________________________________

Special provisions (such as reduced interest or delayed payments): __________________
__________________________________________________________________________________

Terms of credit (such as minimum payment, interest rates, number of payments, penalties):
__________________________________________________________________________________
__________________________________________________________________________________

**Questions to Consider**

How does making only the minimum payment affect the time required to pay off a credit card? How does this affect the total amount of finance charges?

__________________________________________________________________________________

What is the relationship of the interest rate and the total finance charges?

__________________________________________________________________________________

*Lesson 10 – Take Control of Debt: Do Your (Credit) Homework*

# Handout 2: Shopping for Credit
# Suggested Answers

## Credit Research

Student research should be assessed by considering the criteria:

- Did the student collect three credit advertisements from different creditors?
- Did the student identify relevant terms of credit from the disclosure information?
- Did the student identify special provisions that are designed to attract consumers?

## Questions to Consider

How does making only the minimum payment affect the time required to pay off a credit card? How does this affect the total amount of finance charges?

*Making only the minimum payment lengthens the time required to pay off the revolving balance. Since finance charges are incurred each month a balance is carried forward, a longer repayment results in greater finance charges.*

What is the relationship of the interest rate and the total finance charges?

*Higher interest rates increase the total finance charges on unpaid balances.*

# Lesson 11
# Take Control of Debt: Credit Reports

## Lesson Description
Students take on the role of lender in the introduction to this lesson as they consider the information that they would require before loaning various items to other people. The Three C's of Credit are introduced as a method of classifying information about borrowers, and the students read a selection and complete a graphic organizer about a borrower's information. After discussing the difference between credit reports and credit scores, students work in pairs to analyze a fictitious credit report. At the conclusion of the lesson, students are asked to create a brochure that describes ways to improve a borrower's credit report.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Credit and Debt*
Standard 2: Explain the purpose of a credit record and identify borrowers' credit report rights.

## Instructional Objectives
Students will:
- Identify information that is contained in and excluded from a credit report
- Distinguish between a credit report and a credit score
- Identify consumer actions that improve a credit report

## Time Required
One 50-minute class period

## Materials Required
- Copies of the following visuals
  - *Visual 1: Lending Decisions*
  - *Visual 2: Credit Reports*
- Copies of the following handouts for each student
  - *Handout 1: Applying for Credit*
  - *Handout 2: Personal Consumer Credit Report*

## Procedure
*Building Wealth*, pages 19–24, and the **Take Control of Debt** section of the CD-ROM contain information and visuals related to this lesson.

1. Display *Visual 1: Lending Decisions*. Ask students to think about their own willingness to lend these items and to consider information that they would like to know before loaning the items to someone else. Use the following questions to guide the discussion:

   - What information would you want to know before lending the pen, the money or the calculator to a friend? Do you feel differently about any of the items?
     *Answers will vary but should include considerations of the value of the item being lent and information about the borrower such as past experience.*

- What information would you want to know before lending the pen, the money or the calculator to someone in this class? Do you feel differently about any of the items? How are these loans different from lending to your friend?
  *Answers will vary but should once again include consideration of the item's value. However, the lender may or may not have a personal relationship with the borrower.*
- What information would you want to know before lending the pen, the money or the calculator to someone in the school? Do you feel differently about any of the items? How are these loans different from the loans to your friend or classmate?
  *Answers will vary but in addition to considering the item's value, the lender is increasingly unlikely to know the borrower. Students might suggest that they could talk to a friend of the borrower to get a reference. However, gathering borrower information is more difficult.*
- What information would you want to know before lending the pen, the money or the calculator to a stranger? Do you feel differently about any of the items? How are these loans different from the loans to your friend, your classmate or your schoolmate?
  *Answers will vary but should focus on the difficulty of gathering information about a borrower if something of value is being loaned.*
- How is the loan of an inexpensive pen different from the loan of a valuable calculator?
  *Answers will vary but should focus on the differing levels of potential loss to the lender.*

2. Tell students that banks and other lenders do not have personal knowledge about loan applicants. Information about borrowers generally falls into three categories called the **Three C's of Credit**. While lenders can consider a wide variety of facts, federal laws prohibit the use of certain personal information by a lender.

3. Distribute copies of *Handout 1: Applying for Credit* to each student. Have students work in pairs to complete the graphic organizer using the information in the text. Discuss responses using the *Suggested Answers* and the information below.

   - Capacity – Can you repay the debt?
     - *Employment information* (occupation, length of employment, salary)
     - *Expenses* (number of dependents, obligations such as alimony or child support, housing expenses, payments on other debt)
   - Character – Will you repay the debt?
     - *Credit history* (overall debt, frequency of borrowing, on-time payments, debt–income ratios)
     - *Signs of stability* (length of time at present address, own or rent home, length of present employment)
   - Collateral – Is the creditor fully protected if you fail to repay?
     - Security for the loan (other means, besides income, to repay the debt)
     - Types of collateral include savings, investments and property

   Discuss factors that cannot be considered by lenders. Federal law protects borrowers from discrimination based on a variety of characteristics.

4. Display *Visual 2: Credit Reports* and ask a student to read the three definitions to the class. Review the following points:
   - Anyone who has used credit will have a credit report.

- The credit report shows everything about a borrower's payment history, including late payments.
- The information in a credit report is used to create a borrower's credit score, which ranges from under 500 to 800 and above.
- Banks and other lenders use credit reports and scores to make lending decisions and to set interest rates on loans.
- Insurance companies, potential landlords, employers and others can consider credit scores.
- Consumers can request one free copy of their credit report from each of the credit reporting companies annually.

*5.* Distribute *Handout 2: Personal Consumer Credit Report.* Allow students to work in pairs to answer the questions. Review the suggested answers after students complete the work.

## Closure

6. Read the following statements to the class. Ask students to indicate whether each statement would reflect positively or negatively on a person's creditworthiness. Students should give a "thumbs up" to statements that would have a positive impact on a borrower's credit history. A "thumbs down" goes to statements that would have a negative impact.
   - Credit cards are charged to the maximum limit
   - Recently applied for many credit cards to receive free gifts
   - Has changed jobs often and is currently not working
   - Has never filed for bankruptcy
   - History of timely payments
   - Increasing levels of debt
   - Little credit history
   - Low balances on credit lines
   - Maintains a savings and checking account
   - Outstanding debt is large compared to current income
   - Owns a house and is current on the mortgage
   - Pays bills on time
   - Prior loans have been paid in full
   - Steady employment history

7. Tell students that credit reports and credit scores are important in many areas of their financial lives. Other businesses besides lenders rely on this information for decisions. Credit information might be considered by insurance companies that provide home and auto policies, landlords and even potential employers.

### Assessment

8. Have students work individually or in pairs to design an informative brochure called *Building Better Credit* that could be used to teach others how to improve their credit report and credit score. Suggestions in the brochure should include information about the Three C's. Additional information for the brochure can be found on the handout *5 Tips for Improving Your Credit Score*, found at http://www.federalreserve.gov/pubs/creditscore/.

   Student brochures should be assessed by considering the:

   - Is the information in the brochure accurate?
   - Is the information in the brochure complete and comprehensive?
   - Is the brochure well organized and visually appealing?

For more information on credit scoring, material from the Federal Trade Commission can be found at http://www.ftc.gov/bcp/edu/pubs/consumer/credit/cre24.shtm.

**Visual 1: Lending Decisions**

Think about three items:

- Pen
- $5 cash
- Graphing calculator

Would you lend any or all of those items to:

- your best friend?
- someone in this class?
- someone in this school?
- someone you do not know at all?

**Visual 2: Credit Reports**

**Credit reporting company**: an organization that compiles credit information on individuals and businesses and makes it available for a fee.

**Credit report**: a loan and bill payment history, kept by a credit reporting company and used by financial institutions and other potential creditors to determine the likelihood a future debt will be repaid.

**Credit score**: a number generated by a statistical model that objectively predicts the likelihood that a debt will be repaid on time.

**Reviewing your credit report:**
Consumers have the right to receive annually a free copy of their credit report from each of the three major credit reporting companies.

The three companies have set up a central website for ordering free reports at:
***www.annualcreditreport.com***

Name: ______________________________ Date: _________________________

*Lesson 11 – Take Control of Debt: Credit Reports*

# Handout 1: Applying for Credit

When you're ready to apply for credit, you should know what factors creditors think are important in deciding whether you're creditworthy. You should also know what factors they cannot legally consider in their decisions.

**What Law Applies?**
The Equal Credit Opportunity Act requires that all credit applicants be considered on the basis of their actual qualifications for credit and not be rejected because of certain personal characteristics.

**What Creditors Look For**
The Three C's. Creditors look for an ability to repay debt and a willingness to do so — and sometimes for a little extra security to protect their loans. They speak of the three C's of credit: capacity, character and collateral.

- **Capacity.** Can you repay the debt? Creditors ask for employment information: your occupation, how long you've worked and how much you earn. They also want to know your expenses: how many dependents you have, whether you pay alimony or child support and the amount of your other obligations.
- **Character.** Will you repay the debt? Creditors will look at your credit history: how much you owe, how often you borrow, whether you pay bills on time and whether you live within your means. They also look for signs of stability: how long you've lived at your present address, whether you own or rent your home and the length of your present employment.
- **Collateral.** Is the creditor fully protected if you fail to repay? Creditors want to know what assets, other than income, you have that could be used to pay back your loan, such as savings, investments or property. Creditors may require that you provide collateral, assets that you pledge to secure a loan.

Creditors use different combinations of these facts to reach their decisions. Some set unusually high standards; others simply do not make certain kinds of loans. Creditors also use different rating systems. Some rely strictly on their own instinct and experience. Others use a "credit-scoring" or statistical system to predict whether you're a good credit risk. They assign a certain number of points to each of the various characteristics that have proved to be reliable signs that a borrower will repay. Then they rate you on this scale. Different creditors may reach different conclusions based on the same set of facts. One may find you an acceptable risk, whereas another may deny you a loan.

**Information the Creditor Cannot Use**
The Equal Credit Opportunity Act does not guarantee that you will get credit. You must still pass the creditor's tests of creditworthiness. But the creditor must apply these tests fairly and impartially. The act bars discrimination based on age, gender, marital status, race, color, religion and national origin. The act also bars discrimination because you receive public income, such as veteran's benefits, welfare or social security, or because you exercise your rights under federal credit laws, such as filing a billing error notice with a creditor. This protection means that a creditor may not use any of these grounds as a reason to

- discourage you from applying for a loan
- refuse you a loan if you qualify
- lend you money on terms different from those granted another person with similar income, expenses, credit history, and collateral
- close an existing account because of age, gender, marital status, race, color, religion, national origin, receipt of public income or because you exercise your rights under federal credit laws.

Although creditors may not discriminate on the basis of national origin, they may consider your immigration status when making a loan decision.

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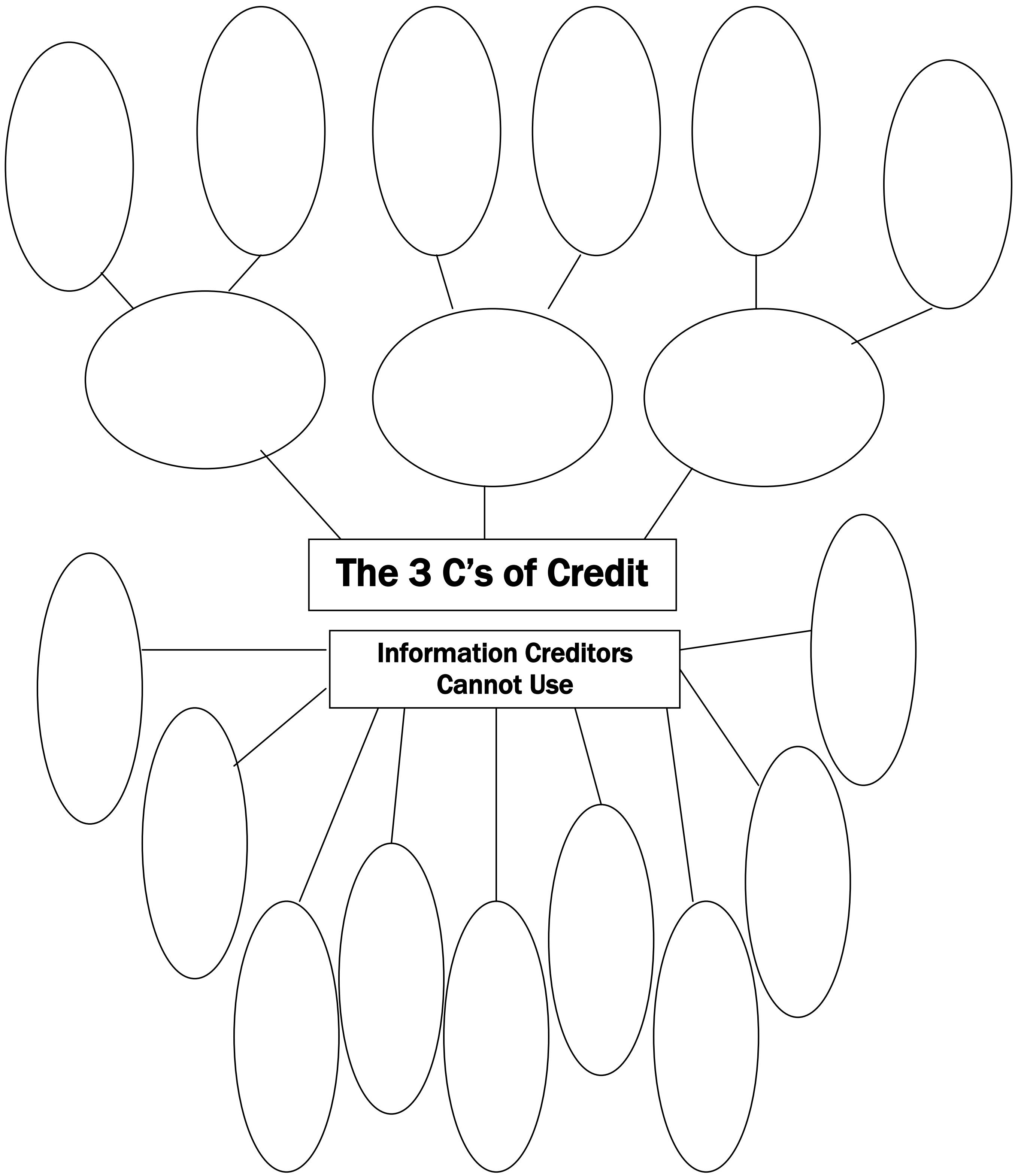
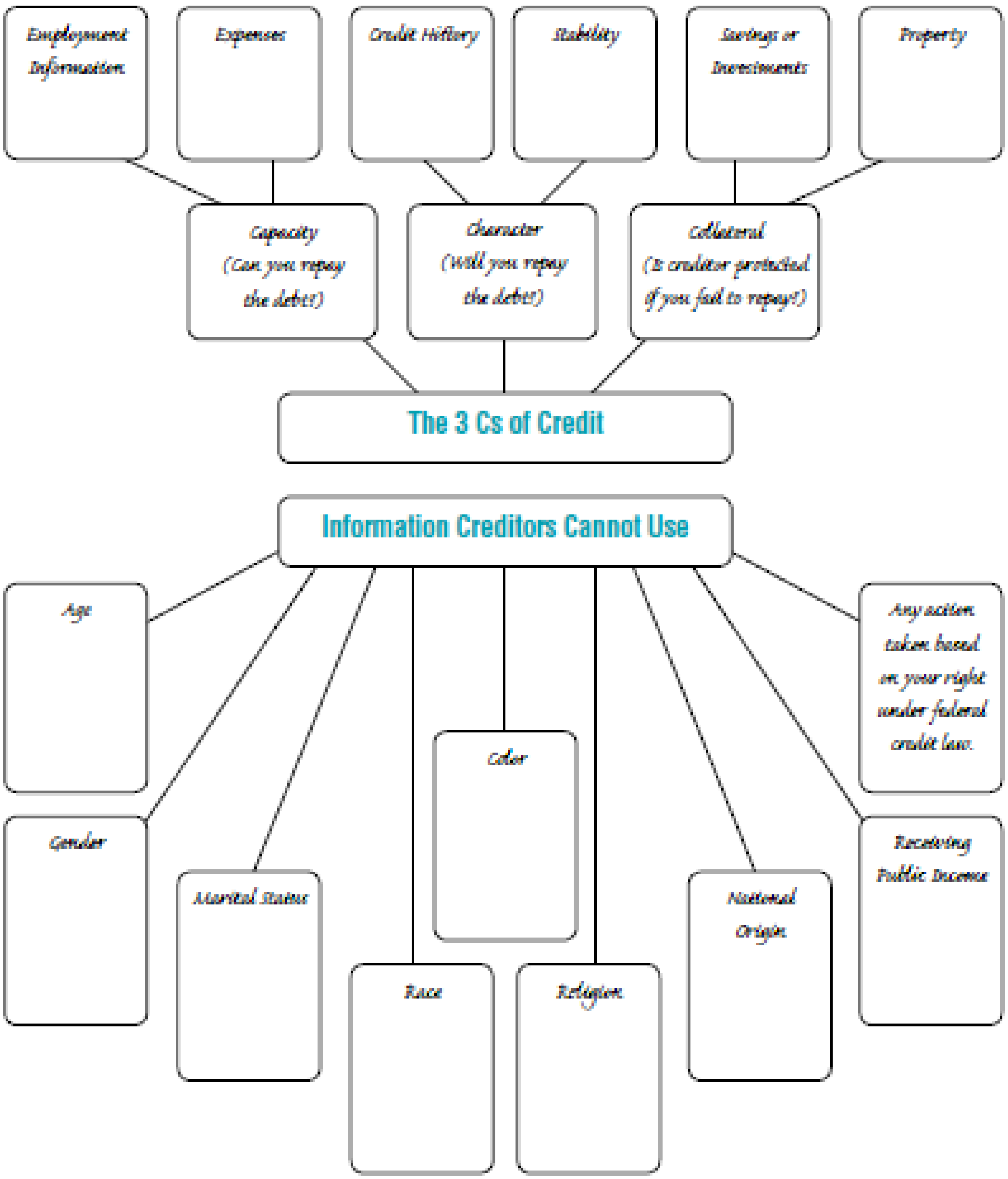
Excerpted from *Consumer Handbook to Credit Protection Laws*, Board of Governors of the Federal Reserve System. Available at www.federalreserve.gov/pubs/consumerhdbk/

## Handout 1: Applying for Credit
## Page 2



*Lesson 11 – Take Control of Debt: Credit Reports*

# Handout 1: Applying for Credit
## Suggested Answers



Name: ______________________________ Date: _________________________

*Lesson 11 – Take Control of Debt: Credit Reports*

# Handout 2: 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 tells the previous address and employment information.

**Personal Identification Information**

Name
1234 Any Street
Dallas, TX 75000

Social Security #: 123-45-6789
Date of Birth: 07/01/1980

Previous Address
456 Other Rd.
Houston, TX 77000

Employer: Acme, Inc.
Location: Dallas, TX

This section contains publicly available information about legal matters related to credit. It might include judgments, tax liens or bankruptcy history.

**Public Record Information**

Dallas County Clerk
Dallas, TX 75000

Civil Claim
Status: Paid
Amount: $1,000
Date: 04/01/2005

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
1000 Exchange Street
San Antonio, TX 78000

Account Number: 123456789
Date Opened: 5/2005
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
5000 Main Street
El Paso, TX 79000

Account Number: 123456789
Date Opened: 8/2000
Loan Type: Revolving credit card

| | |
|---|---|
| Balance | $845 |
| Credit Limit/Original Amount | $3,000 |
| High Balance | $1,100 |
| Terms | NA |
| Monthly Payment | $20 |
| Past Due | 0 |

| | |
|---|---|
| Gas Card of America | Account Number: 123456789 |
| 9999 Petroleum Street | Date Opened: 2/2004 |
| Fort Worth, TX 76000 | Loan Type: Revolving credit card |

| | |
|---|---|
| Balance | $175 |
| Credit Limit/Original Amount | $500 |
| High Balance | $352 |
| Terms | NA |
| Monthly Payment | $20 |
| Past Due | 0 |

Account history:
60 days as of 6/2006
30 days as of 5/2006

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

**Recent Credit Inquiries**

| | |
|---|---|
| 01/2008 | ABC Auto Finance |
| 10/2007 | Department Store, Inc. |
| 8/2007 | Home Loan Mortgage Company |

1. What is the 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?
4. Why would the information in Personal Identification Information be important to a lender?
5. Why would the information in Public Record Information be important to a lender?
6. Why would the information in Credit Account Information be important to a lender?
7. Why would the information in Recent Credit Inquiries be important to a lender?

*Lesson 11 – Take Control of Debt: Credit Reports*

# Handout 2: Personal Consumer Credit Report

Suggested Answers

1. What is the total credit limit on the two revolving credit card accounts? *$3,500*

2. What is the person's current debt? *$8,620*

3. Are there any accounts that are past due? *None*

4. Why would the information in **Personal Identification Information** be important to a lender?

   *Lenders might use this section to verify residential and employment information from the credit application. The date of birth and the Social Security number allow the lender to match a credit application to the credit report.*

5. Why would the information in **Public Record Information** be important to a lender?

   *This information could provide important information about a borrower's past credit issues, including such negative items as bankruptcy or tax liens.*

6. Why would the information in **Credit Account Information** be important to a lender?

   *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. This information describes the borrower's use of credit and payment history. It can also be used to determine a person's current monthly obligations and total indebtedness.*

7. Why would the information in **Recent Credit Inquiries** be important to a lender?

   *This section lists information about anyone who has accessed this credit report. Multiple credit inquires might indicate that other loans could be accessed in the future.*

# Lesson 12
# Take Control of Debt: Term Loans and the Costs of Borrowing

## Lesson Description
This lesson examines the features of a loan with a fixed period of repayment. After distinguishing these loans from revolving credit, students compare the benefits and costs of term loans with different interest rates and term lengths. Outside of class, students research the terms of an auto loan and compute financing costs and payment amounts using online resources.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Credit and Debt*
Standard 1: Identify the costs and benefits of various types of credit.

## Instructional Objectives
Students will:
- Compare term loans and revolving credit
- Distinguish between APR and finance charges
- Analyze the effect of differing APR and loan length on monthly payment and total finance charges
- Identify ways to reduce overall finance charges on a term loan

## Time Required
One 50-minute class period

## Materials Required
- Copies of classroom visuals
    - *Visual 1: Types of Consumer Credit*
    - *Visual 2: Comparing Credit Offers*
    - *Visual 3: Borrowing Decisions*
- Copies of the following handouts for each student
    - *Handout 1: The Cost of Credit*
    - *Handout 2: Loan Research*

## Procedure
*Building Wealth*, pages 19–24, and the **Take Control of Debt** section of the CD-ROM contain information and visuals related to this lesson.

1. Ask students to name some common types of credit. Record responses on the board.
   *Answers will vary but might include credit cards, car loans, mortgages and student loans*

2. Display *Visual 1: Types of Consumer Credit*. Discuss the differences between revolving credit and term loans using the information from the visual and the questions below. Classify student responses in #1 as term loans or revolving (open-end) credit.
    - What are the features of revolving credit?
      *Open-end credit is a line of available credit that is usually designed to be used over and over. It might be a credit card or a line of credit at a bank.*
    - What are the features of term loans?

*With a term loan, the loan amount, the number and dollar value of payments and the total finance charges are agreed upon at the start of the loan.*

3. Display *Visual 2: Comparing Credit Offers*. Review the information on the visual by emphasizing that the APR is stated as a percentage, while the finance charges are always stated in dollar amounts. Since the formula to compute these numbers is standardized, borrowers are able to compare offers from different creditors.

4. Tell students that this lesson will focus on the features of term loans. Display *Visual 3: Borrowing Decisions*. Ask students to read the text and answer the questions in their notes. Use the following questions to facilitate discussion:

   - What are the important features to consider when comparing term loans?
     *APR and total finance charges*
   - Why would some borrowers finance a car at a lender other than Pixley?
     *Pixley might not offer the same low APR to every borrower. The interest rate offered to a particular borrower is based on a variety of factors, including a borrower's credit score.*
   - Why would some people choose to pay more than $1,000 extra by selecting a 60-month loan instead of a 36-month loan?
     *The borrower's budget might not allow the higher monthly payment.*

5. Distribute *Handout 1: The Cost of Credit*. Have students work in pairs to answer the questions. After students are finished, review the correct answers using the key provided.

## Closure

6. Review the major concepts of the lesson, using the following questions:
   - What are the two types of credit?
     *Term loans and revolving credit*
   - How are the two types of credit different?
     *Answers may vary but should emphasize that a term loan typically has a fixed number of payments of a predetermined amount, while revolving credit has flexible payments with a minimum payment required.*
   - How can a borrower reduce the total finance charges for a term loan?
     *By shopping for a lower APR and limiting the term of the loan*
   - What factors affect the total finance charges on credit?
     *The total amount of the loan, the interest rate and the length of the loan determine the total cost of credit.*

## Assessment

7. Distribute *Handout 2: Loan Research*. Have students independently complete the assignment by conducting online research.

**Visual 1: Types of Consumer Credit**

**Revolving credit—a line of credit that may be used repeatedly, with a prearranged borrowing limit; periodic finance charges are computed on the unpaid balance; minimum payment is usually a percentage of the balance due**

Common types of revolving credit include:

- Credit cards (bank or department store)
- Home equity lines of credit
- Check-overdraft accounts that allow a borrower to write checks over the actual balance in the bank

**Term credit—a loan for a predetermined amount that requires specified payments at regular intervals over the life of the loan; finance charges are agreed upon at the start of the loan**

Common types of closed-end credit include:

- Mortgage loans
- Student loans
- Vehicle loans
- Loans for other major purchases

**Visual 2: Comparing Credit Offers**

Truth in Lending laws and regulations require all creditors to state, in writing and before the borrower signs any agreement, the cost of credit in terms of the **finance charge** and the **annual percentage rate** (APR).

**To compare credit offers, consider these two items:**

- **Finance charge**—the total **dollar amount** you pay to use credit. It includes interest costs and other costs, such as service charges and some credit-related insurance premiums.
- **Annual percentage rate (APR)**—the **percentage cost** of credit on a yearly basis. The APR is the key to comparing costs, regardless of the amount of credit or how long you have to repay it.

Federal law does not set interest rates or other credit charges, but it does require their disclosure so that you can compare credit costs.

## Visual 3: Borrowing Decisions

Betty wants to buy a new car. After her down payment, she wants to finance $15,000. What should she consider as she starts to shop for a loan?

She starts by looking at a 5-year loan from three lenders.

| Lender | APR | Finance charges |
|---|---|---|
| Pixley Bank and Trust | 6.5% | $2,609.53 |
| XYZ Savings and Loan | 7.5% | $3,034.15 |
| Joe's Auto Sales | 15.0% | $6,410.94 |

*What is the relationship between the interest rate and the total interest paid?*

Since Pixley Bank and Trust offered the lowest interest rate, she decides to finance the car with that bank. As she completes the paperwork for the loan, the loan officer asks her to choose the length of the loan term.

| Loan term | # of payments | Monthly payment | Finance charges |
|---|---|---|---|
| 3 years | 36 | $459.74 | $1,550.46 |
| 4 years | 48 | $355.72 | $2,074.77 |
| 5 years | 60 | $293.49 | $2,609.53 |

*What is the relationship between the loan term and the total interest paid?*

Name: ______________________________ Date: _________________________

*Lesson 12 – Take Control of Debt: Term Loans and the Costs of Borrowing*

# Handout 1: The Cost of Credit

Suppose you wanted to buy a new car. You have saved some money for a down payment, but you would like to finance $15,000. Consider the three loan offers below. To find the monthly payment, add the stated finance charges to the loan amount ($15,000) and divide by the number of payments.

**Pixley Bank and Trust**
5.9% APR for 36 months
Total finance charges are $1,403.39.

What is the total cost of the car loan (principal + finance charges)? __________________
What is the monthly payment (total cost/number of payments)? __________________

**XYZ Savings and Loan**
7.5% APR for 48 months
Total finance charges are $2,408.81.

What is the total cost of the car loan (principal + finance charges)? __________________
What is the monthly payment (total cost/number of payments)? __________________

**Joe's Auto Sales**
7.5% APR for 72 months
Total finance charges are $3,673.32

What is the total cost of the car loan (principal + finance charges)? __________________
What is the monthly payment (total cost/number of payments)? __________________

Now think about buying a house. After the down payment, you would like to finance $125,000. Compare the two offers below.

**Mary's Mortgage Company**
15-year loan with 6% APR (180 monthly payments)
Total finance charges are $64,867.79.

What is the total cost of the mortgage (principal + finance charges)? __________________
What is the monthly payment (total cost/number of payments)? __________________

**Fred's Finance Company**
30-year loan with 6.5% APR (360 monthly payments)
Total finance charges are $159,430.61.

What is the total cost of the mortgage (principal + finance charges)? __________________
What is the monthly payment (total cost/number of payments)? __________________

# Handout 1: The Cost of Credit
# Suggested Answers

**Pixley Bank and Trust**
5.9% APR for 36 months
Total finance charges are $1,403.39.

What is the total cost of the car loan (principal + finance charges)? $16, 403.39
What is the monthly payment (total cost/number of payments)? $455.65

**XYZ Savings and Loan**
7.5% APR for 48 months
Total finance charges are $2,408.81.

What is the total cost of the car loan (principal + finance charges)? $17,408.81
What is the monthly payment (total cost/number of payments)? $362.68

**Joe's Auto Sales**
7.5% APR for 72 months
Total finance charges are $3,673.32

What is the total cost of the car loan (principal + finance charges)? $18,673.32
What is the monthly payment (total cost/number of payments)? $259.35

Now think about buying a house. After the down payment, you would like to finance $125,000. Compare the two offers below.

**Mary's Mortgage Company**
15-year loan with 6% APR (180 monthly payments)
Total finance charges are $64,867.79.

What is the total cost of the mortgage (principal + finance charges)? $189,867.79
What is the monthly payment (total cost/number of payments)? $1,054.82

**Fred's Finance Company**
30-year loan with 6.5% APR (360 monthly payments)
Total finance charges are $159,430.61.

What is the total cost of the mortgage (principal + finance charges)? $284,430.61
What is the monthly payment (total cost/number of payments)? $790.09

Name: ______________________________ Date: _________________________

*Lesson 12 – Take Control of Debt: Term Loans and the Costs of Borrowing*

# Handout 2: Loan Research

Complete the following table using information from a commercial bank's website. Search for rates for a new car. Assume that you would like to finance $20,000. Find information for loans with terms of 36, 48, 60 and 72 months. Print and attach the online rate quote. Use the loan calculator at *www.dallasfed.org/educate/calculators/closed-calc.cfm* to compute the finance charges.

Name of bank or credit union: ______________________________________________

Website: _________________________________________________________________

| | **36 months** | **48 months** | **60 months** | **72 months** |
|---|---|---|---|---|
| **Amount financed** | $20,000 | $20,000 | $20,000 | $20,000 |
| **Annual Percentage Rate (APR)** | | | | |
| **Monthly payment** | | | | |
| **Total finance charges** | | | | |
| **Total cost of the car (finance charges + $20,000)** | | | | |

1. What is the difference between an APR and finance charges?

_________________________________________________________________

_________________________________________________________________

2. What happens to the total finance charges as a loan term lengthens?

_________________________________________________________________

_________________________________________________________________

3. What happens to the monthly payment as a loan term lengthens?

_________________________________________________________________

_________________________________________________________________

# Handout 2: Loan Research

## Page 2

4. What is the effect of a higher APR on total finance charges?

   ______________________________________________

   ______________________________________________

5. What is the effect of a higher APR on monthly payment?

   ______________________________________________

   ______________________________________________

6. What two factors can a borrower consider in order to minimize the cost of credit?

   ______________________________________________

   ______________________________________________

*Lesson 12 – Take Control of Debt: Term Loans and the Costs of Borrowing*

# Handout 2: Loan Research

## Suggested Answers

Student research on car loans should be assessed by considering the following items:

- Did the student collect lending rates for all four loan terms from a financial institution and attach the rate quote?
- Did the student accurately compute the monthly payment, the total finance charges and the total cost of purchasing the car?

1. What is the difference between an APR and finance charges?
   *The APR is the total cost of borrowing, stated as a percentage of the total loan amount. Finance charges are always stated in dollar amounts.*

2. What happens to the total finance charges as a loan term lengthens?
   *If everything else remains the same, finance charges increase as the loan term increases.*

3. What happens to the monthly payment as a loan term lengthens?
   *If everything else remains the same, a longer loan term reduces the monthly payment.*

4. What is the effect of a higher APR on total finance charges?
   *If everything else remains the same, finance charges increase as the APR increases.*

5. What is the effect of a higher APR on monthly payment?
   *If everything else remains the same, a higher APR increases the monthly payment.*

6. What two factors can a borrower consider in order to minimize the cost of credit?
   *The borrower could consider the length of the loan term and the APR offered by the lender.*

# Lesson 13
# Take Control of Debt: Revolving Credit and the Costs of Borrowing

## Lesson Description
After reviewing the difference between term loans and revolving credit, students analyze a fictitious character's use of credit to calculate the amount of interest the borrower paid. As a class, students will discuss the components of a disclosure form from a credit offer and brainstorm ways to minimize the cost of credit. Outside of class, students will research the terms of various revolving credit offers.

## National Standards in K-12 Personal Finance Education (www.jumpstart.org)
*Credit and Debt*
Standard 1: Identify the costs and benefits of various types of credit.

## Instructional Objectives
Students will:
- Compute the finance charges on an open-end account
- Identify ways to minimize finance charges on a revolving account
- Compare the terms of various revolving credit offers by analyzing disclosure statements

## Time Required
One 50-minute class period

## Materials Required
- Calculators for students
- Copies of the following classroom visuals
  - *Visual 1: Types of Consumer Credit*
  - *Visual 2: Disclosure of Revolving Credit Terms*
- Copies of the following handouts for each student
  - *Handout 1: The Cost of Credit Cards*
  - *Handout 2: Credit Card Research*

## Procedure
*Building Wealth*, pages 19–24, and the **Take Control of Debt** section of the CD-ROM contain information and visuals related to this lesson.

1. Display *Visual 1: Types of Consumer Credit*. Remind students that term loans were discussed in Lesson 12. These loans are fixed in length, and payment amounts and total finance charges are disclosed at the start of the loan.

2. Use the information on *Visual 1: Types of Consumer Credit* to review common types of open-end credit. Discuss the features of open-end credit. Open-end or revolving credit:
   - May be used repeatedly. As purchases are paid off, the credit can be used for new purchases
   - Typically has a prearranged borrowing (or credit) limit
   - Incurs a periodic finance charge that is computed as a percentage of the unpaid balance
   - Requires a minimum monthly payment that is usually a percentage of the balance due
   - Allows borrowers flexibility to select the monthly payment amount as long as the payment is greater than the minimum

3. Distribute *Handout 1: The Cost of Credit Cards* and calculators to students. Review the scenario on the handout with the class. Have students work in pairs to compute the items on the monthly statements and answer the four questions at the bottom of the handout.

   Use the following information to guide students. Each month, the credit card statement is built in several steps:
   - The new balance from the prior month is brought forward as the previous balance.
   - The payment is subtracted, resulting in the remaining balance.
   - The remaining balance is multiplied by the monthly interest rate of 1.5 percent to find the current finance charge.
   - The current finance charge and new purchases are added together to compute the new balance.
   - The minimum payment is computed as a percentage of the new balance.

4. Review the correct answers with the class. Remind students that open-end credit accounts have unique features (like minimum payments) that make them different from other types of loans. These features provide borrowers like Susan, the college freshman, budget flexibility. However, over time, making only the minimum payment can lead to long periods of repayment and high finance charges.

5. Ask students to describe ways for a consumer to minimize finance charges with revolving credit. Answers may vary but should include:
   - Minimize the amount that is charged.
   - Shop for the lowest APR.
   - Pay off the balance as quickly as possible.

6. Display *Visual 2: Disclosure of Revolving Credit Terms*. Tell students that it is important to comparison shop for credit cards by using the information found in the disclosure statement. Discuss the individual items using information below:
   - *APR for purchases*. The annual percentage rate you'll be charged if you carry over a balance from month to month. If the card has an introductory rate, you'll see both that rate and the rate that will apply after the introductory rate expires.
   - *Other APRs*. The APRs you'll be charged if you get a cash advance on your card, transfer a balance from another card or are late in making a payment. More information about the penalty rate may be stated outside the disclosure box—for

instance, in a footnote. In this example, if you make two payments that are more than 10 days late within six months, the APR will increase to 23.9%.

- *Variable-rate information*. Information about how the variable rate will be determined (if relevant). More information may be stated outside the disclosure box—for instance, in a footnote.
- *Grace period for repayment of balances for purchases*. The number of days you'll have to pay your bill for purchases in full without triggering a finance charge.
- *Method of computing the balance for purchases*. The method that will be used to calculate your outstanding balance if you carry over a balance and will pay a finance charge.
- *Annual fees*. The amount you'll be charged each 12-month period for simply having the card.
- *Minimum finance charge*. The minimum, or fixed, finance charge that will be imposed during a billing cycle. A minimum finance charge usually applies only when a finance charge is imposed, that is, when you carry over a balance.
- *Transaction fee for cash advances*. The charge that will be imposed each time you use the card for a cash advance.
- *Balance-transfer fee*. The fee that will be imposed each time you transfer a balance from another card.
- *Late-payment fee*. The fee that will be imposed when your payment is late.
- *Over-the-credit-limit fee*. The fee that will be imposed if your charges exceed the credit limit set for your card.

## Closure

7. Review the major concepts of the lesson, using the following questions:
    - What are the two types of credit?
      *Term loans and revolving credit*
    - How is revolving credit different from a term loan?
      *While term loans have a fixed number of payments of a predetermined amount, revolving credit has flexible payment amounts (with a minimum payment required). Because the borrower can choose the payment amount, the time required to pay off the loan and the total finance charges can vary greatly.*
    - How can a borrower reduce the total finance charges for open-end credit?
      *By shopping for lower APR and by paying more than the minimum payment to reduce the payoff time*
    - Where can a borrower find information about the terms of a credit offer?
      *The terms are found in the disclosure statement.*

## Assessment

8. Distribute *Handout 2: Credit Card Research*. Have students complete the assignment for homework by visiting retail stores or by conducting online research.
    - In order to complete this assignment in class, the teacher could collect credit offers from various merchants for student use.
    - The teacher could specify the particular types of creditors that students are required to research. Possibilities include retailers (department stores, electronics stores, gas stations) and banks that issue credit cards such as Visa or MasterCard.

This lesson plan was developed using a publication from the Federal Reserve Board of Governors, *Choosing a Credit Card*. It is available online at [www.federalreserve.gov/pubs/brochure.htm](www.federalreserve.gov/pubs/brochure.htm).

**Visual 1: Types of Consumer Credit**

**Revolving credit—a line of credit that may be used repeatedly, with a prearranged borrowing limit; periodic finance charges are computed on the unpaid balance; minimum payment is usually a percentage of the balance due**

Common types of revolving credit include:

- Credit cards (bank or department store)
- Home equity lines of credit
- Check-overdraft accounts that allow a borrower to write checks over the actual balance in the bank

**Term credit—a loan for a predetermined amount that requires specified payments at regular intervals over the life of the loan; finance charges are agreed upon at the start of the loan**

Common types of closed-end credit include:

- Mortgage loans
- Student loans
- Vehicle loans
- Loans for other major purchases

# Visual 2: Disclosure of Revolving Credit Terms

Under federal law, all solicitations and applications for credit cards must include certain key information in a disclosure box similar to the one shown.

| | |
|---|---|
| Annual percentage rate (APR) for purchases | 2.9% until 11/1/06<br>after that, **14.9%** |
| Other APRs | Cash-advance APR: 15.9%<br>Balance-transfer APR: 15.9%<br>Penalty rate: 23.9% See explanation below.* |
| Variable-rate information | Your APR for purchase transactions may vary.<br>The rate is determined monthly by adding<br>10.9% to the prime rate. ** |
| Grace period for repayment of balances for purchases | 25 days on average |
| Method of computing the balance for purchases | Average daily balance (excluding new purchases) |
| Annual fees | None |
| Minimum finance charge | $.50 |
| Transaction fee for cash advances: 3% of the amount advanced<br>Balance-transfer fee: 3% of the amount transferred<br>Late-payment fee: $25<br>Over-the-credit-limit fee: $25 | |
| * Explanation of penalty. If your payment arrives more than 10 days late two times within a six-month period, the penalty rate will apply.<br>** The prime rate used to determine your APR is the rate published in the *Wall Street Journal* on the 10th day of the prior month. | |

Source: *Choosing a Credit Card*, Board of Governors of the Federal Reserve System, 2004. Available at www.federalreserve.gov/pubs/shop/

Name:___________________________________ Date:________________________

*Lesson 13 – Take Control of Debt: Revolving Credit and the Costs of Borrowing*

## Handout 1: The Cost of Credit Cards

**Susan, a freshman in college, got a new credit card over the summer. Use the following information to complete the tables below and discover what happened during her first semester.**

Her credit card has an 18% APR with a minimum payment of 3% of the balance or $10, whichever is greater. Each month, interest charges are computed as 1.5% (18% ÷ 12 months) of the unpaid balance on her statement, before new charges are added.

In August, she bought books for her classes ($250) and some items for her dorm room ($90). Because she had not used her card before, she had a zero balance at the beginning of the month. Her first bill came on August 31. She could either pay the total balance or a minimum payment of 3% of that balance. She was a little short of cash, so she only paid the minimum due on her credit card.

| **August 31 Statement** | |
|---|---|
| Previous balance | 0 |
| Current finance charge | 0 * .015 = 0 |
| New charges | $340.00 |
| New balance | $340.00 |
| Minimum payment | $340 * .03 = $10.20 |

In September, Susan wanted to go to the first out-of-town football game with some friends. She paid for the hotel room ($85) with her credit card, and her friend bought the gas and the game tickets. On her statement dated September 30, finance charges were added to the unpaid balance from August. Her new balance included her previous balance less her payment, the finance charges and new purchases. She could pay the entire balance, or she could pay the minimum due. Once again, she knew that she should pay the entire balance, but she decided that she would take care of that later. She paid the minimum payment.

| **September 30 Statement** | |
|---|---|
| Previous balance | |
| Payment | |
| Remaining balance | $329.80 |
| Current finance charge | |
| New charges | |
| New balance | |
| Minimum payment | |

# Handout 1: The Cost of Credit Cards
# Page 2

In October, it was homecoming at the university. Susan wanted new clothes for the weekend. She charged a sweater to wear to the game ($50) and a dress for the dance ($149). For one more month, Susan paid only the minimum.

| October 31 Statement | |
|---|---|
| Previous balance | |
| Payment | |
| Remaining balance | |
| Current finance charge | |
| New charges | |
| New balance | |
| Minimum payment | |

When she took her car to have the oil changed before she drove home for Thanksgiving, the mechanic told her that her tires were not safe and she needed new ones before the long drive. The oil change and the tires totaled $425.

| November 30 Statement | |
|---|---|
| Previous balance | |
| Payment | |
| Remaining balance | |
| Current finance charge | |
| New charges | |
| New balance | |
| Minimum payment | |

Complete the following table using information from Susan's monthly statements.

| | |
|---|---|
| Total purchases | |
| Balance at the end of November | |
| Difference between purchases and balance (How much has she paid off?) | |
| Finance charges in four months | |
| Total of all monthly payments | |

Did you know…?
If Susan never charges anything else and continues to make only the minimum payment, it will take her more than 10 years (122 months) to pay off the credit card. During that time, she will pay $826.74 in finance charges.

# Handout 1: The Cost of Credit Cards
# Suggested Answers

| August | |
|---|---|
| Previous balance | *0* |
| Current finance charge | *0 * .015 = 0* |
| New charges | *$340.00* |
| New balance | *$340.00* |
| Minimum payment | *$340 * .03 = $10.20* |

| September | |
|---|---|
| Previous balance | *$340.00* |
| Payment | *$10.20* |
| Remaining balance | *$329.80* |
| Current finance charge | *$4.95* |
| New charges | *$85.00* |
| New balance | *$419.75* |
| Minimum payment | *$12.59* |

| October | |
|---|---|
| Previous balance | *$419.75* |
| Payment | *$12.59* |
| Remaining balance | *$407.16* |
| Current finance charge | *$6.11* |
| New charges | *$199.00* |
| New balance | *$612.27* |
| Minimum payment | *$18.37* |

| November | |
|---|---|
| Previous balance | *$612.27* |
| Payment | *$18.37* |
| Remaining balance | *$593.90* |
| Current finance charge | *$8.91* |
| New charges | *$425.00* |
| New balance | *$1027.81* |
| Minimum payment | *$30.83* |

| | |
|---|---|
| Total purchases | *$1049.00* |
| Balance at the end of November | *$1027.81* |
| Difference between purchases and balance (How much has she paid off?) | *$21.19* |
| Finance charges in four months | *$19.97* |
| Total of all monthly payments | *$41.16* |

Name:______________________________________ Date:__________________________

*Lesson 13 – Take Control of Debt: Revolving Credit and the Costs of Borrowing*

# Handout 2: Credit Card Research

Complete the following table using disclosure statements from credit card offers. Select one application from each of the three revolving-credit offers. Attach the original offer or print and attach the online disclosure.

| | Card A | Card B | Card C |
|---|---|---|---|
| **Name of the Issuer** | | | |
| **APR for purchases** | | | |
| **Other APRs** | | | |
| **Variable-rate information** | | | |
| **Grace period for repayment of balances for purchases** | | | |
| **Method of computing the balance for purchases** | | | |
| **Annual fees** | | | |
| **Minimum finance charge** | | | |
| **Transaction fee for cash advances** | | | |
| **Balance-transfer fee** | | | |
| **Late-payment fee** | | | |
| **Over-the-credit-limit fee** | | | |
| **Other features of the card (rebates, frequent flier miles, insurance, etc.)** | | | |

# Lesson 13 – Take Control of Debt: Revolving Credit and the Cost of Borrowing
# Optional Activity – Lending Lingo

## Instructions

1. Before playing the game
   - Each set of Lending Lingo cards contains 11 term cards and 11 definition cards. Copy enough sets of cards so that when the class is divided into pairs, each pair will have one set.
   - After making the copies, cut the cards apart and shuffle them. Place each set of 22 cards in a separate envelope.

2. Divide the students into pairs and give each pair a set of 22 cards. Students should spread out the cards face down on a desk.

3. Review the game instructions with students
   - Student 1 turns over two cards. If the cards contain a term and a matching definition, the student keeps both cards and continues his or her turn. Student 1 continues to play until the term card and the definition card that are drawn do not match.
   - The two cards that do not match are returned to the table face down.
   - Student 2 takes a turn and continues until a pair of cards is drawn that do not match.
   - Continue play until all terms are matched to the correct definition.
   - The student with the most pairs of cards is the winner of that round.

4. Student pairs could play additional rounds with other card sets.

5. The uncut original handout can serve as a key to confirm pairs. A copy of the key could be included in each envelope at the teacher's discretion.

**Optional Activity – Lending Lingo**

# Card Set 1

| | |
|---|---|
| Promissory note | Written promise on a financial instrument to repay the money plus interest |
| Principal | Unpaid balance on a loan, not including interest |
| Finance charge | Total dollar amount credit will cost |
| Mortgage | Temporary and conditional pledge of property to a creditor as security for the repayment of a debt |
| Loan | Sum of money lent at interest |
| Collateral | Property, such as stocks, bonds or a car, offered to support a loan and subject to seizure if you default. |
| Debit card | Plastic card similar to a credit card that allows money to be withdrawn or the cost of purchases paid directly from the holder's bank account |
| Credit card | Plastic card from a financial services company that allows cardholders to buy goods and services on credit |
| Creditor | Person, financial institution or other business that lends money |
| Creditworthiness | Past, present and future ability to repay debts |
| Credit reporting company | Organization that compiles credit information on individuals and businesses and makes it available for a fee |

Lesson 13 – Take Control of Debt: Revolving Credit and the Cost of Borrowing

## Optional Activity – Lending Lingo

# Card Set 2

| | |
|---|---|
| Credit score | Number generated by a statistical model that objectively predicts the likelihood that a debt will be repaid on time |
| Debt | Money owed; also known as a liability |
| Liability | Money an individual or organization owes; same as debt |
| Prime rate | Lowest interest rate on bank loans, offered to preferred borrowers |
| Term loan | Loan for a predetermined amount that requires specified payments at regular intervals over the life of the loan |
| Credit report | Loan and bill payment history, kept by a credit reporting company and used by financial institutions and other potential creditors to determine the likelihood a future debt will be repaid |
| Open-end credit | Line of credit that may be used repeatedly, including credit cards, overdraft credit accounts, and home equity lines; also called revolving credit |
| Overdraft checking | Line of credit that allows checks to be written for more than the account balance, with an interest charge on the overdraft |
| Foreclosure | Legal process used to force the payment of debt secured by collateral whereby the property is sold to satisfy the debt |
| Bankruptcy | Legal proceeding declaring that an individual is unable to pay debts |
| Balloon payment | Large extra payment that may be charged at the end of a loan or lease |

Lesson 13 – Take Control of Debt: Revolving Credit and the Cost of Borrowing
**Optional Activity – Lending Lingo**
# Card Set 3

| | |
|---|---|
| Disclosures | Information that must be given to consumers about their financial dealings |
| Credit insurance | Health, life, accident or disruption of income insurance designed to pay the outstanding balance on a debt. |
| Credit | Granting of money or something else of value in exchange for a promise of future repayment |
| Home equity line of credit | Form of open-end credit in which the home serves as collateral |
| Balance sheet | Financial statement showing a “snapshot” of the assets, liabilities and net worth of an individual or organization on a given date |
| Interest | Fee for the use of money over time; an expense to the borrower and revenue to the lender |
| Default | Failure to repay a loan or otherwise meet the terms of your credit agreement |
| Joint account | Credit account held by two or more people so that all can use the account and all assume legal responsibility to repay |
| Annual percentage rate (APR) | Cost of credit expressed as a yearly percentage rate |
| Cosigner | Another person who signs your loan and assumes equal responsibility for it |
| Balance | Amount owed on a loan or credit card |

# Assessment Activities

Name:___________________________________ Date:________________________

## Building Wealth: Budget to Save Assessment

Match the term to the correct definition. Write the letter of the definition next to the term. (4 points each)

1. _____ Strugglers
2. _____ Impulsives
3. _____ Wealth-creating asset
4. _____ Asset
5. _____ Liability
6. _____ Net worth
7. _____ Budget
8. _____ Income
9. _____ Expenses
10. _____ Planner

a. Itemized summary of probable income and expenses for a given period
b. The difference between total assets and total liabilities of an individual
c. Money an individual or organization owes; same as debt
d. Anything an individual or business owns that has commercial or exchange value
e. Those who find it difficult to budget to save
f. Spending items that appear in a personal budget
g. Those who budget to save
h. Money received as salary or other payment
i. Those who seek immediate gratification
j. Possession that generally increases in value or provides a return

11. Consider the following scenario: Taylor has just graduated from college and started her new job. She wants to save money for an emergency fund. She has student loans that she wants to pay off in the next three years, and she would like to buy a home in eight years. She wants to start her own business after working for 10 years and needs to save money for start-up costs. Name two short-term and two long-term financial goals. (10 points)

Short-Term ______________________________________________

______________________________________________

Long-Term ______________________________________________

______________________________________________

**Building Wealth: Budget to Save**
**Assessment**
**Page 2**

12. How can a saver like Taylor use a budget and a balance sheet as she works toward her financial goals? (15 points)

13. On this balance sheet, circle the assets and draw a line through the liabilities. Compute the total net worth. (20 points)

| **Balance Sheet** | |
|---|---|
| Student loan | $20,000 |
| Certificate of deposit | 2,000 |
| Car | 20,000 |
| House | 150,000 |
| Auto loan | 10,000 |
| Mortgage | 120,000 |
| 401(k) retirement account | 20,000 |
| Credit card balances | 8,000 |
| Savings account | 3,000 |
| ***Net Worth*** | |

14. How are wealth-creating assets different from other assets? (15 points)

**Building Wealth: Budget to Save**
**Assessment**
**Suggested Answers**

1. E
2. I
3. J
4. D
5. C
6. B
7. A
8. H
9. F
10. G

11. Short-Term: Saving money for an emergency fund and paying off student loans early
    Long-Term: Buy a house in eight years and start a business using savings to pay start-up costs

12. Student answers will vary but should include these concepts. A budget is used to plan income and expenses. It is also useful as a saver looks for ways to increase income or reduce spending to allow more saving. A balance sheet measures progress toward a goal of increased net worth or total wealth.

13. Student should draw a line through the following four items:

| | |
|---|---|
| Student loan | Auto loan |
| Mortgage | Credit card balances |

    Student should circle the following five items

| | |
|---|---|
| Certificate of deposit | Car |
| House | 401(k) retirement account |
| Savings account | |

    The total net worth is <u>$37,000</u>.

14. Wealth-creating assets grow in value or provide a return. Other assets lose value as they depreciate.

Name:___________________________________ Date:________________________

# Building Wealth: Save and Invest Assessment

Write the correct term from this list next to the definition. (4 points each)

| | |
|---|---|
| Certificate of deposit (CD) | Common stock |
| Compound interest | Coupon rate |
| Discount | Dividend |
| Dow Jones industrial average | Federal Deposit Insurance Corp. (FDIC) |
| Interest | Maturity |
| Par value | Premium |
| Return | Risk |
| Treasury bond | |

1. __________ Type of savings account that earns a fixed interest rate over a specified period of time
2. __________ Sale of a bond when the purchase price is more than its face value
3. __________ Possibility of loss on an investment
4. __________ Share of profits paid to a stockholder.
5. __________ Time when a note, bond or other investment option comes due for payment to investors
6. __________ Nominal, or face, value of a stock or bond, expressed as a specific amount on the security
7. __________ Interest computed on the sum of the original principal and accrued interest
8. __________ Sale of a bond when the purchase price is less than its face value
9. __________ Rate of interest stated on the face of the bond
10. __________ Profit made on an investment
11. __________ Financial instrument that represents ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met
12. __________ Fee for the use of money over time
13. __________ Government security with a term of more than 10 years; interest is paid semiannually.
14. __________ Index based on the stock prices of 30 leading industrial companies
15. __________ Federally chartered corporation that insures bank deposits

16. What are the three types of returns that investors can earn? (9 points)

17. Name two benefits of using a bank. (6 points)

18. Name three items that an investor might look for on a stock table when considering a stock purchase. (9 points)

19. What is the difference between a bond's coupon rate and its yield? (6 points)

20. What role does an entrepreneur play in the economy? (10 points)

## Building Wealth: Save and Invest
## Assessment
## Suggested Answers

1. Certificate of deposit (CD)
2. Premium
3. Risk
4. Dividend
5. Maturity
6. Par value
7. Compound interest
8. Discount
9. Coupon rate
10. Return
11. Common stock
12. Interest
13. Treasury bond
14. Dow Jones industrial average
15. Federal Deposit Insurance Corporation (FDIC)

16. Dividend payments, interest payments and capital gains

17. Answers will vary but could include keeping money safe from loss or theft, making payments easily and inexpensively, maintaining records of financial transactions, depositing paychecks directly, building savings, earning interest and establishing credit.

18. Answers will vary but could include closing price, 52-week high and low, stock symbol, price–earnings ratio, volume, previous-day high and low, closing price and change in price.

19. The coupon rate is the stated rate of return. The bond yield is the rate of return based upon the market (or purchase) price of the bond and the amount of the coupon payment.

20. The entrepreneur is an innovator and risk-taker who combines the factors of production to bring forth new products or techniques that benefit society.

Name:________________________________ Date:______________________

## Building Wealth: Take Control of Debt Assessment

Use the following terms to answer questions 1–12. (3 points each)

| | |
|---|---|
| Annual percentage rate (APR) | Balance |
| Bankruptcy | Collateral |
| Cosigner | Credit report |
| Disclosures | Finance Charge |
| Mortgage | Open-End Credit |
| Principal | Term loan |

1. ______Total dollar amount credit will cost
2. ______Property, such as stocks, bonds or a car, offered to support a loan and subject to seizure if you default.
3. ______Line of credit that may be used repeatedly, including credit cards, overdraft credit accounts, and home equity lines; also called revolving credit
4. ______Information that must be given to consumers about their financial dealings
5. ______Cost of credit expressed as a yearly percentage rate
6. ______Another person who signs your loan and assumes equal responsibility for it
7. ______Unpaid balance on a loan, not including interest
8. ______Temporary and conditional pledge of property to a creditor as security for the repayment of a debt
9. ______Loan for a predetermined amount that requires specified payments at regular intervals over the life of the loan
10. ______Loan and bill payment history, kept by a credit reporting company and used by financial institutions and other potential creditors to determine the likelihood a future debt will be repaid
11. ______Legal proceeding declaring that an individual is unable to pay debts
12. ______Amount owed on a loan or credit card

**Building Wealth: Take Control of Debt**
**Assessment**
**Page 2**

13. How does debt impact a borrower's balance sheet? (10 points)

14. How could a loan affect a borrower's budget? (10 points)

15. Name the Three C's of Credit. Describe two items that would demonstrate a borrower's creditworthiness for each one. (15 points)

16. What is the difference between the annual percentage rate (APR) and finance charges on a loan? (4 points)

17. Classify the following items as term loans or revolving (open-end credit). Circle the correct answer. (1 point each)
    a. Check-overdraft account Term or Revolving
    b. Mortgage Term or Revolving
    c. Bank credit card Term or Revolving
    d. Home equity lines of credit Term or Revolving
    e. Student loan Term or Revolving
    f. Store credit card Term or Revolving
    g. Auto loan Term or Revolving

18. What is the difference between a credit score and a credit report? (3 points)

19. Describe strategies that a borrower can use to reduce the overall cost of borrowing. (15 points)

## Building Wealth: Take Control of Debt
## Assessment
## Suggested Answers

1. Finance charges
2. Collateral
3. Open-end credit
4. Disclosures
5. APR
6. Cosigner
7. Principal
8. Mortgage
9. Term loan
10. Credit report
11. Bankruptcy
12. Balance
13. Debt increases liabilities and therefore can reduce net worth. However, debt can be used to purchase assets that will offset this reduction in wealth.
14. The monthly payment terms commit future income. Spending or saving in other budget categories would have to be reduced in order to budget for the payments.
15. The three C's of credit are capacity, character and collateral. Students should name two items from the list below for each category.
    - Capacity – occupation, length of employment, salary, number of dependents, obligations such as alimony or child support, housing expenses, payments on other debt
    - Character – overall debt, frequency of borrowing, on-time payments, debt–income ratios, length of time at present address, own or rent home, length of present employment
    - Collateral – title to a car, deed to a house, jewelry or other items of value, financial assets such as stocks or bonds
16. The APR is the percentage cost of credit on a yearly basis. APR can also be described as the total cost of borrowing, stated as a percentage of the total loan amount. Finance charges represent the total cost of borrowing and are always stated in dollar amounts.
17. See below for answers:
    a. Revolving
    b. Term
    c. Revolving
    d. Revolving
    e. Term
    f. Revolving
    g. Term
18. A credit report is a history of loan and bill payments that is kept by a credit reporting company, while a credit score is a number based on items from the credit report and generated by a statistical model.
19. A borrower should:
    - Minimize the amount borrowed or charged
    - Shop for the lowest APR
    - Shorten the length of a term loan
    - Pay off revolving accounts as quickly as possible by paying more than the minimum