Building Wealth

IN THE CLASSROOM

UNIT 3: TAKE CONTROL OF DEBT

FEDERAL RESERVE BANK OF DALLAS

Economic Education
www.dallasfed.org

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Preface

This collection of lesson plans is designed to facilitate the use of *Building Wealth* in the high school classroom. The lessons use a variety of instructional techniques and include student handouts as well as presentation visuals to be used by the teacher.

These lessons are built around the idea that teenagers are active participants in the economy. These students make decisions every day about earning, spending and saving. Rather than looking forward to some future reality, these lessons encourage the student to learn and use sound financial practices today.

Building Wealth was originally developed by the Community Affairs Department of the Federal Reserve Bank of Dallas. The impetus for the publication was research showing that poor credit and lack of financial wealth were major barriers preventing individuals from purchasing homes or starting small businesses. The book offers basic guidance on wealth-creating strategies for individuals and families. It contains information about budgeting, saving and investing, controlling debt, and protecting wealth with insurance.

Building Wealth has reached a diverse audience of more than one million people. It has been used in a wide variety of settings, ranging from credit counseling to home buyer education classes to high school classrooms.

Building Wealth is newly revised and expanded. New terms and concepts have been included as well as the information about various types of insurance. In conjunction with the new print edition, an interactive CD-ROM that animates features from the book is also available.

The interactive CD-ROM features an introduction by Ben Bernanke, Chairman of the Board of Governors of the Federal Reserve System, and Richard Fisher, President of the Federal Reserve Bank of Dallas. These videos emphasize the importance of sound personal finance decisionmaking.

Ordering Materials

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

Visit www.dallasfed.org/ca/wealth/ to

- Order a classroom set (45 copies) of the English or Spanish version of the book
- Order the CD-ROM
- Download the PDF of the English and Spanish versions of the book
- Play the interactive version online

Visit www.dallasfed.org/educate/everyday/ to

- Order a classroom set of Everyday Economics: *Entrepreneurs and the Economy*
- Download a PDF of the publication

Call 1-800-333-4460, extension 25254, to order materials.

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.

In the spring of 2006, *Building Wealth* was 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.

Required Areas of Instruction	**Lesson 3.1**	**Lesson 3.2**
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		

Unit 3: Take Control of Debt

Lesson 3.1 Use Credit Wisely

Lesson Description

In a class discussion, students review the balance sheet and the budget worksheet from Unit 1 and consider ways to use these two worksheets to analyze a decision to use credit. Working in pairs, students analyze scenarios and evaluate the wisdom of using credit in the given situation. Finally, students use a graphic organizer to examine the factors considered by lenders and consumer credit protection.

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

Credit and Debt
Standard 3: Describe ways to avoid or correct debt problems.
Standard 4: Summarize major consumer credit laws.

Instructional Objectives

Students will:

- Analyze the impact of purchases financed with debt on a balance sheet.
- Analyze the effect of debt payments on a budget.
- Evaluate borrowing decision scenarios.
- Describe the characteristics of a good borrower.

Time Required

One 50-minute class period

Materials Required

- Class set of *Building Wealth* books
- Copies of student activity, *To Borrow or Not to Borrow?*, cut into five sections. Each student needs one section. (See procedure 4)
- *Suggested Discussion Points* to guide student responses
- Copies of the following handouts for each student
    - *Applying for Credit*
    - *Applying for Credit Graphic Organizer*

Procedure

Teachers should read *Building Wealth*, pages 19–24, in preparation for this lesson.

1. Introduce the topic of credit and debt by telling students that this lesson will focus on two sets of questions. The first will be questions that a borrower should consider before using credit. To answer these questions, students will review the balance sheet and the budget worksheet from Unit 1. In the second part of the lesson, students will consider the questions a lender will likely ask before extending credit to a borrower.

2. 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.

3. Review the budget worksheet by discussing Lynne's budget found on pages 8 – 9 of *Building Wealth*. Have students also refer to their own budget. 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 payment of $1,000, what must change about her budget?

      She will not pay rent of $680, but the other $320 must come from some other budget line, such as clothing, meals out, etc.
    - What percentage of monthly income should be obligated by debt?

      Consumer Credit Counseling Service (www.cccs.net) recommends two guidelines. Loan payments (including car loans, installment loans, credit card payments, etc.) should be less than 10 percent of monthly gross (pre-tax) income. Housing costs (mortgage payments or rent) should be less than 30 percent of monthly gross income. Note that Lynne's budget only shows net income and these guidelines refer to gross income.

4. Cut student activity, *To Borrow or Not to Borrow*, into five sections. Divide students into pairs and give one scenario to each pair. The pairs decide if the character in their scenario should borrow. Considerations should be given to the impact on the character's balance sheet and/or budget. Have groups explain their answers and reasons. Use

Suggested Discussion Points to guide student responses. Remind students that smart borrowers should always ask themselves questions before using credit.

5. If time permits, reinforce concepts such as marginal decisionmaking (*Budget to Save*, 1.2) and opportunity cost (*Save and Invest*, 2.2).

6. Discuss the questions that a lender will ask a borrower, using the following suggestions:
   - What information would a student want to know before lending money to a friend?
   - What information would they seek before loaning money to a stranger? How could they get the information?
   - How is loaning money to someone you know different from loaning money to a stranger?

7. Distribute a copy of the handout *Applying for Credit* and the accompanying graphic organizer to each student. Have students work in pairs to complete the graphic organizer using the information in the handout. Discuss responses using the information below and on the *Suggested Answers* page (found after the graphic organizer on page 14 of this lesson). Remind them that a lender is looking for information to make a decision about granting credit.

   - 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

Closure

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.
- What are the three Cs of credit? How do they help a lender understand the risk of a loan?
  Answers will vary but should focus on capacity, character and collateral. See discussion guidelines on procedure no. 6 above.

Assessment

1. Student completion of the *To Borrow or Not to Borrow* activity and graphic organizer
2. Student participation in classroom discussion

To Borrow or Not to Borrow?
Student Activity

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. His mom has offered to buy the groceries and help him cook a nice dinner at home before the dance, 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 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?*

Suggested Discussion Points
To Borrow or Not to Borrow?

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:

- His credit card is for emergencies, not for consumption. If he uses the card for consumption, he will be changing his initial strategy. Is this advisable? Why or why not?
- Will his income be enough to pay off the credit card?
- Patrick needs to calculate the cost of borrowing.
    - What are the terms of the credit card? (Teacher may wish to provide credit terms.)
    - Will his future income be enough to pay off the credit card?
    - How long will it take to pay off the charge?
    - How much will the dinner eventually cost him?
- What will he be giving up to go out to dinner? What is his opportunity cost?

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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 needs to find out the terms of the student loan and calculate the total cost.
- Next, Carla needs to create a budget based on her expected income to make certain that she will be able to manage the additional liability of the student loan.
- 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.
- To cover all possibilities, she will need to create a budget based on the unlikelihood of not getting the job. How will she handle the loan payments?

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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:

- Since Joe lives 20 miles from work, his car is unreliable and there is no public transportation, he may want to consider two options—(1) move closer to work so that he

can walk or use public transportation, thus enabling him to continue saving for a car. Money he was spending on gas can also be saved for his new car or (2) borrow money to purchase a more reliable used car.

- With either option, he reduces repair expenses, thus freeing money in his budget for car payments or additional savings.
- His savings up to this point will allow him to make a down payment, reducing the liability of the car loan. After the down payment, he will need to make certain he still has enough savings for unexpected expenses.
- He will need to consider the security of his job.

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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:

- When the debt is repaid and if the asset increases in value, he will have a new asset and a higher net worth
- If the asset loses value, Alex will not see his wealth increase. What is his opportunity cost?
- By planning to pay off the purchase in three months, Alex has minimized the finance charges that he will incur.
- Investing in collectables requires knowledge of the market and careful consideration of purchases.
- Investing in collectables also limits liquidity (how easily an investment can be converted to cash). Alex will need to determine if this matters. Why would liquidity be important?

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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? What is her opportunity cost?
- With no savings for a down payment, the entire cost of the car will be added as a liability.
- Although 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 the car.
- In addition, without savings, unanticipated expenses could significantly affect her budget.

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 Cs. 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 Cs 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.

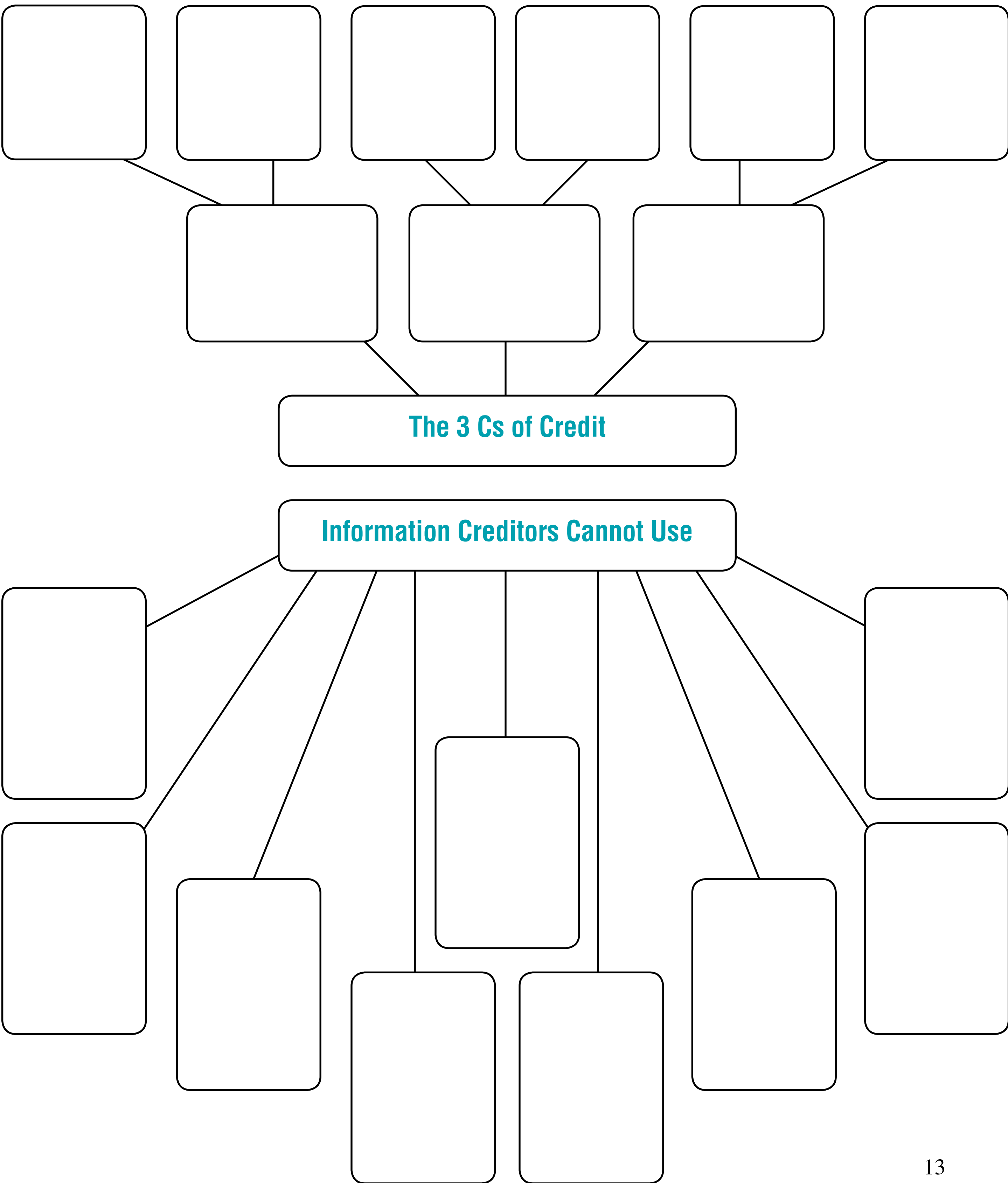
Although creditors may not discriminate on the basis of national origin, they may consider your immigration status when making a loan decision.

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

Name:______________________________ Date:______________

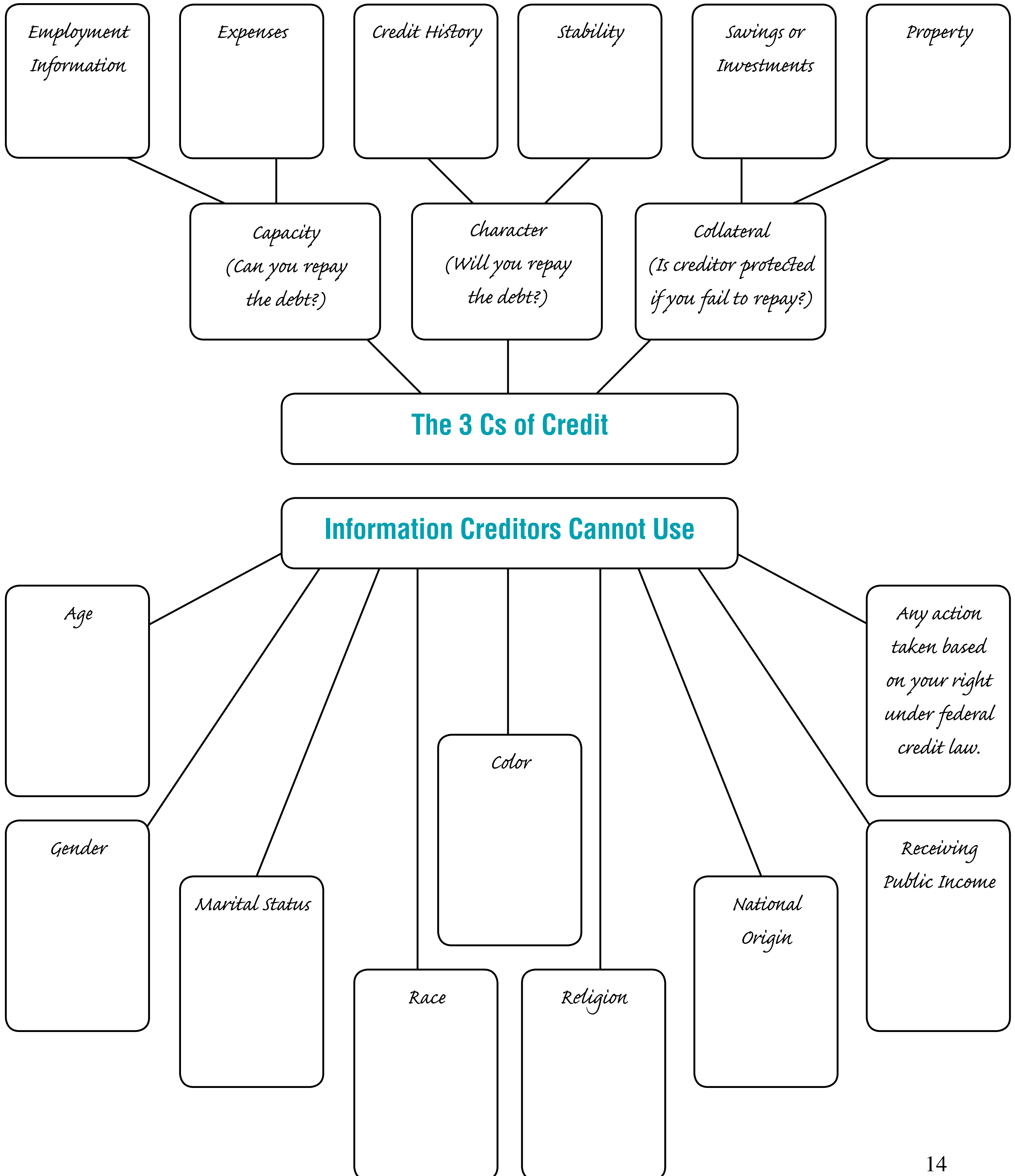
Building Wealth

Applying for Credit Graphic Organizer



Applying for Credit Graphic Organizer

Suggested Answers



Unit 3: Take Control of Debt

Lesson 3.2 Do Your Credit Homework

Lesson Description

In this lesson, students will shop for a loan, choosing from four fictitious credit offers. They will record on a chart information they have gathered about the terms of the various offers. During class discussion, types of credit are described and important credit disclosure items are defined. Students complete an activity that shows the rapid accumulation of credit card debt. Outside of class, students research credit offers for both revolving credit and automobile loans.

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.
Standard 3: Describe ways to avoid or correct debt problems.
Standard 4: Summarize major consumer credit laws.

Instructional Objectives

Students will:

- Compare financing offers for a major purchase.
- Compare closed-end and open-end credit.
- Distinguish between finance charges and annual percentage rates.
- Compute the monthly finance charges and minimum payment on a revolving credit account.
- Use disclosure statements from credit offers to compare the anticipated costs of borrowing.

Time Required

One to two 50-minute class periods

Materials Required

- Copies of the following handouts for each student
    - *Do Your (Credit) Homework*
    - *Credit Cards*
    - *How do I find information about credit cards?*
    - *Credit Card Research*
    - *Car Loan Research*
- Calculators for students (at least one calculator for every two students)
- Copies of *Visuals 1–6*
- Teacher-made transparency of student handout, *Do Your (Credit) Homework*

Procedure

Teachers should read *Building Wealth*, pages 19–24, in preparation for this lesson.

1. Post *Visuals 1–4* along the front of the classroom. Note that for large classes, multiple sets of visuals could facilitate students' movement around the room. 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 with a home theater system. After doing some research on various brands, you have found the perfect system. The total cost, including tax and installation is $5,000. 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.

   Look at the four financing options posted at the front of the room. Select your top two choices for ways to finance your new television.

2. Ask students to return to their seats after they have looked at all four ads. Have students vote for the best way to buy the television. Review the four options and briefly discuss the attractive features (low interest, low payment, etc.) of each one. If many of the students select Option #2, tell them that only 10 percent of applicants will receive the low interest rate. All the rest will be offered Option #1.

3. Distribute one copy of student handout, *Do Your (Credit) Homework*, to each student. Tell the students that it is important to research credit options before making a decision. Have students re-examine the four credit options and complete as many blanks of the chart as possible. Remind students that they will not be able to find all the information for the chart in the ads. Complete the transparency of the handout to review student answers using the information below. Note that these are the only items that should be completed by the students in this step.

	Interest Rate	Monthly Payment	Number of Payments	Total Cost of the TV	Total Finance Charges
Option #1	0% APR for six months; 18% APR thereafter	$100			
Option #2	3% APR	4% of the balance			
Option #3	21% APR	4% of the balance			
Option #4	12% APR	$33.21 per $1,000 ($166.05 for $5,000)	36 months		

4. Discuss the differences between open-end and closed-end credit using the information below and definitions and examples found on *Visual 5*.

    - How is Option #4 different from Options #1, 2 and 3?
      The ad says that Option #4 has 36 payments, but #1, 2 and 3 do not tell the number of payments
    - Do any of the options give the exact dollar amount of the monthly payment?
      Option #1 specifies a $100 payment and Option #4 discloses a monthly payment of $33.21 per $1,000 borrowed.
    - The first three options are called open-end credit. What are the features of open-end credit?
      Open-end credit is a line of available credit that is usually designed to be used over and over. In this case, as the balance on the television is paid off, additional items could be purchased using the line of credit.
    - The fourth option is called closed-end credit. What are the features of closed-end credit?
      In closed-end credit, the following terms are agreed upon at the start of the loan—amount borrowed, number and dollar value of payments and total finance charges.

5. Using *Visual 6,* define important terms before continuing the discussion on types of credit. Understanding the difference between finance charges and APRs is crucial to the remainder of this lesson.

6. Discuss closed-end credit with students by emphasizing the following points.
    - Credit is extended for a specific time period.
    - The amount financed, the finance charge and schedule of payments are disclosed and agreed upon by the lender and the borrower.
    - Common types of closed-end credit are listed on *Visual 5*.

7. Have students complete the remaining boxes under Option #4 on the handout *Do Your (Credit) Homework*. Use the transparency of the handout to review student answers using the information below.

    - Since the loan will be for $5,000, and the ad discloses that 36 payments are $33.21 for every $1,000 borrowed, multiply $33.21 by 5 to find the monthly payment for the entire loan of $5,000. ($166.05 per month)
    - The loan term is 36 months, so the total of 36 payments of $166.05 is $5,977.80, the total cost of the TV.
    - The interest paid is the total price ($5,977.80) less the cash price ($5,000). The difference is $977.80.

	Interest Rate	Monthly Payment	Number of Payments	Total Cost of the TV	Total Finance Charges
Option #4	12% APR	$33.21 per $1,000 $166.05 for $5,000	36 months	$5,977.80	$977.80

8. Have students read page 23 in *Building Wealth*. Discuss the factors that increase the cost of closed-end credit: a longer loan term and higher APR. Use the two charts on page 23 to compare loans with different interest rates and different loan terms.

9. Use *Visual 5* to review common types of open-end credit. Discuss how open-end 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.
   - Allows borrowers to choose a monthly payment amount with a minimum payment that is usually a percentage of the balance due.

10. Distribute student handout *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.

    Use the suggested answers sheet to discuss the correct answers with the students after they complete the task. 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.

11. Distribute the handout *How Do I Find Information on Credit Cards*. Discuss the need for borrowers to comparison shop for credit cards by using the information found in the disclosure statement. Discuss the individual items using the descriptions on the handout.

12. Use the transparency of *Do Your (Credit) Homework* to give students the information on credit costs. Have students complete the remaining items on the handout.

    Note that students could use the debt calculators found at *www.dallasfed.org/educate/calculators/* to compute these answers. The homework assignment will require use of these calculators. These answers assume the borrower makes only the minimum required payment each month.

	Interest Rate	Monthly Payment	Number of Payments	Total Cost of the TV	Total Finance Charges
Option #1	0% APR for six months; 18% APR thereafter	$100	79	$7,846.06	$2,846.06
Option #2	3% APR	4% of the balance	105	$5,325.18	$325.18
Option #3	21% APR	4% of the balance	165	$8,776.19	$3,776.19
Option #4	12% APR	$33.21 per $1,000 $166.05 for $5,000	36	$5,977.80	$977.80

13. Discuss the completed table on *Do Your (Credit) Homework*.
    - Option #2 is the lowest cost option for buying the television. However, the low interest rate in that offer is available to only 10 percent of applicants. Borrowers who qualify for this financing offer have demonstrated the capacity and the character to be good borrowers. Remind students of the "three Cs of credit" discussed in lesson 3.1.
    - Option #3 is $930 more expensive than Option #1. The interest rate is somewhat lower on #1, but more important, the fixed monthly payment of $100 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.
    - Option #4 is significantly less expensive than #1 or #3 but 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.

14. Assign students the two handouts *Credit Card Research* and *Car Loan Research* for homework. Students can complete the assignment by visiting retail stores and a commercial bank or by conducting online research.

Closure

Review the major concepts of the lesson, using the following questions:

- What are the two types of credit?
  Closed-end and open-end
- How are the two types of credit different?
  Answers may vary, but should emphasize that closed-end credit typically has a fixed number of payments of a predetermined amount, while open-end credit has flexible payments with a minimum payment required.
- How can a borrower reduce the total finance charges for a closed-end loan?
  By shopping for a lower APR and limiting the term of the loan
- 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

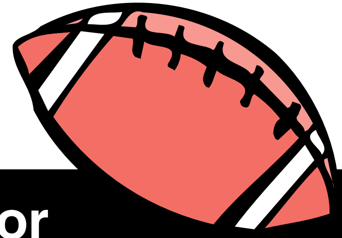
Assessment

1. Student completion of the following activities:
   - *Do Your (Credit) Homework*
   - *Credit Cards*
   - *Credit Card Research*
   - *Car Loan Research*
2. Student participation in classroom discussion

This lesson plan was developed using materials from two publications of the Federal Reserve Board of Governors, *Choosing a Credit Card* and *Consumer Handbook to Credit Protection Laws*. The publications are available online or can be ordered as hard copies. For information, visit the Board's website at www.federalreserve.gov/pubs/brochure.htm.

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

Visual 1

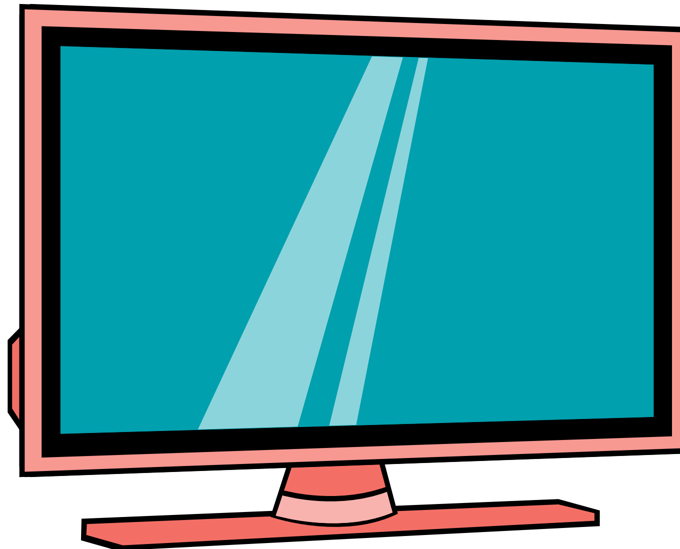


BUY NOW!

Get the TV you want for the game this weekend!

0% interest for six months

Low monthly payment of $100



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.

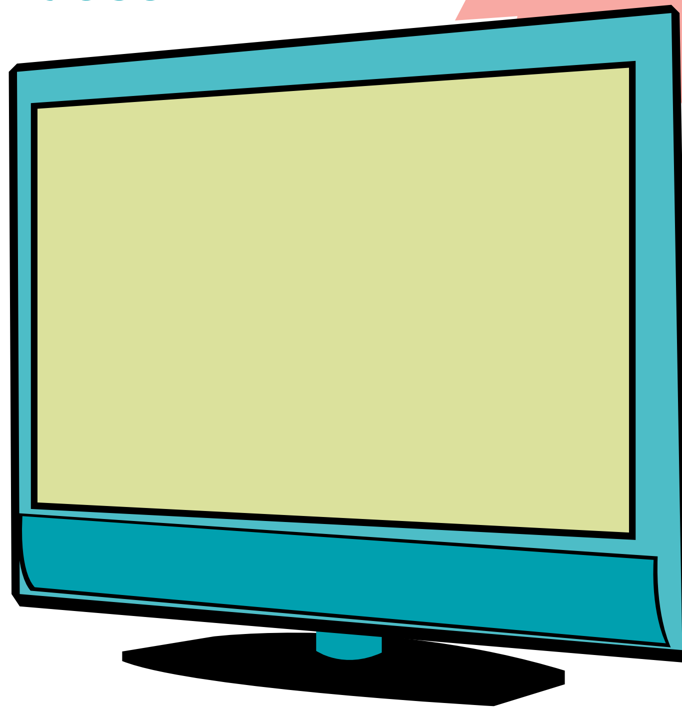
Visual 2

Do you have good credit?

Shop today!

Enjoy your new TV tonight!

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.

Visual 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,

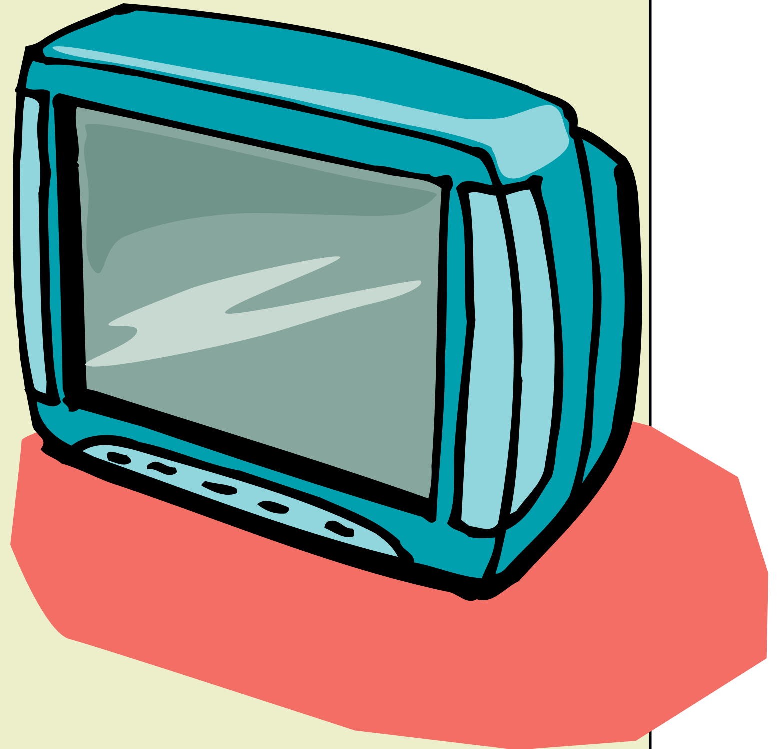
Your friends at XYZ Bank

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% 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 Balance-transfer fee: 3% of the amount transferred Late-payment fee and Over-the-credit-limit fee: $25	
* Explanation of penalty. If your payment arrives more than ten days late two times within a six-month period, the penalty rate will apply. ** 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.	

Visual 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.

Name: ________________________ Date: __________

Do Your (Credit) Homework

	Interest Rate (APR)	Monthly Payment	Number of Payments	Total Cost of the TV	Total Finance Charges
Option #1 Store financing—no payments for six months with $100-per-month payments					
Option #2 Store financing—3% interest for qualified buyers					
Option #3 Bank Credit Card					
Option #4 36-month loan from bank					

Visual 5
Types of Consumer Credit

Open-end 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 open-end 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

Closed-end 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 6
The Cost of Credit

Truth in Lending laws and regulations require all creditors (banks, stores, car dealers, credit card companies, finance companies) 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.

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

Remember, interest is a fee for the use of money over time. The interest rate is the percentage charged for a loan, usually a percentage of the amount lent. Because of other fees and charges that could be added, it is important for a borrower to compare finance charges and APR.

Name: ____ Date: ____________________

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.

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.

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.

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.

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

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

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

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

QUESTIONS:

1. What was her total balance at the end of November? _______________
2. How much had she paid in total finance charges at the end of November? __________________
3. Estimate the number of months it will take to pay off the balance by paying only the minimum due. ________ months
4. Estimate the total amount of interest she will pay on her credit card. $ ________

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*

What was her total balance at the end of November?

$1,027.81

How much had she paid in total finance charges at the end of November?

0 + 4.95 + 6.11 + 8.91 = $19.97

Estimate the number of months it will take to pay off the balance by paying only the minimum due.

122 months (more than 10 years)

Estimate the total amount of interest she will pay on her credit card.

$826.74 in interest on $1,049.00 in purchases

Name: ____ Date: ____________________

How do I find information about credit cards?

You can find lists of credit card plans, rates, and terms on the Internet, in personal finance magazines, and in newspapers. The Federal Reserve System surveys credit card companies every six months. You'll need to get the most recent information directly from the credit card company—by phoning the company, looking on the company's web site, or reading a solicitation or application.

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

<table>
<tr><td>Annual percentage rate
(APR) for purchases</td><td>2.9% until 11/1/06
after that, 14.9%</td></tr>
<tr><td>Other APRs</td><td>Cash-advance APR: 15.9%
Balance-Transfer APR: 15.9%
Penalty rate: 23.9% See explanation below.*</td></tr>
<tr><td>Variable-rate information</td><td>Your APR for purchase transactions may vary. The rate is determined monthly by adding 10.9% to the Prime Rate. **</td></tr>
<tr><td>Grace period for repayment
of balances for purchases</td><td>25 days on average</td></tr>
<tr><td>Method of computing the
balance for purchases</td><td>Average daily balance (excluding new purchases)</td></tr>
<tr><td>Annual fees</td><td>None</td></tr>
<tr><td>Minimum finance charge</td><td>$.50</td></tr>
<tr><td colspan="2">Transaction fee for cash advances: 3% of the amount advanced
Balance-transfer fee: 3% of the amount transferred
Late-payment fee: $25
Over-the-credit-limit fee: $25</td></tr>
<tr><td colspan="2">* Explanation of penalty. If your payment arrives more than ten days late two times within a six-month period, the penalty rate will apply.
** 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.</td></tr>
</table>

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 ten 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 twelve-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.

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

Name: ____ Date: ____________________

Credit Card Research

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

	Department Store	**Electronics Store**	**Bank Credit Card**
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			

Name: ____ Date: ____________________

Car 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)				