 High School Personal Finance Curriculum

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Cards, Cars and Currency Correlation with National Standards in K-12 Personal Finance

| Lesson |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Financial Responsibility and Decision Making: Apply reli- <br> able information and systematic decision making to personal <br> finance decisions. <br> Standard 1: Take responsibility for personal financial <br> decisions. <br> Eighth-grade expectation 1: Identify ways to be a <br> financially responsible young adult. |  |  |  |  |  |

## Cards, Cars and Currency Correlation with National Standards in K-12 Personal Finance

| Lesson |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Financial Responsibility and Decision Making: Apply reli- <br> able information and systematic decision making to personal <br> finance decisions. <br> Standard 4: Make financial decisions by systematically <br> considering alternatives and consequences. <br> Eighth-grade expectation 1: Explain the relationship <br> between spending practices and achieving financial <br> goals. |  |  |  |  |

Cards, Cars and Currency Correlation with National Standards in K-12 Personal Finance

| Lesson |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Planning and Money Management: Organize and plan per- <br> sonal finances and use a budget to manage cash flow. <br> Standard 3: Describe how to use different payment methods. <br> Twelfth-grade expectation 1: Demonstrate skill in basic <br> financial tasks, including scheduling bill payments, writ- <br> ing a check, reconciling a checking/debit account <br> statement, and monitoring printed and/or online <br> account statements for accuracy. |  |  |  |  |

## Cards, Cars and Currency Correlation with National Standards in K-12 Personal Finance

| Lesson | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Credit and Debt: Maintain credit worthiness, borrow at favorable terms and manage debt. <br> Standard 1: Identify the costs and benefits of various types of credit. <br> Twelfth-grade expectation 2: Define all required credit card disclosure terms and complete a typical credit card application. |  | X |  |  |  |
| Credit and Debt: Maintain credit worthiness, borrow at favorable terms and manage debt. <br> Standard 1: Identify the costs and benefits of various types of credit. <br> Twelfth-grade expectation 2: Explain how credit card grace periods, methods on interest calculation and fees affect borrowing costs. |  | X |  |  |  |
| Credit and Debt: Maintain creditworthiness, borrow at favorable terms and manage debt. <br> Standard 1: Identify the costs and benefits of various types of credit. <br> Twelfth-grade expectation 5: Given a scenario, apply systematic decision making to identify the most costeffective option for purchasing a car. |  |  |  | X |  |
| Credit and Debt: Maintain credit worthiness, borrow at favorable terms and manage debt. <br> Standard 4: Summarize major consumer credit laws. Eighth-grade expectation 1: Give examples of protections derived from consumer credit law. |  | X |  | X |  |
| Credit and Debt: Maintain credit worthiness, borrow at favorable terms and manage debt. <br> Standard 4: Summarize major consumer credit laws. Twelfth-grade expectation 1: Summarize consumer credit laws and the protections that they provide. |  | X |  | X |  |
| Income and Careers: Use a career plan to develop personal income potential. <br> Standard 3: Describe factors affecting take-home pay. Eighth-grade expectation 1: Explain all terms commonly withheld from gross pay. |  |  |  |  | X |

Cards, Cars and Currency Correlation with National Standards in K-12 Personal Finance

| Lesson | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Saving and Investing: Implement a diversified investment <br> strategy that is compatible with personal goals. <br> Standard 1: Discuss how saving contributes to financial <br> well-being. <br> Eighth-grade expectation 1: Give examples of how <br> saving money can improve financial well-being. |  |  |  |  |  |

Cards, Cars and Currency Correlation with National Content Standards in Economics

| Lesson |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Standard 1: Productive resources are limited. Therefore, <br> people cannot have all the goods and services they want; as a <br> result, they must choose some things and give up others. <br> Benchmark 3, Grade 8: Choices involve trading off the <br> expected value of one opportunity |  |  |  |  |  |
| Standard 4: People respond predictably to positive and nega- <br> tive incentives. <br> Benchmark 1, Grade 12: Acting as consumers, pro- <br> ducers, workers, savers, investors, and citizens, people <br> respond to incentives in order to allocate their scarce <br> resources in ways that provide the highest possible <br> returns to them.. |  |  |  |  |  |
| Standard 4: People respond predictably to positive and nega- <br> tive incentives. <br> Benchmark 3, Grade 8: Incentives can be monetary or <br> non-monetary. |  |  |  |  |  |
| Standard 12: Interest rates, adjusted for inflation, rise and fall <br> to balance the amount saved with the amount borrowed, thus <br> affecting the allocation of scarce resources between present <br> and future uses. <br> Benchmark 7, Grade 12: Higher interest rates reduce <br> business investment spending and consumer spending <br> on housing, cars and other major purchases. |  |  |  |  |  |
| Standard 12: Interest rates, adjusted for inflation, rise and fall <br> to balance the amount saved with the amount borrowed, thus <br> affecting the allocation of scarce resources between present <br> and future uses. <br> Benchmark 1, Grade 12: An interest rate is a price of <br> money that is borrowed or saved. |  |  |  |  |  |
| Standard 12: Interest rates, adjusted for inflation, rise and fall <br> to balance the amount saved with the amount borrowed, thus <br> affecting the allocation of scarce resources between present <br> and future uses. <br> Benchmark 6, Grade 12: Riskier loans command <br> higher interest rates than safer loans because of the <br> greater chance of default on the repayment of risky <br> loans. . |  |  |  |  |  |

## Cards, Cars and Currency | Intro

## Overview

In 2007, Cards, Cars, and Currency was written as a lesson plan to accompany the Fall 2006 issue of the Inside the Vault newsletter produced by the Federal Reserve Bank of St. Louis. The featured article in the newsletter was adapted from the paper Consumer-Finance Myths and Other Obstacles to Financial Literacy, written by St. Louis Fed senior economist William R. Emmons and published as a Federal Reserve Bank of St. Louis Supervisory Policy Analysis Working Paper 2005-03 in April 2005. The complete paper is available at www.stls.frb.org/banking/ SPA/WorkingPapers/SPA_2005_03.pdf or from www.stls.frb.org/banking/SPA/research.html.

In response to the identified need for financial literacy, in 2008 the Federal Reserve Bank of St. Louis revised and expanded the content of the 2007 lesson plan to create an on line curriculum guide for use in high school personal finance classes. The new curriculum retained the same name as the original lesson plan: Cards, Cars, and Currency. As a result of new regulations introduced in 2010 regarding overdraft rules for debit and ATM cards and the Credit Card Act of 2009, which introduced new rules for credit card companies, Cards, Cars and Currency was revised.

The 2010 revised curriculum provides an integrated approach to learning and a basis for the real-world application of knowledge. The lessons incorporate activities designed to address higher-order thinking skills using real-world scenarios. With a focus on responsibility for personal financial decisions, students will be able to identify the bottom line of financial decision making: keeping their hard earned money.

All of the lessons are correlated with the national Personal Finance Standards and the National Standards in Economics. (See the Lesson Correlation section for more information.) The curriculum is divided into five lessons. A brief description of each lesson in the curriculum follows:

## Lesson 1: Keep the Currency

Students participate in a discussion of the general features of a $\$ 1$ bill. They learn that although currency is valued, people often "throw currency away" as a result of poor financial decision-making and the lack of financial knowledge. Following the discussion, the students play a game in which they attempt to "keep the currency," working in pairs to answer 20 true-or-false questions about credit cards, debit cards and purchasing a car. From this game, which serves as a pretest for subsequent lessons, the students learn that financial literacy is important in keeping currency.

## Lesson 2: The Credit Card Deal

Students analyze the terms of credit cards and learn about using a credit card responsibly by completing a Credit Card Packet, which involves working in pairs to calculate the cost of credit by analyzing a disclosure statement and reviewing a record of purchases, a record of payments and credit card statements. After completing the Credit Card Packet, the class is divided into teams and given a real-world scenario to debate-the consumer vs. the credit card company. The students then conduct a survey as an out-of-class activity, gathering and interpreting data on credit card usage in their community. The students use an online calculator to determine the real cost of making just the minimum payment on credit card accounts.

## Lesson 3: Banking on Debit Cards

After discussing basic information about debit cards, students work in pairs to balance a bank account statement and calculate the costs of using a debit card irresponsibly. The students then conduct a survey as an out-of-class activity, collecting and interpreting data on debit-card usage in their area. The students analyze the advantages and disadvantages of using credit cards and debit cards.

## Lesson 4: The Car Deal Package

Using examples of three types of cars as a reference-an economy car, a moderately priced car and a luxury car-students learn about the decisions involved in purchasing a car. The students work in groups to compare different car deals, using three criteria: the income test, the down-payment option and the tie option. The students analyze the terms of a sample car contract and consider the effects of signing the contract without understanding the terms. The students use an online calculator to collect information for responsible decision-making.

## Lesson 5: A Penny Saved

Students read four scenarios involving take-home pay and fees that banks and creditcard companies charge, along with "what-if" alternatives for each scenario. Working in pairs, the students calculate the amount of currency that the characters in each scenario saved or lost as a result of their decision-making. The students play a second version of "Keep the Currency" from Lesson One. From this game, which serves as a post-test for the unit, the students learn that financial literacy is important in keeping currency-and that keeping (or saving) currency as a result of knowledge about finances can be the same as earning.

## Lesson Description

Students participate in a discussion of the general features of a $\$ 1$ bill. They learn that although currency is valued, people often "throw currency away" as a result of poor financial decisions and the lack of financial knowledge. Following the discussion, the students play a game in which they attempt to "keep the currency," working in pairs to answer 20 true-or-false questions about credit cards, debit cards and purchasing a car. From this game, which serves as a pretest for subsequent lessons, the students learn that financial literacy is important in keeping currency.

## Concepts

Financial literacy

## Objectives

Students will:

- Explain the importance of financial literacy.
- Explain the importance of taking responsibility for personal financial decisions.


## Content Standards

## National Standards in K-12 Personal Finance

Financial Responsibility and Decision Making: Apply reliable information and systematic decision making to personal financial decisions.

- $\quad$ Standard 1: Take responsibility for personal financial decisions.
- Eighth-grade expectation 1: Identify ways to be a financially responsible young adult.
- $\quad$ Standard 4: Apply consumer skills to purchase decisions.
- Eighth-grade expectation 1: Explain the relationship between spending practices and achieving financial goals.


## Time Required

45-60 minutes

## Materials

- One $\$ 1$ bill for demonstration
- A copy of Handout 1.1 for each pair of students
- A copy of Handout 1.2 for the teacher
- Copies of Handout 1.3 on paper of one color
- Copies of Handout 1.4 on paper of another color
- Cut Handouts 1.3 and 1.4 apart to provide one set of $T$ and $F$ cards for each pair of students.
- (Optional) Small prizes for the student pairs who have kept the most currency at the end of the "Keep the Currency" game


## Procedures

1. Show the class a $\$ 1$ bill. Discuss some of the general features of the bill, such as usage, color, size and shape. Explain that "currency" is another name for paper money. After a few minutes of discussion, inform the class that the discussion is finished, and throw the bill in the trash. As the students react to this, point out that people "throw currency away" every day in different ways-because of their lack of financial knowledge.
2. Explain that personal finance is becoming more complex every day, yet the average level of financial literacy for U.S. consumers is low. One survey conducted in 2008 found that 12th-grade students could correctly answer only 48.3 percent of the questions on a basic financial-skills quiz. If consumers do not want to throw currency away, they need to arm themselves with knowledge of basic economic and financial principles and to exercise smart spending and saving behaviors. Discuss the following:

- What is financial literacy? (Answers may vary. Financial literacy can be defined as having knowledge of financial matters and applying that knowledge to one's life.)
- Why do more than one half of 12 th-grade students appear to be financially illiterate? (Answers may vary, but students might cite a lack of experience, poor parental examples and little education in personal finance.)
- What type of behavior would someone who is financially illiterate exhibit? (bounced checks, overdrawn bank accounts, no bank account, spending beyond his or her means, sustained high credit card balances, frivolous credit card usage)
- What would you consider to be evidence of responsible financial behavior? (having a bank account, saving, limited use of credit cards, credit cards paid in full each month, maintenance of a budget)
- One responsible financial behavior is having a savings account and contributing to it regularly. To achieve a higher level of saving, how might you have to change your spending? (Answers will vary, but students should recognize ways they could reduce their spending without a severe impact on their lifestyles, i.e. fewer stops for premium coffee drinks, one less shirt, fewer ring tone downloads.)
- Why is it important to take responsibility for personal financial decisions? (Answers may vary. It is important to take responsibility for personal financial decisions because of the effects of being irresponsible, such as loss of currency.)
- The effect of financial irresponsibility is the loss of currency.

Note: In April 2008, the National Jump\$tart Coalition released the financial literacy scores of 2008 high school seniors as measured by a national survey. This biennial survey was given to 6,856 high school seniors in 40 states. Students answered only 48.3 percent of the questions correctly. Only 48 percent of students knew that a credit card holder who only pays the minimum amount on the monthly card balances will pay more in annual finance charges than a cardholder who pays the full balance each month. The 31-question survey revealed that high school seniors have a lot to learn about personal finance. Additional information about the survey can be found at www.jumpstart.org.
3. Ask the students if they think they could score higher than the students who participated in the national financial literacy survey. Tell the class that although the specific questions on the national survey were different from questions they will answer, they can test their financial knowledge by playing the "Keep the Currency" game.
4. Divide the students into pairs. Give each pair of students one copy of Handout 1.1: Keep the Currency Score Sheet and two cards-one T and one F card—cut from Handouts 1.3 and 1.4. Explain the rules of the game as follows:

- Each pair of students pretends to start the game with $\$ 200$ in currency. The object of the game is to keep as much of this currency as possible by providing correct "true" or "false" responses to 20 statements.
- The teacher reads aloud the statements from Handout 1.2: Keep the Currency Statements with Answers. After each statement, the student partners should confer with one another, reach an agreement and hold up a card to designate their answer when given the signal by the teacher.
- When all pairs are holding up their cards, the teacher will announce the correct answer. Pairs holding a card indicating the correct response can keep their currency. If their answer is incorrect, they subtract $\$ 10$ from their balance.
- On Handout 1.1, each pair of students should circle either "Keep your currency!" if the question was answered correctly or "Deduct $\$ 10$ " if the question was answered incorrectly. After each response, each pair of students also should enter its updated total of currency kept in the "Current Balance" column.
- After all statements have been read, students who have retained the most currency win.

5. Discuss the fact that knowing the correct answer prevented currency from being thrown away. (NOTE: Do not debrief the activity further or explain the answers or statements.) Explain to the class that they will understand these statements more after the unit of study. Save the sets of cards for use at end of unit.

## Closure

6. Remind students that ordinary people "throw currency away" because they don't have the financial knowledge and skills they need.
7. Explain that financial literacy involves applying financial knowledge and skills in our everyday lives and taking responsibility for our personal financial decisions. By studying personal finance, students will begin to develop the skills and knowledge they need to avoid throwing money away.
8. Explain that the Cards, Cars and Currency unit is designed to introduce some of the skills and knowledge students will need in order to be financially literate.

## Assessment

Note: There is no assessment for this introductory lesson, which is designed as an anticipatory set for additional learning.

Handout 1.1: Keep the Currency Score Sheet

|  |  | Starting Balance | \$200.00 |
| :---: | :---: | :---: | :---: |
| 1. | Keep your currency! | Deduct \$10 | \$ |
| 2. | Keep your currency! | Deduct \$10 | \$ |
| 3. | Keep your currency! | Deduct \$10 | \$ |
| 4. | Keep your currency! | Deduct \$10 | \$ |
| 5. | Keep your currency! | Deduct \$10 | \$ |
| 6. | Keep your currency! | Deduct \$10 | \$ |
| 7. | Keep your currency! | Deduct \$10 | \$ |
| 8. | Keep your currency! | Deduct \$10 | \$ |
| 9. | Keep your currency! | Deduct \$10 | \$ |
| 10. | Keep your currency! | Deduct \$10 | \$ |
| 11. | Keep your currency! | Deduct \$10 | \$ |
| 12. | Keep your currency! | Deduct \$10 | \$ |
| 13. | Keep your currency! | Deduct \$10 | \$ |
| 14. | Keep your currency! | Deduct \$10 | \$ |
| 15. | Keep your currency! | Deduct \$10 | \$ |
| 16. | Keep your currency! | Deduct \$10 | \$ |
| 17. | Keep your currency! | Deduct \$10 | \$ |
| 18. | Keep your currency! | Deduct \$10 | \$ |
| 19. | Keep your currency! | Deduct \$10 | \$ |
| 20. | Keep your currency! | Deduct \$10 | \$ |
|  |  | Ending Balance | \$ |

## Handout 1.2: Keep the Currency Statements with Answers

1. APR stands for "annual percentage rate" and is the cost of credit on an annual basis. (True - APR describes the cost of credit on an annual basis.)
2. Any person can secure and use a debit card. (False - A person must have a checking or savings account to secure and use a debit card.)
3. A debit card does not have a revolving line of credit. (True - A debit card is used for a transaction that is deducted electronically from a cardholder's bank account.)
4. The incentive considered most attractive by college students when choosing a credit card is the special store discounts offered with each card. (False - The top incentive for college students when choosing a credit card is the reward program the card offers. [Special store discounts $=8$ percent; rewards program $=28$ percent])

SOURCE: Experience.com 2006 College Life- Finances \& Banking survey of 4,891 college students by Jan Yang and Keith Simmons, USA TODAY, Wednesday, Feb. 7, 2007
5. Beginning in 2010, if you have authorized the credit card company to allow transactions that will take you over your credit limit, the credit card company can impose only one fee per billing cycle. (True: If you opt-in to allowing transactions that take you over your credit limit, your credit card company can impose only one fee per billing cycle.)

SOURCE: www.federalreserve.gov/consumerinfo/wyntk_creditcardrules.htm
6. "Caveat emptor" is a Latin phrase that means the consumer is always right. (False - This saying means "buyer beware" and is meant to serve as a warning to consumers to make careful purchasing decisions.)
7. The sum total of all payments paid on a car loan is equal to the purchase price of the car. (False - The total amount of payments is the purchase price of the car plus interest and finance charges.)
8. It is more advantageous to use a debit card than a credit card for purchases. (False - Both debit cards and credit cards have advantages and disadvantages.)
9. By law, lenders who make car loans must charge all consumers the same fixed interest rate on contracts issued on the same day. (False - Interest rates charged on car contracts will vary from one consumer to another, based on his or her credit report and credit history.)
10. Most overdraft charges on bank accounts occur because people write checks when they don't have enough money in their account to cover the checks. (False - According to the Center for Responsible Lending. Most overdraft charges on bank accounts [46.3 percent] are caused from debit-card purchases and ATM withdrawals.)

SOURCE: Center for Responsible Lending, by Julie Snider, USA TODAY, Jan. 25, 2007.

## Handout 1.2: Keep the Currency Statements with Answers, cont.

11. A credit card lender does not require collateral for a credit card account because it is an unsecured loan. (True - An unsecured loan is not backed by collateral, and is quite risky for the lender. The term "unsecured" means that the loan is not secured by anything of value.)
12. Beginning in 2010, if you want an increase in the credit limit on your credit card and you are under age 21 and have a credit card with a cosigner, your increase will be approved if you have made your payments on time for at least six consecutive months. (False: If you are under age 21 and have a card with a cosigner and want an increase in the credit limit, your cosigner must agree in writing to the increase.)

SOURCE: www.federalreserve.gov/consumerinfo/wyntk_creditcardrules.htm
13. Beginning in 2010, financial institutions are required to provide all customers standard overdraft services for debit cards and ATM transactions. (False: Beginning in 2010, financial institutions must give consumers the choice as to whether overdraft service will apply to debit card and ATM transactions.)

SOURCE: www.federalreserve.gov/consumerinfo/wyntk_overdraft.htm
14. Because of the easy access to credit cards, the number of credit card transactions exceeds the number of debit card transactions by more than one-third. (False: There are more debit card transactions than credit cards transactions.)

SOURCE: The Nilson Report, Dec. 2009, Issue 938
15. If a credit card is lost or stolen, the maximum amount a cardholder must pay is $\$ 50$. (True - The Truth in Lending Act is a federal law that protects cardholders against unauthorized use of their credit cards. If a card is lost or stolen, the maximum amount a cardholder must pay is $\$ 50$.)
16. Debit cards are the same as ATM cards. (False - Debit cards differ from ATM cards in that debit cards can be used to make purchases. Although an ATM card is a type of debit card, it is used to access a computer to get cash, make deposits or transfer money between accounts and is not used to make purchases.)
17. If a consumer does not make payments on a loan for a vehicle, the vehicle is repossessed and sold by the creditor, thus eliminating the consumer's debt. (False - The debt is eliminated only if the vehicle sells for the amount of the loan. If the vehicle is sold for less than what is owed, the consumer is responsible for the difference and still has a debt to pay.)
18. When a car dealership has several promotional offers and incentive programs, the best deal for the buyer will be the one that offers a zero-percent interest rate because there will be no interest charges to pay. (False - Promotional offers and incentive programs can be quite different, and each should be considered individually to determine which is best. A loan with a zero-percent interest rate is not always the best deal.)
19. The interest rates on car loans are usually lower than on unsecured loans because there is less risk to the lender. (True - A car loan is secured by the car. The car can be repossessed if terms of the contract are not kept.)
20. Consumers should record their transactions in a check register at the end of the month when they receive their bank statement. (False - Consumers should record transactions as they occur to prevent being overdrawn.)

Handout 1.3: T Cards


Handout 1.4: F Cards


## Lesson Description

Students learn about credit card usage and credit card consumer protection laws through class discussion. Students analyze the terms of credit cards and learn about responsible use of credit cards by computing the cost of credit, analyzing credit card disclosures and credit card statements. The students will debate a real-world scenario-the consumer vs. the credit card company-and conduct a credit-card-usage survey as an out-of-class activity. The students use an online calculator to determine the cost of making the minimum payment on credit card accounts.

## Concepts

Collateral

Credit
Credit Card Act of 2009
Credit card
Fair Credit and Charge Card Disclosure Act
Fair Credit Billing Act
Incentives
Interest
Truth in Lending Act
Unsecured loan

## Objectives

Students will:

- Define the terms listed in the Concepts section of the lesson.
- Explain the importance of analyzing credit card disclosure statements.
- Explain the importance of reviewing credit card statements.
- Compare the advantages and disadvantages of using credit cards.
- Identify ways to avoid credit problems.
- Explain the importance of consumer protection laws.
- Identify ways to use a credit card responsibly.


## Content Standards

## National Standards in K-12 Personal Finance

Financial Responsibility and Decision Making: Apply reliable information and systematic decision making to personal financial decisions.

- Standard 1: Take responsibility for personal financial decisions.
- Eighth-grade expectation 2: Give examples of the benefits of financial responsibility and the costs of financial irresponsibility.
- Twelfth-grade expectation 1: Explain how individuals demonstrate responsibility for financial well-being over a lifetime.
- $\quad$ Standard 4: Make financial decisions by systematically considering alternatives and consequences.
- Eighth-grade expectation 4: Use a financial or online calculator to determine the cost of achieving a medium-term goal.

Planning and Money Management: Organize and plan personal finances and use a budget to manage cash flow.

- $\quad$ Standard 3: Describe how to use different payment methods.
- Eighth-grade expectation 1: Discuss the advantages and disadvantages of different payment methods, such as stored value cards, debit cards and online payment systems
- $\quad$ Standard 4: Apply consumer skills to purchase decisions.
- Eighth-grade expectation 1: Explain the relationship between spending practices and achieving financial goals.

Credit and Debt: Maintain creditworthiness, borrow at favorable terms and manage debt.

- Standard 1: Identify the costs and benefits of various types of credit.
- Eighth-grade expectation 2: Explain how interest rate and loan length affect the cost of credit.
- Eighth-grade expectation 4: Give examples of "easy access" credit.
- Eighth-grade expectation 5: Discuss potential consequences of using "easy access" credit.
- Twelfth-grade expectation 2: Define all required credit card disclosure terms and complete a typical credit card application.
- Twelfth-grade expectation 3: Explain how credit card grace periods, methods on interest calculation, and fees affect borrowing costs.
- Standard 4: Summarize major consumer credit laws.
- Eighth-grade expectation 1: Give examples of protections derived from consumer credit law.
- Twelfth-grade expectation 1: Summarize consumer credit laws and the protections that they provide.


## National Standards in Economics

- $\quad$ Standard 4: People respond predictably to positive and negative incentives.
- Benchmark 3, Grade 8: Incentives can be monetary or non-monetary.
- Benchmark 1, Grade 12: Acting as consumers, producers, workers, savers, investors and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide the highest possible returns to them.
- Standard 12: Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, thus affecting the allocation of scarce resources between present and future uses.
- Benchmark 1, Grade 12: An interest rate is a price of money that is borrowed or saved.
- Benchmark 6, Grade 12: Riskier loans command higher interest rates than safer loans because of the greater chance of default on the repayment of risky loans.


## Time Required

180-240 minutes

## Materials

- Visuals 2.1, 2.2, 2.3 and 2.4
- One yellow highlighter for each student
- A copy of Handouts 2.1, 2.2 and 2.11 for each student
- A copy of Handouts 2.3, 2.4, 2.5, 2.6, 2.7 and 2.8 assembled as a Credit Card Package for each student
- Four copies of Handout 2.9 for each student
- Enough copies of Handout 2.10, cut in half to provide one half-sheet copy for each student
- Computers with internet access
- One copy of Handouts 2.2, 2.3, 2.6, 2.7, 2.8 and 2.11—Answer Key for the teacher


## Procedures

1. Define credit as the ability of a consumer to obtain goods or services before payment, based on an agreement to pay later. Explain that using a credit card is one form of credit and choosing and using credit cards are important components of personal finance. Explain that students will learn strategies for handling credit cards responsibly.
2. Tell the students that credit card usage is a subject of much interest. The following information is provided by Nellie Mae, a subsidiary of Sallie Mae, the nation's largest student loan provider.

- In 2006, 92 percent of graduate students had at least one credit card:
- The average outstanding balance on graduate student credit cards was $\$ 8,612$ :
- 67 percent of graduate students obtained their first credit card as an undergraduate student.
(www.nelliemae.com/pdf/ccstudy_2006.pdf)
- In 2004, 76 percent of undergraduates began the school year with credit cards;
- The average outstanding balance on undergraduate credit cards was \$2,327;
- 56 percent of the undergraduates reported having obtained their first card at age 18.
- Undergraduates reported direct mail solicitation as the primary source for selecting a credit card
(www.nelliemae.com/pdf/ccstudy_2005.pdf)

3. Explain the following information about credit cards.

- A credit card represents an agreement between a lender-the institution issuing the card-and the cardholder. It is a convenient form of borrowing with a revolving line of credit. This means it can be used repeatedly to buy products or services, up to a specific dollar amount. The credit card company determines this dollar amount based on a credit card holder's credit history.
- Credit cards can be called "easy access" credit because they are relatively easy to acquire.
- Credit card holders receive a monthly statement from the credit card issuer that includes a list of purchases and payment information from their credit card issuer. Credit card holders must pay a minimum amount each month to avoid fees. The minimum payment required is determined by the credit card company and is printed on the monthly statement.
- Interest is the price of using someone else's money. Credit card holders use the credit card issuer's money to make purchases. If the cardholder does not pay the full statement amount by the due date, the credit card companies add interest to the balance the cardholder owes.
- A credit card is an unsecured loan. This means that it is a loan that is not backed with collateral. Collateral is property required by a lender and offered by a borrowee as a guarantee of payment on a loan. It is a borrower's savings, investments or the value of the asset purchased, which the lender can seize if the borrower fails to repay a debt.
- From the lender's perspective, an unsecured loan is quite risky. This means that the possibility that the borrower may not repay is very high. Therefore, the interest rate on credit cards is often high.

4. Explain that there are different kinds of credit cards. Some are major credit cards and can be used at any business that accepts credit cards. These credit cards are issued by banks. The credit card companies manage credit card services for banks, such as accepting and approving credit card applications, approving credit card purchases and advertising credit cards and their features. Credit card companies make money from charging a fee with each credit card transaction. Mastercard and Visa are major credit card companies. Ask students to name some advantages of these cards. (Answers may vary but should include using one card for all purchases, having only one bill to pay, not having to carry a lot of money and still being able to make purchases, being able to buy something now and pay for it later.)
5. Explain that some retailers have a store-branded credit card. This is a strategy to encourage shoppers to spend more in their stores. These retail credit cards typically charge higher interest rates than other cards, but may give special discounts for card users. Ask students to name some retail credit cards. (Accept any major retail store such as Target, Sears, and J.C. Penney.)
6. Display Visual 2.1: Did You Know. Discuss the facts displayed on the visual:

- Approximately what percentage of Americans "threw currency away" in 2007 because of the way in which they used their credit cards? (the $40 \%$ that carried a balance on their cards)
- Why has the total amount of money charged in credit card penalty fees increased? (There has been a rise in credit card debt. More people have failed to pay their credit cards according to the terms of the card.)
- Why would credit card companies continue to send credit card offers to customers who were already deeply in debt? (Answers may vary but should include discussion about the fact that credit card companies earn a fee for each credit card transaction and they earn interest when cardholders fail to pay the entire balance each month.)
- Which group of customers do you think credit card companies prefer-the 60 percent that pay the balance in full each month or the 40 percent that carry a balance from month to month? (Credit card companies prefer the 40 percent group because they earn revenue for the interest charged to those who don't pay off their balances.)

7. Define incentives as perceived benefits that encourage certain behaviors. Inform
the class that credit card companies are competitive, and they often offer incentives to entice consumers. The incentives may be promotional low interest rates, special store discounts, reward programs that allow card holders to accumulate and redeem points for merchandise, free air travel or cash rewards. Consumers have many choices, and not all credit cards have incentives.
8. Display Visual 2.2: Top Incentives for College Students to Use Credit Cards. Point out the top four incentives for college students to use a credit card according to the 2006 survey cited on the visual.
9. Conduct a class survey of incentive preferences using the same four incentive options. Record the results of the survey, convert the results into percentages and ask the students how and why the results differ from those of the college survey. (Answers may vary but should include differences in personal preference. For example, one consumer may be interested in free airline tickets because of frequent visits to family and friends in other cities, while another consumer never flies and would prefer a discount at a local store.)
10. Point out that incentives are a marketing technique for credit card companies and retail stores, and before choosing a credit card, it is very important for consumers to consider the terms of credit as well as the incentives. All credit cards do not have the same terms. It is the consumer's responsibility to know and understand the terms.
11. Ask the students how consumers can make wise decisions about which credit card to choose when there are many credit cards being offered with different incentives and terms. (Accept any answers given and close the discussion by stating that this lesson will provide answers.)
12. Explain that the Truth in Lending Act helps consumers make credit card decisions. This federal law mandates disclosure of information about the cost (terms) of credit. Creditors must display both their finance charges and annual percentage rate on forms they use. The law provides criminal penalties for willful violators, as well as civil remedies. It also protects consumers against unauthorized use of their credit cards. If a card is lost or stolen, the maximum amount a consumer must pay is $\$ 50$. The Fair Credit and Charge Card Disclosure Act mandates a box on credit card applications that describes key features and costs. The Fair Credit Billing Act is an addition to the Truth in Lending Act that requires prompt credit for payments made. It also allows consumers to dispute billing errors on a credit card and withhold payment for damaged goods.
13. Tell the students that the Credit Card Act of $\mathbf{2 0 0 9}$ established new credit card rules and amended previous acts with regulations prohibiting unfair credit card practices. This law:

- requires changes on credit card disclosures,
- places restrictions on credit card companies with limits on fees and rate increases, and
- requires consistency in payment dates and times.

14. Explain that one issue addressed in the new rules is the over-the-credit limit fee. The rule states that consumers must tell the credit card company if they want the company to allow transactions that would take the consumers' accounts over the credit limit. The company may not charge an over-the-limit fee unless the cardholder has told the credit card company to allow over-the-credit limit purchases on his or her account. If the cardholder has not told the credit card company to allow over-thelimit transactions, any transaction that would cause an account to go over the credit limit will be rejected.
15. Explain that another important change resulting from the Credit Card Act of 2009 involves consumers under the age of 21. The law states that consumers under the age of 21 must demonstrate that they are able to make payments or they must have a co-signer to open a credit card account.
16. Explain that laws and practices regarding credit cards are subject to change based on consumer demand and the competitive credit card market. Credit card holders are responsible for knowing what the current laws are. When changes are made, credit card issuers notify cardholders of the changes. Consumers are responsible for reading the notifications and information and acting accordingly.
17. Give each student a copy of Handout 2.1: Sample Credit Card Disclosure. Point out that although the information in the handout is included with the credit card information consumers receive with their credit cards; many consumers do not read the information.
18. Give each student a yellow highlighter. Tell students to read Handout 2.1 and highlight any information that would be important in choosing and using a credit card.
19. After the students have finished highlighting their copies of the handout, ask them to share with the class what they highlighted and why.
20. Distribute a copy of Handout 2.2: Credit Cards and Law to each student. Instruct the students to read the information in the box and answer the questions in the second page by writing their answers on the handout.
21. After the students have finished answering the questions on Handout 2.2, ask students to share their answers. Use Handout 2.2-Answer Key to check their answers.
22. Discuss the following questions about the terms of credit cards:

- What are the consequences to consumers if they neglect to read and understand the terms of their credit card? (Possible Answers: Without knowing the terms of a credit card, a consumer could end up paying a high interest rate and be charged late fees and over-the-credit limit fees.)
- How can the terms of a credit card affect the amount of currency a consumer has to spend on other things? (Possible Answers: High interest rates and fees will add to the cost of the charges made. The end result of paying high interest rates and fees is less currency available for other things.)

23. Tell students that using a credit card and making payments on the card are a package deal-charging and paying.
24. Distribute a "Credit Card Package" to each student. Divide the class into pairs. Instruct each pair of students to work together to complete the Credit Card Package.
25. When all pairs of students have completed their Credit Card Packages, discuss their results:

- How could John Doe have avoided problems with fees and charges on his account? (He could have paid his account by the due date.)
- What were some advantages of using a credit card? (convenience, a loan that allows consumers to buy now and pay later, paying one bill instead of several)
- What were some disadvantages of using a credit card? (If the full amount is not paid by the due date, interest charges are added to the balance. If the terms of the credit card are not met, late fees and penalties are added.)
- How does using a credit card compare with using cash? (A credit card is more convenient to carry and use than cash. There are times when a credit card is required. For example, renting a car and making a hotel reservation require a credit card.)
- Did John end up throwing currency away? (Yes, John threw money away because of interest charges, late fees and over-the-credit limit fees.)

26. After discussing the completed Credit Card Packages, ask each student to refer to their completed copy of Handout 2.7: Number Search.
Example:

| NUMBER SEARCH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 35$ | 30 | $\$ 35$ | $\$ 27$ | $\$ 0$ |
| 2 | $10.99 \%$ | $14.99 \%$ | 25 | $8.99 \%$ |
| T\$1.50 | $\$ 19$ | FREE | $\$ 64$ | $15.99 \%$ |
| $\$ 475$ | $21.99 \%$ | 60 | $\$ 500$ | $\$ 29$ |
| $28.99 \%$ | $\$ 25$ | $\$ 100$ | 6 | 1 |

27. Explain that they will use this handout to play a game similar to bingo. Review the rules as follows:

- Listen to the questions read from Handout 2.6.
- Refer to your completed Handout 2.6 to identify the correct answer to the question and then mark an " $X$ " through the answer on your Number Search grid. To win the game, you must have a vertical, horizontal or diagonal row of " $X$ " answers on the grid.

28. Play several rounds. (Optional: Give small prizes to winners.)
29. Tell students as a homework project, they will be collecting data related to credit card usage by people they know. Provide each student four survey forms from Handout 2.9: Credit Card Survey. Tell the students that each of them should collect data by interviewing four adults, using a separate survey form for each interview, and asking each adult all of the questions on the handout. Tell the students that to protect the adults' confidentiality, they should not put the adults' names on the survey forms. Tell the students to bring their completed surveys to class on a specific date.
30. When the students return to class with their completed survey forms, display Visual 2.3: Credit Card Survey Results. Divide the class into small groups. Have the members of each group combine the data from their surveys and report the results to the class. As results are reported, record the data on Visual 2.3.
31. Ask students to assume the role of a news reporter. Tell them their assignment is to use data and information the entire class collected in the survey to write a news story on the use of credit cards in their local area. The students should convert the data to percentages for their report. Stress the importance of objectivity and confidentiality in this news story to protect the survey participants.
32. Explain that people have different views about credit cards. Some consumers may think the terms of a credit card are fair and accept the responsibility to abide by those terms. Others may argue that the disclosures are too complicated to understand and credit card issuers charge unfairly high interest rates and fees. Emphasize that regardless of an individual consumer's point of view, credit card companies are in business to make a profit, and a company's views may not always coincide with that of credit card users.
33. Distribute copies of the Consumer's Side column of Handout 2.10: Different Views to half the class and copies of the Other Side column of the handout to the remaining half of the class. Ask the students to refer to the source at the bottom of their column and explain to the students that the columns were adapted from an actual newspaper article.
34. Ask each student to assume the role of the author of the column he or she has been given. Tell the students to read the column silently and use highlighters to highlight facts important in defending the viewpoint expressed in their column.
35. Divide the class into groups of four, so that two students in each group have the Consumer's Side column and the other two students in each group have the Other Side column. Each student should discuss the column information with the group and defend the views in his or her column.
36. Display Visual 2.4: Different Views. Allow each group of students to present one fact or statement for each side of the visual. Record the facts and statements the groups present on the visual as they are shared. (Optional: To do this activity as a simulation, call on two or three students to represent each side. Assign a student to serve as a judge or choose several students to serve as an arbitration panel. Tell the students to present their view or case in front of the judge or panel, who will determine which side presents the most persuasive case.)
37. Give each student a copy of Handout 2.11: Minimum or Fixed. Tell the students to use an online calculator to complete the chart and determine the effects of paying different amounts on a credit card account. An online calculator can be found at http://federalreserve.gov/creditcardcalculator/
38. After the students have completed the chart in Handout 2.11, discuss their findings using the answer key. The discussion should include the length of the loan and total interest paid on the loan.

## Closure

39. Review the important content in the lesson by asking the following questions:

- What is credit? (the ability of a consumer to obtain goods or services before payment, based on an agreement to pay later)
- What are credit cards? (a convenient form of borrowing with a revolving line of credit)
- What is interest? (Interest is the price of using someone else's money.)
- When do credit card holders pay interest? (when they don't pay the balance on the card in full each month)
- Why do credit card holders pay interest? (because they are borrowing from credit card conpanies, they are using someone else's money-the credit card companies'.)
- What are incentives? (Incentives are perceived benefits that encourage certain behaviors.)
- What is an unsecured loan? (a loan not backed by collateral)
- What is collateral? (property required and offered as a guarantee of payment on a loan)
- Is a credit card a secured or unsecured loan? (unsecured)
- Why are interest rates higher for unsecured loans? (These are riskier loans. The lender has no guarantee of property if the loan isn't repaid.)
- Why is it important to analyze credit card disclosure statements? (to be aware of interest rates charged and any penalties or fees that might be charged; so that you know whether or not your interest rate might change and when and why)
- Why is it important to review credit card statements? (to make sure that transactions listed are accurate, to ensure that payments are credited, to ensure that any interest or fees charged are appropriate)
- What are the advantages and disadvantages of using credit cards? (Advantages: convenience, a loan to buy now and pay later, paying one bill instead of several. Disadvantages: If the full amount is not paid by the due date, interest charges are added to the balance. If the terms of the credit card are not met, late fees and over-the-credit limit fees are added.)
- Why are there laws regarding credit cards? (to protect consumers)
- How can consumers avoid credit problems? (by being responsible, by reading the information provided about the credit card, by charging only what they can afford to pay in full when the statement arrives)


## Assessment

40. Tell students that they will again take the role of news reporters. Tell them that their assignment is to write an article titled "Tips on Using Credit Cards without Throwing Away Your Currency." In the article, students should emphasize that using credit cards is a package deal-charging and paying.
41. Ask students to find information about the new credit card rules at www.federalreserve.gov/consumerinfo/wyntk_creditcard rules.html.

Divide the class into four groups and give each group a different topic:

- New statements
- New disclosures
- Increase in rates or other fees
- Changes to billing and payments

After students have found information, each group will become the "expert" group and teach the class the information learned.

## Extension Activities

1. Instruct the class to make a collage on a bulletin board in the classroom, using the disclosure information from credit card offers. Tell the students to place the caption "READ BEFORE USING" on the bulletin-board collage.

## Visual 2.1: Did You Know

Did you know that:

- The average American's credit card debt has risen from \$2,966 in 1990 to $\$ 9,840$ in 2007?
- Most Americans have four credit cards in their wallet?
- About 60 percent of all U.S. consumers always or usually pay off their credit card bills in full each month?
- About 40 percent of Americans carry a balance on their cards from month to month?
- In 2007, credit card issuers imposed $\$ 18.1$ billion in penalty fees on credit card holders-up more than 50 percent since 2003?
- During the first quarter of 2008, 30 percent of credit card mailings were specifically targeted to customers who already were deeply in debt?
- There are more than 6,000 major credit card issuers?

SOURCE: Weiss, Gary. "Don't Get Clobbered by Credit Cards!" Parade Magazine, August 102008.

## Visual 2.2: Top Incentives for College Students To Use Credit Cards

Special StoreDiscounts8\%
Cash Back ..... 22\%
Low Interest Rate ..... 24\%
Reward Program ..... 28\%

SOURCE: Incentive data from Yang, Jan and Simmons, Keith. Experience.com 2006 College Life—Finances \& Banking survey of 4,891 college students, USA TODAY.

## Cards, Cars and Currency | Lesson 2: Credit Cards—A Package Deal

## Visual 2.3: Credit Card Survey Results

Total number surveyed $\qquad$

1. Do you use a credit card? $\qquad$ Yes $\qquad$ No
2. How many credit cards do you carry in your wallet? $\qquad$
3. Do you have a store-brand card or major credit card?
$\qquad$ Store-brand card $\qquad$ Major credit card $\qquad$ Both
4. How many times a week do you use a credit card?
$\qquad$ Fewer than five times $\qquad$ More than five times
5. What would you estimate is the average dollar amount of each transaction on your credit card?
$\qquad$ $\$ 10$ or less $\qquad$ more than $\$ 10$ but less than $\$ 50$ $\qquad$ $\$ 50$ or more
6. What incentives does your credit card offer?
7. What are the advantages of using a credit card?
8. What are the disadvantages of using a credit card?
9. Do you know the interest rate that you pay on your credit card? $\qquad$ Yes $\qquad$ No
10. Do you always or usually pay off the full balance on your credit card(s) each month?
$\qquad$ Yes $\qquad$ No

## Visual 2.4: Different Views

| The Consumer's Side | The Other Side |
| :--- | :--- |

## Handout 2.1: Sample Credit Card Disclosure Information

## Credit Card Disclosure Information

| Annual percentage rate (APR) for purchases | $8.99 \%, 10.99 \%$, or $12.99 \%$ introductory APR for one year, based on your creditworthiness. <br> After that, your APR will be $14.99 \%$. This APR will vary with the market based on the Prime Rate |
| :---: | :---: |
| APR for balance transfer | 15.99\% This APR will vary with the market based on the prime rate. |
| APR for cash advances | Your cash APR may vary monthly. The rate will be determined by adding $14.99 \%$ to the U.S. prime rate. |
| Penalty APR and when it applies | 28.99\% This APR will be applied to your account if you: <br> 1. make a late payment, <br> 2. go over the credit limit, <br> 3. make a payment that is returned or, <br> 4. do any of the above on another account that you have with us. <br> How long will the penalty APR apply? If your APRs are increased for any of these reasons, the penalty APR will apply until you make six consecutive minimum payments when due. |
| How to avoid paying interest on purchases | Your due date is at least 25 days after the close of each billing cycle. We will not charge you any interest on purchases if you pay your entire balance by the due date each month. |
| Minimum interest charge | If you are charged interest, the charge will be no less than \$1.50. |
| For credit card tips from the Federal Reserve Board | To learn more about factors to consider when applying for or using a credit card, visit the web site of the Federal Reserve Board at www.federal reserve.gov/ creditcard. |
| Fees |  |
| Set-up and Maintenances Fees |  |
| - Annual fee | \$20 |
| - Account set-up fee | \$20 (one-time fee) |
| - Participation fee | \$12 annually (\$1 per month) |
| - Additional card fee | \$5 (if applicable) |
| Transaction Fees |  |
| - Balance transfer | Either \$5 or 3\% of the amount of the transaction, whichever is greater (maximum fee: \$100) |
| - Cash advance | Either \$5 or 3\% of the amount of each cash advance, whichever is greater |
| - Foreign transaction | 2\% of each transaction in U.S. dollars |
| Penalty Fees |  |
| - Late payment | \$29 if balance is less than or equal to \$1,000; \$35 if balance is more than \$1,000 |
| - Over-the credit limit | \$29 |
| - Returned payment | \$35 |

How we will calculate your balance:
We use a method called "average daily balance (including new purchases)."

## Loss of Introductory APR:

We may end your introductory APR and apply the penalty APR if you become more than 60 days late in paying your bill.

## Handout 2.2: Credit Cards and Law

Directions: Use the information in the box below and refer to Handout 2.1 to answer the questions on the next page.

Using a credit card is a convenient way to buy now and pay later. It is a type of loan that must be repaid. Most credit cards are unsecured, which means no collateral is required. Interest charges, late fees and other penalties can be incurred according to the terms of a credit card, and different cards have different terms.

By federal law, credit card companies must provide a credit card disclosure form that specifically explains the terms of the card. These are some of the important laws that protect consumers:

- The Credit Card Act (2009) provides new credit card rules and amends previous acts with regulations prohibiting unfair credit card practices and changes in what is required on credit card disclosures. The act puts restrictions on credit card companies by limiting fees and rate increases and requiring consistency in payment dates and times.
- The Fair Credit and Charge Card Disclosure Act (1988) is part of the Truth in Lending Act. It requires lenders who offer a credit card to disclose the APR, the amount of any annual fee and requires that all credit card applications include a box describing key features and costs.
- The Fair Credit Billing Act (1974) is an addition to the Truth in Lending Act that requires prompt credit for payments and error corrections on consumer credit cards. It also allows the cardholder to dispute billing errors on a credit card and withhold payment for damaged goods.
- The Truth in Lending Act (1968) mandates disclosure of information about the cost of credit. Both the finance charges and the annual percentage rate must be displayed prominently on forms and statements used by creditors. The law provides criminal penalties for willful violators, as well as civil remedies. It also protects the credit card owner against unauthorized use of a credit card. If a credit card is lost or stolen, the maximum amount a credit card owner is liable for is $\$ 50$.

It is because of these and other federal laws that credit card disclosures continue to be revised for clarification and consumer protection. However, it is a credit card holder's responsibility to know what the disclosure form says.

SOURCE: www.federalreserve.gov/creditcard/regs.html

## Handout 2.2: Credit Cards and Law-Part II <br> Answer the following questions by referring to Handout 2.1 and Handout 2.2-Part I.

1. What is the APR for purchases after one year?
2. What is the APR for balance transfers?
3. What is the APR for cash advances?
4. How much is the fee for late payment?
5. What is the over-the-credit-limit fee?
6. What is the returned payment fee?
7. Which sections of the credit card disclosure form are affected by the Fair Credit and Charge Card Disclosure Act?
8. What part of the credit card disclosure is required because of the Truth in Lending Act?
9. What act requires consistency in payment dates and times and places new limits on fees and rate increases?
10. Why are federal laws regarding credit cards important?Write a paragraph with supporting details to defend your answer.

## Handout 2.2: Credit Cards and Law—Answer Key

Directions: Use the information in the box below and refer to Handout 2.1 to answer the questions on the next page.

Using a credit card is a convenient way to buy now and pay later. It is a type of loan that must be repaid. Most credit cards are unsecured, which means no collateral is required. Interest charges, late fees and other penalties can be incurred according to the terms of a credit card, and different cards have different terms.

By federal law, credit card companies must provide a credit card disclosure form that specifically explains the terms of the card. These are some of the important laws that protect consumers:

- The Credit Card Act (2009) provides new credit card rules and amends previous acts with regulations prohibiting unfair credit card practices and changes in what is required on credit card disclosures. The act puts restrictions on credit card companies by limiting fees and rate increases and requiring consistency in payment dates and times.
- The Fair Credit and Charge Card Disclosure Act (1988) is part of the Truth in Lending Act. It requires lenders who offer a credit card to disclose the APR, the amount of any annual fee and requires that all credit card applications include a box describing key features and costs.
- The Fair Credit Billing Act (1974) is an addition to the Truth in Lending Act that requires prompt credit for payments and error corrections on consumer credit cards. It also allows the cardholder to dispute billing errors on a credit card and withhold payment for damaged goods.
- The Truth in Lending Act (1968) mandates disclosure of information about the cost of credit. Both the finance charges and the annual percentage rate must be displayed prominently on forms and statements used by creditors. The law provides criminal penalties for willful violators, as well as civil remedies. It also protects the credit card owner against unauthorized use of a credit card. If a credit card is lost or stolen, the maximum amount a credit card owner is liable for is $\$ 50$.

It is because of these and other federal laws that credit card disclosures continue to be revised for clarification and consumer protection. However, it is a credit card holder's responsibility to know what the disclosure form says.

SOURCE: www.federalreserve.gov/creditcard/regs.htm|

## Handout 2.2: Credit Cards and Law—Part II—Answer Key <br> Answer the following questions by referring to Handout 2.1 and Handout 2.2-Part I.

1. What is the APR for purchases after one year? (14.99\%)
2. What is the APR for balance transfers? (15.99\%)
3. What is the APR for cash advances? ( $14.99 \%$ plus the U.S. Prime Rate)
4. How much is the fee for late payment? (\$29 if the balance is less than $\$ 1,000 ; \$ 35$ if the balance is $\$ 1,000$ or more)
5. What is the over-the-credit-limit fee? (\$29)
6. What is the returned payment fee? (\$35)
7. Which sections of the credit card disclosure form are affected by the Fair Credit and Charge Card Disclosure Act? (the entire page of Handout 2.1)
8. What part of the credit card disclosure is required because of the Truth in Lending Act? (the entire page of Handout 2.1)
9. What act requires consistency in payment dates and times, and places new limits on fees and rate increases? (The Credit Card Act of 2009)
10. Why are federal laws regarding credit cards important? Write a paragraph with supporting details to defend your answer. (Answers may vary.)

## Handout 2.3: The Beginning

On March 1, ABC Clothing Store had a special 10-percent-off sale on all merchandise for customers who opened a new credit card account. Knowing that this was a special one-day-only promotion, John Doe opened a credit card account and was approved for a \$500 credit limit. The office clerk explained some of the details of his credit card account, gave him some papers about his account including a credit card disclosure form and told him that he had a great introductory APR of $10.99 \%$ for one year! He stuffed everything in his pocket to read later except for the over-the-credit-limit authorization, which he quickly signed and returned. He was ready to shop-not deal with reading papers! And he did lots of shopping. Not only did John buy several things for himself, he also bought several gifts for friends and family. Of course, buying was easy because John had a new credit card. A simple swipe of the card and his signature was all it took to finalize his transactions. According to the sales receipts, the total amount for John's purchases was $\$ 440.04$, and the tax was $\$ 34.96$. The receipts also included information on his savings. John saved $\$ 48.89$ on purchases and $\$ 4.15$ in tax.

Wow! What a savings!
The excitement of the sale day and the month of March quickly passed. John Doe's credit card statement arrived in the mail on April 6. Busy with other things, John put the unopened statement aside and had a passing thought about the papers that he had stuffed in his pocket when he opened the account. He'd read them later when he paid the credit card bill.

On Monday, April 26, he remembered his credit card statement. After opening the statement, John immediately accessed his account online on April 26 and made the minimum payment due. The post date for the payment was April 27. John was pleased; his payment was only \$19.

## Read the information above and refer to Handouts 2.4 and 2.5 to find answers to these questions:

1. What incentive was offered to John Doe to open a new credit card account?
2. How much did John save on purchases and tax according to the sales receipts?

## Handout 2.3: The Beginning-Answer Key

On March 1, ABC Clothing Store had a special 10-percent-off sale on all merchandise for customers who opened a new credit card account. Knowing that this was a special one-day-only promotion, John Doe opened a credit card account and was approved for a $\$ 500$ credit limit. The office clerk explained some of the details of his credit card account, gave him some papers about his account including a credit card disclosure form and told him that he had a great introductory APR of $10.99 \%$ for one year! He stuffed everything in his pocket to read later except for the over-the-credit-limit authorization, which he quickly signed and returned. He was ready to shop—not deal with reading papers! And he did lots of shopping. Not only did John buy several things for himself, he also bought several gifts for friends and family. Of course, buying was easy because John had a new credit card. A simple swipe of the card and his signature was all it took to finalize his transactions. According to the sales receipts, the total amount for John's purchases was $\$ 440.04$, and the tax was $\$ 34.96$. The receipts also included information on his savings. John saved $\$ 48.89$ on purchases and $\$ 4.15$ in tax.
Wow! What a savings!
The excitement of the sale day and the month of March quickly passed. John Doe's credit card statement arrived in the mail on April 6. Busy with other things, John put the unopened statement aside and had a passing thought about the papers that he had stuffed in his pocket when he opened the account. He'd read them later when he paid the credit card bill.

On Monday, April 26, he remembered his credit card statement. After opening the statement, John immediately accessed his account online on April 26 and made the minimum payment due. The post date for the payment was April 27. John was pleased; his payment was only $\$ 19$.

## Read the information above and refer to Handouts 2.4 and 2.5 to find answers to these questions:

1. What incentive was offered to John Doe to open a new credit card account? (The store offered a 10 percent discount on purchases if John opened a credit card account.)
2. How much did John save on purchases and tax according to the sales receipts? (\$48.89 on purchases $+\$ 4.15$ in tax $=\$ 53.04$ saved)

## Handout 2.4: John's Credit Card Disclosure Information

| Credit Card Disclosure Information |  |
| :---: | :---: |
| Annual percentage rate (APR) for purchases | $8.99 \%, 10.99 \%$, or $12.99 \%$ introductory APR for one year, based on your creditworthiness. <br> After that, your APR will be $14.99 \%$. This APR will vary with the market based on the Prime Rate |
| APR for balance transfer | 15.99\% This APR will vary with the market based on the prime rate. |
| APR for cash advances | Your cash APR may vary monthly. The rate will be determined by adding $14.99 \%$ to the U.S. Prime Rate. |
| Penalty APR and when it applies | 28.99\% This APR will be applied to your account if you: <br> 1. make a late payment, <br> 2. go over the credit limit, <br> 3. make a payment that is returned, or <br> 4. do any of the above on another account that you have with us. How long will the penalty APR apply? If your APRs are increased for any of these reasons, the Penalty APR will apply until you make six consecutive minimum payments when due. |
| How to avoid paying interest on purchases | Your due date is at least 25 days after the close of each billing cycle. We will not charge you any interest on purchases if you pay your entire balance by the due date each month. |
| Minimum interest charge | If you are charged interest, the charge will be no less than \$1.50. |
| For credit card tips from the Federal Reserve Board | To learn more about factors to consider when applying for or using a credit card, visit the web site of the Federal Reserve Board at www.federal reserve.gov/ creditcard. |
| Fees |  |
| Set-up and Maintenances Fees |  |
| - Annual fee | \$20 |
| - Account set-up fee | \$20 (one-time fee) |
| - Participation fee | \$12 annually (\$1 per month) |
| - Additional card fee | \$5 (if applicable) |
| Transaction Fees |  |
| - Balance transfer | Either $\$ 5$ or $3 \%$ of the amount of the transaction, whichever is greater (maximum fee: \$100) |
| - Cash advance | Either \$5 or 3\% of the amount of each cash advance, whichever is greater |
| - Foreign transaction | 2\% of each transaction in U.S. dollars |
| Penalty Fees |  |
| - Late payment | \$29 if balance is less than or equal to \$1,000; \$35 if balance is more than \$1,000 |
| - Over-the credit limit | \$29 |
| - Returned payment | \$35 |

## Handout 2.5: John Doe's April Statement

| Summary of Account Activity | Payment Inform | ion |  |
| :---: | :---: | :---: | :---: |
| Previous Balance. . . . . . . . . . . . . . . . \$0.00 | Current Balance |  | \$475.00 |
| Payments . . . . . . . . . . . . . . . . . . . . \$0.00 | Minimum Payment Due . . . . . . . . . . . . . . \$19.00 |  |  |
| Other Credits . . . . . . . . . . . . . . . . . . \$0.00 | Payment Due Date . . . . . . . . . . . . . . . . . . 04/24/XX |  |  |
| Purchases . . . . . . . . . . . . . . . . . . \$475.00 | Late Payment Warning: If we do not receive your minimum payment by the date listed above, you may have to pay a $\$ 29$ |  |  |
| Balance Transfers . . . . . . . . . . . . . . . \$0.00 |  |  |  |
| Cash Advances. . . . . . . . . . . . . . . . . \$0.00 | late fee and your APRs may be increased up to the penalty APR of 28.99\%. |  |  |
| Past Due Amount . . . . . . . . . . . . . . . \$0.00 |  |  |  |
| Fees Charged . . . . . . . . . . . . . . . . . . $\$ 0.00$ | Minimum Payment Warning: If you make only the minimum payment each period, you will pay more in interest and it will take you longer to pay off your balance. |  |  |
| Interest Charged. . . . . . . . . . . . . . . . \$0.00 |  |  |  |
| Current Balance . . . . . . . . . . . . . . \$475.00 | and it will take you <br> For example: | onger to pay off your | balance. |
| Credit Limit. . . . . . . . . . . . . . . . . \$500.00 | If you make no |  |  |
| Available Credit . . . . . . . . . . . . . . . \$25.00 | additional charges | balance shown on | up paying about |
| Statement Closing Date . . . . . . 03/24/XX | each month you | this statement in | this much in |
| Days in Billing Cycle . . . . . . . . . . . 30 |  |  | interest... |
| Questions? | only the minimum | 2 years | \$64 |
| Call Customer Service . . . 1-800-xxx-xxxx | payment | 2 yeas |  |
| Lost or Stolen Credit Card. 1-800-xxx-xxxx | \$45 | 1 year | \$27 |


| Transactions |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reference Number | Transaction Date | Post Date | Description of Transaction or Credit | Amount |
| 67985645 | 03/01 | 03/02 | ABC Clothing | \$475.00 |
| Fees |  |  |  |  |
| Late fees |  |  |  |  |
|  |  |  | Balance transfer fees | \$0.00 |
|  |  |  | Cash advance fees | \$0.00 |
|  |  |  | Total fees for this period | \$0.00 |
| 20XX Totals Year-to-Date |  | Interest Charged |  |  |
| Total fees charged in 20XX Total interest charged in 20XX |  | Interest charged on purchases |  | \$0.00 |
|  |  | Interest charged on cash advances |  | \$0.00 |
|  |  | Total interest for this period |  | \$0.00 |


| Notice of Change to Your Interest Rates |  |  | Important Changes to Your Account Terms    <br> Interest Charge Calculation    <br> APR for purchases    |  |
| :--- | :--- | :--- | :--- | :---: |
| Your Annual Percentage Rate (APR) is the annual interest rate on your account. |  |  |  |  |
| Type of Balance | Annual Percentage Rate (APR) | Balance Subject to Interest Rate | Interest Charge |  |
| Purchases | $10.99 \%$ | $\$ 475.00$ | $\$ 0.00$ |  |

## Handout 2.5: John Doe's April Statement, (cont.)

## What if I want CCC Bank to permit transactions that exceed my credit limit on this account?

From time to time, there are emergencies that require additional funds. If you want CCC Bank to permit and authorize transactions that exceed your credit limit on this account, you must complete the authorization form below and return it to CCC Bank. If you fail to complete and return the form, transactions that cause you to exceed your credit limit will be denied. Over-the-credit-limit fees apply. (See Disclosure Information.) By opting in to allow transactions that take you over your credit limit, we will impose only one fee per billing cycle. You can revoke your opt-in at any time. CCC Bank reserves the right to reject transactions that are deemed unreasonable.

Detach and return to CCC Bank
Authorization for transactions that exceed credit limit
I authorize and request that CCC Bank permit and authorize transactions that exceed my credit limit. I understand that over-the-credit-limit fees apply and only one fee per billing cycle will be imposed.

Printed Name $\qquad$

Date: $\qquad$

Account Number: $\qquad$

Detach and return with payment

| Credit Card Company 123 Credit Street Anytown, USA | Payment Information <br> Account Number: $\qquad$ 123456789 <br> New Balance Total: $\qquad$ $\$ 475.00$ |
| :---: | :---: |
| John Doe <br> 123 Payment Avenue <br> Bottom Line, USA | Payment Due Date: $\qquad$ 04/24/XX <br> Total Minimum Payment Due $\qquad$ $\$ 19.00$ <br> Enter Payment Amount <br> Enclosed $\qquad$ \$ $\qquad$ |

## Handout 2.6: Number Search

## Refer to Handout 2.4 and Handout 2.5 to find answers to these questions about John's account.

1. What is the APR on purchases?
2. How much is the minimum payment?
3. What is the current balance on his credit card?
4. What is John Doe's credit limit on this card?
5. How much more can John Doe charge on this card?
6. How much did John Doe owe on this card before this statement?
7. If the minimum payment is made by the due date, what amount will be written in the Previous Balance section of the next statement issued?
8. If the balance is paid in full, what amount will be paid?
9. How much is John's balance transfer fee?
10. When did the credit card company post charges to this account?
11. How many days are in the billing cycle?
12. What is the amount of the late fee if the balance on the card is less than or equal to $\$ 1,000$ ?
13. What is the amount of the late fee if the balance on the card is more than $\$ 1,000$ ?
14. What is the amount of an over-the-credit limit fee?
15. What is the APR after the first year?
16. What is the lowest APR on this credit card for the first year introductory offer?
17. What is the APR for a balance transfer?
18. What is the APR for cash advances?
19. What is the penalty APR?
20. If the penalty APR is applied, how many consecutive on-time payments must be made to remove this penalty APR?
21. How many days after the close of each billing cycle must the payment due date be?
22. If John is charged interest, what is the minimum amount he would be charged?
23. What is the penalty fee for a returned payment?
24. What is John's annual fee for this card?.
25. What is the maximum fee for a balance transfer?
26. The introductory offer is good for how many years?
27. If John pays $\$ 45$ each month on this account and makes no additional charges, how many years will it take him to pay off this credit card?
28. If John makes no additional charges using this card and continues to make the minimum payment on time each month, how many years will it take John to pay off this credit card?
29. How much interest will John end up paying on this card if he makes no additional charges and continues to make the minimum payment each month?
30. How much interest will John end up paying on this card if he makes no additional charges and makes a monthly payment of $\$ 45$ ?

## Handout 2.6: Number Search—Answer Key

## Refer to Handout 2.4 and Handout 2.5 to find answers to these questions about John's account.

1. What is the APR on purchases? (10.99\%)
2. How much is the minimum payment? (\$19)
3. What is the current balance on this credit card? (\$475)
4. What is John Doe's credit limit on this card? (\$500)
5. How much more can John Doe charge on this card? (\$25)
6. How much did John Doe owe on this card before this statement? (\$0)
7. If the minimum payment is made by the due date, what amount will be written in the Previous Balance section of the next statement issued? (\$475)
8. If the balance is paid in full, what amount will be paid? (\$475)
9. How much is John's balance transfer fee? ( $\$ 0$, because John did not transfer a balance)
10. When did the credit card company post charges to this account? (March 2)
11. How many days are in the billing cycle? (30)
12. What is the amount of the late fee if the balance on the card is less than or equal to $\$ 1,000$ ? ( $\$ 29$ )
13. What is the amount of the late fee if the balance on the card is more than $\$ 1,000$ ? ( $\$ 35$ )
14. What is the amount of the over-the-credit limit fee? (\$29)
15. What is the APR after the first year? (14.99\%)
16. What is the lowest APR on this credit card for the first year introductory offer? (8.99\%)
17. What is the APR for a balance transfer? (15.99\%)
18. What is the APR for cash advances? (the U.S. Prime Rate plus 14.99\%)
19. What is the penalty APR? (28.99\%)
20. If the penalty APR is applied, how many consecutive on-time payments must be made to remove this penalty APR? (6)
21. How many days after the close of each billing cycle must the payment due date be? (25)
22. If John is charged interest, what is the minimum amount he would be charged? (\$1.50)
23. What is the penalty fee for a returned payment? (\$35)
24. What is John's annual fee for this card?. (\$20)
25. What is the maximum fee for a balance transfer? (\$100)
26. The introductory offer is good for how many years? (1)
27. If John pays $\$ 45$ each month on this account and makes no additional charges, how many years will it take him to pay off this credit card? (1)
28. If John makes no additional charges using this card and continues to make the minimum payment on time each month, how many years will it take John to pay off this credit card? (2)
29. How much interest will John end up paying on this card if he makes no additional charges and continues to make the minimum payment each month? (\$64)
30. How much interest will John end up paying on this card if he makes no additional charges and makes a monthly payment of \$45? (\$27)

## Handout 2.7: What's the Number (Game Card)

Directions: Select answers from Handout 2.6 to fill in the spaces on the game card in any random order. You may use each number only once on the game card.

| What's the Number |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | FREE |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Handout 2.8: The May Statement and More

John Doe did not make any new purchases with his credit card during the month of April. He received a new statement on May 1. There are several blank numbered boxes on Handout 2.8: The May Statement. Fill in these boxes and answer the following questions.

1. If John pays his balance in full on the May statement, how much will the March 1 purchase have cost him?
2. If John pays his balance in full on the May statement, how much did he save by shopping on the March 1 sale day instead of paying the regular price?

Handout 2.8: The May Statement and More, (cont.)


## Handout 2.8: May Statement and More, (cont.)

- 


## What if I want CCC Bank to permit transactions that exceed my credit limit on this account?

From time to time, there are emergencies that require additional funds. If you want CCC Bank to permit and authorize transactions that exceed your credit limit on this account, you must complete the authorization form below and return it to CCC Bank. If you fail to complete and return the form, transactions that cause you to exceed your credit limit will be denied. Over-the-credit limit fees apply. (See Disclosure Information.) By opting in to allow transactions that take you over your credit limit, we will impose only one fee per billing cycle. You can revoke your opt-in at any time. CCC Bank reserves the right to reject transactions that are deemed unreasonable.


Detach and return with payment


## Handout 2.8: The May Statement and More—Answer Key

John Doe did not make any new purchases with his credit card during the month of April. He received a new statement on May 1. There are several blank numbered boxes on Handout 2.8: The May Statement. Fill in these boxes and answer the following questions.

1. If John pays his balance in full on the May statement, how much will the March 1 purchase have cost him? (\$19 paid on the April statement + \$524.76 on the May statement $=\$ 543.76$ )
2. If John pays his balance in full on the May statement, how much did he save by shopping on the March 1 sale day instead of paying the regular price? (According to the sales receipts, the total amount for John's purchases was $\$ 440.04$ and the tax was $\$ 34.96$. The receipts also included information on his savings: John saved $\$ 48.89$ on purchases and $\$ 4.15$ in tax. The regular price would have been $\$ 475.00+\$ 48.89+\$ 4.15=\$ 528.04$. If he pays the amount in full on his May statement, using his credit card cost him \$543.76. He did not save anything, but lost $\$ 15.72$. [\$43.76-\$528.04 = \$15.72].)

## Handout 2.8: The May Statement and More—Answer Key

| Summary of Account Activity | Payment Information |  |  |
| :---: | :---: | :---: | :---: |
| Previous Balance. . . . . . . 1 \$475.00 | New Balance |  | 2 \$524.76 |
| Payments . . . . . . . . . . . . . . . . . . . . \$19.00 | Minimum Payment Due . . . . . . . . . . . . . . \$20.97 |  |  |
| Other Credits . . . . . . . . . . . . . . . . . . \$0.00 | Payment Due Date . . . . . . . . . . . . . . . . . . 05/24/XX |  |  |
| Purchases . . . . . . . . . . . . . . . . . . . \$00.00 | Late Payment Warning: If we do not receive your minimum payment by the date listed above, you may have to pay a $\$ 29$ |  |  |
| Balance Transfers . . . . . . . . . . . . . . . \$0.00 |  |  |  |
| Cash Advances . . . . . . . . . . . . . . . . . \$0.00 |  |  |  |
| Past Due Amount . . . . . . . . . . . . . . . \$0.00 | APR of $428.99 \%$ |  |  |
| Fees Charged . . . . . . . . . . . . . . . . $\$ 64.00$ |  |  |  |
| Interest Charged. . . . . . . . . . . . . . . . \$4.76 | Minimum Payment Warning: If you make only the minimum payment each period, you will pay more in interest and it will take you longer to pay off your balance. |  |  |
| New Balance . ......... 3 \$524.76 |  |  |  |
|  | For example: |  |  |
| Credit Limit. . . . . . . . . . . . . . . . . . $\$ 500.00$ | If you make no |  |  |
| Available Credit . . . . . . . . . . . . . . . . $\$ 00.00$ | additional charges | You will pay off the balance shown on | And you will end |
| Days in Billing Cycle . . . . . . . . . . . . 31 | using this card and each month you pay... | this statement in about... | this much in interest.. |
|  |  |  |  |
| Call Customer Service . . . .1-800-xxx-xxxx | payment | 2 years | \$78 |
| Lost or Stolen Credit Card. 1-800-xxx-xxxx | \$45 | 1 year | \$33 |



| Notice of Change to Your Interest Rates |  | Important Changes to Your Account Terms |  |
| :---: | :---: | :---: | :---: |
|  |  | Revised terms as of / / APR for purchases |  |
| Interest Charge Calculation |  |  |  |
| Your Annual Percentage Rate (APR) is the annual interest rate on your account. |  |  |  |
| Type of Balance | Annual Percentage Rate (APR) | Balance Subject to Interest Rate | Interest Charge |
| Purchases | 7 10.99\% | \$520.00 | 8 \$4.76 |

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## Handout 2.8: The May Statement and More—Answer Key

## What if I want CCC Bank to permit transactions that exceed my credit limit on this account?

From time to time, there are emergencies that require additional funds. If you want CCC Bank to permit and authorize transactions that exceed your credit limit on this account, you must complete the authorization form below and return it to CCC Bank. If you fail to complete and return the form, transactions that cause you to exceed your credit limit will be denied. Over-the-credit limit fees apply. (See Disclosure Information.) By opting in to allow transactions that take you over your credit limit, we will impose only one fee per billing cycle. You can revoke your opt-in at any time. CCC Bank reserves the right to reject transactions that are deemed unreasonable.
 Detach and return to CCC Bank Authorization for transactions that exceed credit limit

I authorize and request that CCC Bank permit and authorize transactions that exceed my credit limit. I understand that over-the-credit-limit fees apply and only one fee per billing cycle will be imposed.

Printed Name: $\qquad$
Date: $\qquad$
Account Number: 9123456789


Detach and return with payment

| Credit Card Company <br> 123 Credit Street <br> Anytown, USA | Payment Information <br> Account Number: $\qquad$ 123456789 <br> New Balance Total: $\qquad$ \$524.76 |
| :---: | :---: |
| John Doe <br> 123 Payment Avenue <br> Bottom Line, USA | Payment Due Date: ........................04/24/XX |
|  | Total Minimum Payment Due .... $10 \$ 20.97$ |
|  | Enter Payment Amount |
|  | Enclosed ......................... \$ |

## Handout 2.9: Credit Card Survey

1. Do you use a credit card? $\qquad$ Yes $\qquad$ No
2. How many credit cards do you carry in your wallet? $\qquad$
3. Do you have a store-brand card or major credit card?
$\qquad$ Store-brand card $\qquad$ Major credit card $\qquad$ Both
4. How many times a week do you use a credit card?
$\qquad$ Fewer than five times $\qquad$ More than five times
5. What would you estimate is the average dollar amount of each transaction on your credit card?
$\qquad$ $\$ 10$ or less $\qquad$ more than $\$ 10$ but less than $\$ 50$ $\qquad$ $\$ 50$ or more
6. What incentives are offered by your credit card?
7. What are the advantages of using a credit card?
8. What are the disadvantages of using a credit card?
9. Do you know the interest rate that you pay on your credit card? $\qquad$ Yes $\qquad$ No
10. Do you always or usually pay off the full balance on your credit card(s) each month?
$\qquad$ Yes $\qquad$ No

## Handout 2.10: Different Views

## The Consumer's Side

Wesley Wannemacher of Lima, Ohio, charged \$3,200 on a credit card in 2001 to help pay for his wedding. That put him \$200 over his credit limit. Wannemacher told a U.S. Senate panel that he had paid \$6,300 over the last six years, nearly double his initial debt, and still has a balance of $\$ 4,400$.

Millions of consumers have been caught in spiraling debt as credit card issuers have flooded them with solicitations and then squeezed them with record-high fees and high interest rates.

For years, Congress ignored consumer outcries, but now some changes have been made. Still, some of the policies remain:

- Many card issuers hit consumers with penalty rates of up to 32.24 percent for a variety of infractions, mostly late payments. The sky-high interest rates can apply to the customers' entire balance, not just new charges.
- Some issuers impose these rates on cardholders who pay them on time, but are late paying another creditor.
- Many issuers impose fees of up to \$39 for paying even one minute late or going over a credit limit. In one of the most abusive practices, the fee is imposed repeatedly every month the customer remains over the limit.

These practices are plainly designed to suck consumers dry. Issuers surely have a right to rein in those who don't pay their bills, but only in a way that enables customers to get out of debt. Lenders who are so incompetent that they extend credit to people who can't handle it deserve some of the blame and some of the bill.
With all the traps awaiting consumers, issuers should have to disclose every rule and penalty in clear English. Instead, a federal study last fall confirmed what just about every customer knows: The fine-print disclosures are too complicated for many consumers to understand.
After Wannemacher agreed to testify before the Senate he received a call from the credit card company to forgive the $\$ 4,400$ balance. Also, one company has dropped the practice of charging over-the-limit fees repeatedly every month a customer remains over the limit. Another issuer announced it would drop the practice of charging higher interest rates because a customer was late paying another creditor. These moves are helpful, but Congress should set some markers to ensure that credit card issuers behave better than loan sharks.

SOURCE: Adapted from editorial article Today's Debate: Credit Practices, March 9, 2007, USA TODAY

## And the Other Side

Credit cards have undergone enormous change in recent years, and we have been listening to consumers and to concerns raised by some members of Congress. We agree there are things that we can and should do better.
It's clear that disclosures of terms and conditions must be updated to reflect modern, multiple-featured cards. The bottom line: Each customer must have disclosures that are concise, clear and comprehensible. We supported a Federal Reserve review of disclosures and some changes have resulted.

It's important to keep credit card trends in perspective. More than half of Americans pay their balances in full every month. Credit card balances make up only about 3 percent of the debt carried by American households, and that percentage has actually dropped in recent years.
According to government studies, intense competition has lowered interest rates, eliminated most annual fees and ensured greater consumer choice.

Credit cards offer convenience, flexibility and safety to consumers and are more widely available than ever before. The benefits to the economy are also clear: Credit cards facilitate online commerce and allow smaller stores to compete with mega-retailers. Because credit cards are so convenient, it's easy for consumers to forget that using a credit card means taking out a loan for which no collateral is offered. This makes a credit card loan riskier for the lender than other loans.
Certainly, a small minority of consumers struggle to manage their debt. That's why the credit card industry has extensive efforts to promote financial literacy. In addition to the American Bankers Association Education Foundation, banks across the country offer education and credit counseling to help increase financial literacy in their local communities.

For consumers, plastic is the most preferred method of payment today. We need to make sure the many benefits of credit cards are not lost as we continue to improve the credit card customer's experience.

SOURCE: Adapted from article written by Ed Yingling, President and CEO of the American Bankers Association, March 9, 2007, USA TODAY

## Handout 2.11: Minimum or Fixed

You have a credit card with a balance of $\$ 990$ and an interest rate of 19 percent. By not making any additional charges to this account and making the minimum payment each month, you are working to pay this account off. Although all credit cards do not use the same rate in calculating the minimum payment, it is usually between 2 percent and 4 percent of the total balance. Your minimum payment is based on a 3 percent rate. After analyzing your budget, you have a decision to make. Do you want to continue to make the minimum payment or make a fixed payment of $\$ 40, \$ 50$ or $\$ 60$ a month? To complete the chart and help you make your decision use the online calculator at http://federalreserve.gov/creditcardcalculator/Default.aspx

|  | Minimum <br> Payment | $\mathbf{\$ 4 0}$ Payment | $\mathbf{\$ 5 0}$ Payment | \$60 Payment |
| :--- | :---: | :---: | :---: | :---: |
| Credit card balance | $\$ 990$ | $\$ 990$ | $\$ 990$ | $\$ 990$ |
| Interest rate | $19 \%$ | $19 \%$ | $19 \%$ | $19 \%$ |
| Minimum payment rate | $3 \%$ | $3 \%$ | $3 \%$ | $3 \%$ |
| Months to pay off debt |  |  |  |  |
| Total amount of <br> interest paid |  |  |  |  |

1. If you make the minimum payment how long will it take you to pay the debt?
2. How much interest will you have paid?
3. What happens to the amount of time it takes to pay off this debt as you increase your monthly payment?
4. What happens to the amount of interest you pay as you increase your monthly payment?
5. What choice will you make? Explain your answer.

## Handout 2.11: Minimum or Fixed—Answer Key

You have a credit card with a balance of $\$ 990$ and an interest rate of 19 percent. By not making any additional charges to this account and making the minimum payment each month, you are working to pay this account off. Although all credit cards do not use the same rate in calculating the minimum payment, it is usually between 2 percent and 4 percent of the total balance. Your minimum payment is based on a 3 percent rate. After analyzing your budget, you have a decision to make. Do you want to continue to make the minimum payment or make a fixed payment of $\$ 40, \$ 50$ or $\$ 60$ a month? To complete the chart and help you make your decision use the online calculator at http://federalreserve.gov/creditcardcalculator/Default.aspx

|  | Minimum <br> Payment | $\mathbf{\$ 4 0}$ Payment | $\mathbf{\$ 5 0}$ Payment | $\mathbf{\$ 6 0}$ Payment |
| :--- | :---: | :---: | :---: | :---: |
| Credit card balance | $\$ 990$ | $\$ 990$ | $\$ 990$ | $\$ 990$ |
| Interest rate | $19 \%$ | $19 \%$ | $19 \%$ | $19 \%$ |
| Minimum payment rate | $3 \%$ | $3 \%$ | $3 \%$ | $3 \%$ |
| Months to pay off debt | 125 | 32 | 24 | 20 |
| Total amount of <br> interest paid | $\$ 878$ | $\$ 277$ | $\$ 207$ | $\$ 167$ |

1. If you make the minimum payment how long will it take you to pay the debt? (125 months)
2. How much interest will you have paid? (\$878)
3. What happens to the amount of time it takes to pay off this debt as you increase your monthly payment? (amount of time decreases)
4. What happens to the amount of interest you pay as you increase your monthly payment? (amount of interest decreases)
5. What choice will you make? Explain your answer. (Answers may vary but should include information on the amount of interest paid and the length of time required to pay off the debt.)

## Lesson Description

After discussing basic information about debit cards, students work in pairs to balance a bank account statement and calculate the costs of using a debit card irresponsibly. The students then conduct a survey as an out-of-class activity, collecting and interpreting data on debit card usage in their area. The students analyze the advantages and disadvantages of using credit cards and debit cards.

## Concepts

Automated Teller Machine (ATM) card
Automated electronic transfer
Check
Checking account
Debit cards
Overdraft
Overdraft service

## Objectives

Students will:

- Define the terms listed in the "Concepts" section of the lesson.
- Explain the importance of taking responsibility for personal finances.
- Describe advantages and disadvantages of standard overdraft services.
- Analyze the consequences of not being responsible in keeping a current bankaccount balance.
- Explain the importance of maintaining records of deposits, withdrawals and payments from bank accounts.
- Compare the advantages and disadvantages of different card-payment methods.


## Content Standards

## National Standards in K-12 Personal Finance

Financial Responsibility and Decision Making: Apply reliable information and systematic decision making to personal financial decisions.

- $\quad$ Standard 1: Take responsibility for personal financial decisions.
- Eighth-grade expectation 1: Identify ways to be a financially responsible young adult.
- Eighth-grade expectation 2: Give examples of the benefits of financial responsibility and the costs of financial irresponsibility.
- Twelfth-grade expectation 1: Explain how individuals demonstrate responsibility for financial well-being over a lifetime.
- Standard 4: Make financial decisions by systematically considering alternatives and consequences.
- Eighth-grade expectation 3: Evaluate the results of a financial decision.

Planning and Money Management: Organize and plan personal finances and use a budget to manage cash flow.

- Standard 3: Describe how to use different payment methods.
- Eighth-grade expectation 1: Discuss the advantages and disadvantages of different payment methods, such as stored-value cards, debit cards and online payment systems.
- Twelfth-grade expectation 1: Demonstrate skill in basic financial tasks, including scheduling bill payments, writing a check, reconciling a checking/debit account statement, and monitoring printed and/or online account statements for accuracy.
- Standard 4: Apply consumer skills to purchase decisions.
- Eighth-grade expectation 1: Explain the relationship between spending practices and achieving financial goals.

Credit and Debt: Maintain creditworthiness, borrow at favorable terms and manage debt.

- Standard 1: Identify the costs and benefits of various types of credit.
- Eighth-grade expectation 1: Explain how debit cards differ from credit cards.


## Time Required

180-240 minutes

## Materials

- Visuals 3.1, 3.2 and 3.3
- A copy of Handout 3.1 cut into strips, with each strip cut in half so that terms and their definitions are two different pieces of paper
- A copy of Handouts 3.2, 3.3, 3.4, 3.5, 3.6, 3.8 and 3.9 for each student
- Four copies of Handout 3.7 for each student plus a copy for each group of four students
- A copy of Handout 3.10, cut into strips
- Two large sheets of chart paper
- A copy of Handouts 3.3 Part II, 3.5, 3.6, 3.10-Answer Keys for the teacher
- A copy of Handout 3.11 for half the students
- A copy of Handout 3.12 for half the students
- A calculator for each student
- Optional: small prizes for students who succeed with Handouts 3.11 and 3.12


## Procedures

1. Tell the students they will be learning about debit cards. Randomly distribute the cutapart terms and definitions from Handout 3.1: Debit Card Terms to the students. Tell the students that some of them have terms that need to be matched to definitions, and others have definitions that need to be matched to terms. Allow a few minutes for the students to circulate around the room to find matches. When every student has found a match, allow time for each pair of students to read their matched term and definition to the class. Ensure that each pair of students is correctly matched.
2. Explain that these are all personal finance terms about which they will learn in this lesson. Have students return to their seats.
3. Ask the students if they or someone in their household has a checking account. Explain that a checking account is an account held at a bank or credit union into which account owners deposit funds. This means funds are added to the account. The account owners can also withdraw or remove funds from an account. Explain that funds can be withdrawn from a checking account by electronic transfer, check, with an ATM card or debit card. Explain that responsibility is important in maintaining a checking account. An account holder must keep a record of deposits and withdrawals to prevent an overdraft. Explain that an overdraft occurs when an account holder does not have enough money to cover transactions from checks, ATM withdrawals, debit card purchases, or electronic payments.
4. Tell the class that consumers sometimes choose to use an automatic electronic transfer to pay expenses. Explain that this is an online payment that is automatically deducted from the account balance on a recurring basis. Cell-phone bills, car payments and utility bills, such as gas and electric bills, are examples of the type of payment that people often choose to pay with an automatic electronic transfer.
5. Explain that consumers can also use checks to withdraw funds from their bank accounts. Define a check as a printed form directing a bank to withdraw money from an account and pay it to another account. Consumers who have checking accounts can write checks to pay for purchases.
6. Ask the students if they are familiar with ATMs. Tell the class that "ATM" is the abbreviation for "automated teller machine." Emphasize that an ATM card is used to access a computer that allows a bank customer to get cash, make deposits or transfer money between accounts. ATMs are found in banks and many other convenient locations and can be used 24 hours a day, seven days a week. Banks usually provide their customers with ATM cards as a free service. However, when an account holder uses an ATM card at an ATM that is from a different bank, there is usually a fee charged for the transaction.
7. Explain that a debit card is a "pay now" point-of-sale transaction card that replaces cash and checks. Debit card transactions are deducted electronically from a cardholder's savings or checking account. Debit cards differ from ATM cards because they can be used to make purchases, and they differ from credit cards because they are not loans.
8. Explain other considerations for using debit cards.

- Unlike credit cards, which cap your liability for unauthorized charges at \$50, your liability for a debit card depends on the situation. If you notify the bank within two business days of discovering an unauthorized transaction, your maximum liability is $\$ 50$. However, if you don't notify the bank until after those first two days, you could lose up to $\$ 500$.
- It can be more difficult to deal with problem transactions involving damaged or defective purchases, major purchases or items purchased online because of the more limited protections in cases of unauthorized transactions or disputes.
- A temporary hold on your funds is made when making some purchases. If the final purchase price is unknown when a debit card is swiped, the hold can be for more than the actual purchase. For example, when you check into a hotel, a hold is placed on your funds for the cost of your anticipated stay. Until the final transaction is processed, which could take a day or more, you will not have access to that amount in your account.

SOURCE: www.fdic.gov/consumers/consumer/news/cnfallo9; Debit vs. Credit Cards: How They Stack Up
9. Explain that in the past, most banks automatically enrolled customers in a standard overdraft service for all types of transactions. Define an overdraft service as a service provided by financial institutions to generally approve and pay overdraft transactions when the accountholder does not have enough funds to cover the transactions in return for a fee.
10. Explain that because of the increasing percentage of bank overdrafts triggered by debit cards and ATM transactions, the rules for standard overdraft service have been changed. Effective July 1, 2010, financial institutions are required to provide customers a notice that explains overdraft services including ATM cards and debit card transactions, and consumers must be given a choice as to whether the overdraft service will apply to debit card and ATM transactions.
11. Distribute a copy of Handout 3.2: Overdraft Service. Tell the students that this form is similar to one that a financial institution is required to send to account holders under the new rules.
12. Divide the class into pairs. Instruct each pair of students to work together to read the contents of the handout and underline 10 things that would be important to an account holder.
13. Allow time for each pair of students to share information considered important. (Responses will vary but should include all content on the form.)
14. Distribute a copy of Handout 3.3: Debit Cards in the News, Part I to each student. Divide the class into four groups. Assign each group one of the paragraphs on the handout. Explain that their assigned paragraph is a news report. Instruct each group to work together to develop a presentation based on the content of their paragraph. Encourage the groups to design a visual as part of their news report presentation. (Visuals might include graphs, charts, illustrations or graphics.)
15. Distribute a copy of Handout 3.3: Debit Cards in the News, Part I/ to each student. Explain that as each of the four news reports are presented, they should write answers to the questions based on the presentations given.
16. Allow time for each group to present its news reports. After presentations have been given, allow time for class discussion. Guide the discussion using Handout 3.3: Debit Cards in the News, Part II—Answer Key.
17. Display Visual 3.1: The Causes of Overdrafts and discuss the causes of overdrafts according to the 2008 survey cited on the visual. Explain that the percentage of overdrafts from each category will change based on the actions of consumers. Ask the students to predict the percentage change in categories for the future.

- Which category will probably decrease? (The check category will probably decrease as more consumers use fewer checks.)
- Which categories will probably increase? (The electronic and debit/ATM categories will probably increase as consumers use these services more.)

18. Explain that taking responsibility for personal financial decisions includes being responsible when using a debit card. Because debit card transactions are deducted electronically from a cardholder's bank account, it is important to maintain current bank-account records. Banks usually provide account information online, and an increasing number of consumers view their accounts online. Like a printed account statement, however, an online account statement is not always a reliable reflection of a bank account balance. An account holder may have written a check that has not yet been presented to the bank for payment by the time the online statement is produced, for example, or a recurring electronic transaction may be scheduled after the most recent online statement is produced. Also, occasional errors can be made on an account. These are some of the reasons that maintaining an up-to-date bank-account balance is important.
19. Provide each student with a calculator and three handouts-Handout 3.4: Jane's Bank Account, Handout 3.5: Jane's Bank Account Register and Handout 3.6: Analyzing Jane's Transactions. Divide the class into pairs and allow each pair of students to work together to complete the three handouts.
20. After the students have completed the three handouts, allow time for class discussion and to review answers using Handouts 3.5 and 3.6 answer keys. Ask the class the following questions:

- Would you describe Jane as being financially responsible? Why or why not?
- What advice would you have for Jane? (Answers to both questions may vary but should include information on the importance of recording all transactions in a bank-account register in a timely manner to avoid bank overdrafts. Jane did not do this, and as a result she lost currency to fees. Answers should also reflect Jane's decision to have the overdraft service on debit card and ATM transactions and the cost of the service.)

21. Display Visual 3.2: The Plastic of Choice. Ask students to compare the 2003 data and the 2008 data as shown in the charts Discuss possible reasons for the increasing popularity of debit cards across the nation. (Answers may vary but should include advantages of using a debit card, such as convenience, automatic deduction with no bills to pay and no fees unless an overdraft occurs.)
22. Remind the students that the information on Visual 3.2 is from data collected on a national level. Ask the students the following questions about how data collected in their community might compare with the national data:

- Do you think debit cards are the plastic of choice in this locality?
- Do you think debit card usage will increase in this locality in the next few years? (Answers to both questions will vary. Accept all answers as valid thoughts based on limited information.)

23. Tell the students that they will collect data related to debit card usage at the local level for a homework project. Give each student four copies of Handout 3.7: Debit Card Survey. Instruct the students to use the survey forms to interview four adults, using a separate survey form for each adult and asking each adult all the questions on the form. Remind the students that to protect the confidentiality of the information they collect, they should not put any adults' names on the survey forms. Tell the students to bring their completed surveys back to class by the specified date.
24. When the students have brought the completed surveys to class, display Visual 3.3: Debit Card Survey Results. Divide the class into groups of four to tabulate the collected survey data and summarize the findings. Provide a copy of Handout 3.7 to each group. When students have completed summarizing the data by group, record and summarize the findings on Visual 3.3 and discuss the results.
25. Instruct the students to assume the role of news reporters. Their assignment is to use data and information collected in the debit card survey to write a news story on the use of debit cards and payment methods in their locality. The students should convert the numerical data to percentages for their stories. Stress the importance of objectivity and confidentiality in their stories to protect the survey participants.

## Closure

26. Divide the class into pairs. Provide each pair of students a copy of Handout 3.8: The Pros and Cons of Debit Cards and a copy of Handout 3.9: The Pros and Cons of Credit Cards (the subject of lesson two). Instruct each pair of students to complete the handouts together by listing advantages and disadvantages of using each type of card.
27. When each pair of students has completed the handouts, discuss the advantages and disadvantages of each method of payment. Ensure the discussion includes the following advantages and disadvantages:

- Fees: Credit cards have late fees, over-the-credit-limit fees and interest fees according to the terms of the card. Debit cards may have an overdraft fee, which is charged if a cardholder has requested the overdraft service and spends more than is in his or her account. If a cardholder has not chosen to have the overdraft service, a transaction will be declined at the point-of-purchase. This could be embarrassing. Think about going to a restaurant, ordering and enjoying a meal and then having a debit card declined.
- Convenience: A credit card holder receives a monthly statement indicating a balance that must be paid by a specific date. Purchases with a debit card are automatically deducted directly from a bank account, and there is no statement balance to be paid.
- Choice: A credit card allows a consumer to wait until the statement is due to choose to pay a minimum amount or more, depending upon the consumer's budget. The full amount of a debit card purchase is deducted from a bank account immediately. There is no choice on when to pay or how much to pay when using a debit card.
- Responsibility: Whether using credit cards or debit cards, consumers have the responsibility to monitor their accounts and meet the terms of the card to avoid fees.
- Incentives: Credit cards often offer incentives to consumers, whereas debit cards do not. Credit cards allow consumers to build credit; debit cards do not help build credit.
- Liabilities: Unlike credit cards, which cap liability for unauthorized charges at $\$ 50$, the liability for a debit card depends on the situation. If a bank is notified within two business days of discovering an unauthorized transaction, the maximum liability is $\$ 50$. However, if a bank is not notified within two business days, the loss can be up to $\$ 500$.
- Consumer Protection: Debit cards offer more limited protection in cases of unauthorized transactions or disputes. Credit cards sometimes allow withholding payment while disputes are investigated.


## Assessment

28. Tape one piece of chart paper labeled "Debit Card" on one wall of the classroom and a second piece of chart paper labeled "Credit Card" on another wall. Pass out the eight strips cut from Handout 3.10: Debit or Credit? to eight different students. Tell the students to decide if the description on their strip refers to a debit card or a credit card and to walk to a spot near the appropriate piece of chart paper. After the eight students have moved to the charts, call on each student to read his or her sentence strip aloud. Ask the class to applaud to designate their agreement. After checking to be sure students are located in the correct places, have them return to their seats.
29. Distribute one copy of Handout 3.11: Banking on Debit Cards, Part I to half the class and one copy of Handout 3.12: Banking on Debit Cards, Part I/ to the other half. Tell the students to choose any five of the terms on their handout and write a brief definition of those terms in the same space as the term.
30. Tell the students that they will now play a game using their copies of Handout 3.11 and Handout 3.12. Explain that you will randomly call out a term from the handouts. If a student has written a definition on his or her card for the word that is called out, the student should mark an " $X$ " through that space. The first student who has all five of his or her boxes marked this way wins the game, provided the student can define all five terms correctly.
31. Begin the game by calling out terms randomly from Handouts 3.11 and 3.12. After calling out each term, allow time for the students to search their copies of the handouts and mark an " X " if they have defined a called-out term. When a student indicates he or she has marked all five terms, ask the student to define the five marked terms. If the student cannot define all five terms correctly, play continues until another student has marked and correctly defined the five terms. Play the game for more than one round. (Optional: Give a small prize to the winner of each round of play.)

## Extension Activities

1. Tell students to survey different banks to identify the overdraft fee each bank charges and to bring the results of their surveys to class on a specific date. When the students bring their collected data to class, ask them to find the average, mode and median overdraft fees charged.
2. Using Handout 3.7 as a guide, challenge the students to design, conduct and analyze a survey about the use of ATM cards.

## Visual 3.1: Causes of Overdrafts

Bank Fees ■ 0.6\%

Visual 3.2: The Plastic of Choice

- Debit cards account for 33 percent of in-store transactions.
- Credit cards account for 19 percent of in-store transactions.
- In three years, debit card use will account for more than half of all retail purchases.


## Visual 3.3: Debit Card Survey Results

Total Number Surveyed $\qquad$

1. Do you use a debit card? Yes $\qquad$ No $\qquad$
2. How many times a week do you use a debit card?

Fewer than five times $\qquad$ Five times or more $\qquad$
3. What would you estimate the average dollar amount of each transaction is on your debit card?
\$10 or less $\qquad$
More than $\$ 10$, less than $\$ 50$ $\qquad$
$\$ 50$ or more $\qquad$
4. What are the benefits of using a debit card?
5. What are the disadvantages of using a debit card?
6. Have you ever been overdrawn at your bank as a result of using your debit card?

Yes $\qquad$ No $\qquad$
7. Estimate the percentage of use for each method of payment when making an in-store transaction. (The sum of all methods of payment should be 100 percent.)
$\qquad$
credit card $\qquad$ debit card
$\qquad$ check
$\qquad$ cash

## Handout 3.1: Debit card Terms

| ATM card | A form of debit card used in a machine by punching in a code or personal identification number. A computer is accessed to get cash, make deposits or transfer money between accounts. |
| :---: | :---: |
| Bank-account register | A tool in which an account holder lists the initial balance in an account and then records all debits and credits in order to maintain an accurate record of account activity and an accurate balance. |
| Bank statement | A record given to an account holder by a bank or credit union to keep the account holder informed of all transactions made during the statement period. These statements are sent on a regular basis or posted online. |
| Check | A printed form directing a bank to withdraw money from an account and pay it to another account. |
| Checking account | An account held at a bank or credit union into which account owners deposit funds. Account owners have the privilege of writing checks on these accounts and are able to use ATM cards and debit cards to access funds. |
| Financial responsibility | Making well-thought-out decisions about earning, spending and saving money; keeping financial records, staying out of debt and so on. |
| Credits | Additions or deposits to an account. In a bank-account register, these are added to the balance. |

## Handout 3.1: Debit card Terms-cont.



## Handout 3.2: Overdraft Information

## CCC Bank <br> Anytown, USA

Information on Overdrafts, Overdraft Service and Overdraft Fees
(This overdraft policy will be effective beginning July 1, 2010, for all new accounts and effective beginning August 15, 2010, for all accounts existing prior to July 1, 2010)

An overdraft occurs when you do not have enough money in your account to cover a transaction, but the CCC Bank pays the amount of the transaction anyway. CCC Bank pays overdrafts at its discretion, which means that CCC Bank does not guarantee that it will always authorize and pay any type of transaction. If CCC Bank does not authorize and pay an overdraft, your transaction will be declined. CCC Bank can cover an overdraft in two different ways:

1. CCC Bank offers standard overdraft practices that come with your account. This notice explains our standard overdraft service.
2. CCC Bank also offers overdraft protection plans, such as a link to a savings account, which may be less expensive than the standard overdraft practices. To learn more, ask about these plans.

What is the standard overdraft service that comes with my account?
CCC Bank does authorize and pay overdrafts for the following types of transactions:

1. Checks and other transactions made using your checking account number
2. Automatic bill payments

CCC Bank does not authorize and pay overdrafts for the following types of transactions unless you request this service:

1. ATM transactions
2. Debit card transactions

## What fees will I be charged if CCC Bank pays my overdraft?

Under the standard overdraft service:
CCC Bank will charge you a fee of $\mathbf{\$ 3 4}$ each time it pays an overdraft.
If your account is overdrawn for 5 or more consecutive business days, CCC Bank will charge an additional $\$ 5$ per day. There is no limit on the total fees CCC Bank can charge you for overdrawing your account.

## What if I want CCC Bank to authorize and pay overdrafts on my ATM and point-of-ser-

 vice debit card transactions?If you want CCC Bank to authorize and pay overdrafts on ATM and point-of-service debit card transactions, you must complete the authorization form below and return it to CCC Bank. Failure to complete and return the form will result in ATM and debit card transactions being denied if your account does not have funds to cover the transactions.

## Authorization for Overdraft Services for Debit Card and ATM Transactions

$\square$ I authorize and request that CCC Bank pay overdrafts on my ATM and debit card transactions.

Printed Name: $\qquad$

Signature $\qquad$

Date: $\qquad$

## Handout 3.3: Debit Cards in the News-Part I

## Debit Cards: What are they?

Although most consumers have a checking account, every year people use fewer and fewer checks. Today consumers increasingly use debit cards instead of checks. A debit card is a service offered by banks. It allows a point-of-sale transaction that replaces both cash and checks. Debitcard transactions are deducted electronically from a cardholder's bank account. Consumers agree that debit cards are easier and faster than writing a check and are more convenient than using cash. Additionally, because the amount of a debit-card purchase is deducted from the account holder's bank account, there is no interest paid as their might be with the use of a credit card.

## Debit Cards: What's Happening?

Consumers are using debit cards both more frequently than in the past and for increasingly smaller transaction amounts. In October 2009, the Center for Responsible Lending reported that nearly three-quarters of checking account customers had a debit card, with active card users averaging 17 debit card transactions per month. As a result, debit card usage has exceeded credit card usage since 2005.

At the same time, the average debit card transaction size has decreased by about four percent per year, with more than a quarter of all debit card transactions now conducted for purchases of less than $\$ 10$. People between the ages of $18-24$ are more likely to use a debit card for small purchases than those older than 24.

## Debit Cards and ATMS: There's More to the Story

The November 2008 FDIC Study of Bank Overdraft Programs reports that debit card transactions are the most common way to overdraw bank accounts. The report states that $48.8 \%$ of overdraft transactions were from debit cards and ATMs while $30.2 \%$ were from checks. According to research done by the Center for Responsible Lending, Americans paid nearly $\$ 24$ billion in overdraft fees in 2008, which was a $35 \%$ increase from 2006. This report also states that the average overdraft fee charged was $\$ 34$. Think about the cost of using a debit card for a soft drink for which you paid $\$ 1$ if that purchase caused you to overdraw your bank account and caused your bank to impose a \$34 overdraft charge! Wow-\$35 for a soft drink would definitely be throwing currency away!

## Debit Cards and ATMS: Consumers Make Decisions

Many consumers prefer to have overdraft service to cover important bills, such as checks used to pay rent and utilities and not have overdraft services on debit card and ATM transactions. In response, the Federal Reserve Board has implemented new rules. Beginning July 1, 2010, a consumer must request the overdraft service for ATM and one-time debit card transactions. Financial institutions must provide consumers information about overdraft services and fees charged and give consumers a choice. Customers who do not choose to have the overdraft service will have debit card and ATM transactions declined. According to Federal Reserve Chairman Ben Bernanke, "Both new and existing account holders will be able to make informed decisions about whether to sign up for overdraft service."

## Handout 3.3: Debit Cards in the News-Part II

1. Why are debit cards popular with consumers?
2. How has consumer usage of debit cards changed?
3. Where is the danger of "throwing currency away" when using debit cards?
4. How are debit card holders affected by the new Federal Reserve rules?

## Handout 3.3: Debit Cards in the News—Part II—Answer Key

1. Why are debit cards popular with consumers?
(Debit cards are easier and faster than writing checks and are more convenient than using cash. There are no interest fees, and there is no debt to repay.)
2. How has consumer usage of debit cards changed?
(Consumers are using debit cards both more frequently than in the past and for increasingly smaller transaction amounts.)
3. Where is the danger of "throwing currency away" when using debit cards?
(People throw currency away when they incur overdraft charges.)
4. How are debit card holders affected by the new Federal Reserve rules?
(Consumers will have to choose to have the overdraft service on debit cards and ATM transactions. It will not be provided unless a customer "opts" in to the service. If they choose not to have this service, close attention should be given to keeping an accurate bank balance to avoid having transactions declined. If they choose to have this service, close attention should be given to keeping an accurate bank balance to avoid overdraft fees.)

## Handout 3.4: Jane's Bank Account

Jane has a job at The Happy Diner. When she gets paid, she deposits her paycheck in her checking account at XYZ Bank. Jane chose this bank for her checking account because she is a student, and this bank provides free checking to students. This means the bank does not charge any monthly service fee on a checking account, although there is a $\$ 35$ fee for any overdrafts. The bank also provides a free debit card to use with the checking account. Jane likes the idea of being able to write checks and use a debit card from the same account. She thinks having a debit card is much more convenient than having a credit card. First of all, there is no monthly statement to worry about paying because purchase amounts come directly out of her bank account. She does not have to be concerned about paying the interest fees that are associated with a credit card. She has read that some of the interest rates on credit cards can be very high.

Jane has a bank-account register, but she has not kept it up to date. Usually, because the bank sends her a statement at the end of each month, she looks at the ending balance on the bank statement to see how much money she has in her account. Knowing that she had $\$ 468.75$ in her account on the bank statement she received on March 1, she was confident that she could pay her normal bills using checks-car payment, insurance payment on the car, gas for the car and cell phone bill. For most other things, she would use her debit card because the amount was usually small, and it was more convenient than writing more checks.

## Problem:

Jane had several transactions for March. Refer to the transactions below and record them in her bank-account register to find her ending balance. To record the transactions, use the information given for checks. Use the abbreviations "DC" for a debit card purchase and "DEP" for a deposit. If the transaction is an expense that will be deducted from Jane's account, record it in the "Debit" column. If the transaction is a deposit and will be added to Jane's account, record it in the "Credit" column. In the event that Jane is overdrawn, use the abbreviation "OD" and deduct the overdraft fee. Record any overdrafts in the Debit column.

## March Transactions for Jane

| March 10 - Jane wrote check number 204 to ABC Finance Company for $\$ 410.00$. |
| :--- |
| March 16 - Jane deposited her paycheck from The Happy Diner for $\$ 250.00$. |
| March 16 - Jane wrote check number 205 to FGH Insurance Company for $\$ 178.00$. |
| March 17 - Jane used her debit card for an $\$ 11$ purchase at a fast food restaurant. |
| March 17 - Jane used her debit card for a $\$ 17.00$ purchase at the drug store. |
| March 18 - Jane wrote check number 206 to Cell Talk for $\$ 54.00$. |
| March 19 - Jane used her debit card for a $\$ 12.00$ purchase at a discount store. |
| March 20 - Jane wrote check number 207 to the gas station for $\$ 36.00$. |
| March 25 - Jane used her debit card for a $\$ 2.50$ purchase at a fast-food restaurant. |
| March 26 - Jane used her debit card for a $\$ 3.00$ purchase of school supplies. |

Handout 3.5: Jane's Bank Account Register
Jane's Bank Account Register


Handout 3.5: Jane's Bank Account Register-Answer Key

| Jane's Bank Account Register |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Check Number | Date | Transaction Description | Payment, Fee, Withdrawal, Debit (-) |  | Deposit, Credit (+) |  | Balance |  |
|  |  | Beginning balance |  |  |  |  | \$468 | 75 |
| 204 | 3/10 | ABC Finance Company | \$410 | 00 |  |  | \$58 | 75 |
| Dep | 3/16 | The Happy Diner |  |  | \$250 | 00 | \$308 | 75 |
| 205 | 3/16 | FGH Insurance | \$178 | 00 |  |  | \$130 | 75 |
| DC | 3/17 | Purchase | \$11 | 00 |  |  | \$119 | 75 |
| DC | 3/17 | Purchase | \$17 | 00 |  |  | \$102 | 75 |
| 206 | 3/18 | Cell Talk | \$54 | 00 |  |  | \$48 | 75 |
| DC | 3/19 | Purchase | \$12 | 00 |  |  | \$36 | 75 |
| 207 | 3/20 | Gas station | \$36 | 00 |  |  | \$ | 75 |
| DC | 3/25 | Purchase | \$2 | 50 |  |  | -\$1 | 75 |
| OD | 3/25 | Overdraft fee | \$35 | 00 |  |  | -\$36 | 75 |
| DC | 3/26 | Purchase | \$3 | 00 |  |  | -\$39 | 75 |
| OD | 3/26 | Overdraft fee | \$35 | 00 |  |  | -\$74 | 75 |
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## Handout 3.6: Analyzing Jane's Transactions

Directions: After completing Jane's bank account register, answer the following questions:

1. What problems could have been prevented if Jane had recorded all transactions in her bank account in a timely manner?
2. How much, if any, currency did Jane end up "throwing away" because of overdraft fees?
3. On March 25, Jane used her debit card to buy food at a fast-food restaurant. How much did this transaction actually cost Jane?
4. On March 26, Jane used her debit card to purchase school supplies. How much did this transaction actually cost Jane?
5. If no other transactions occur before the April bank statement, what will Jane's beginning balance be on the April bank statement?
6. How many debits did Jane make from March 10 through March 26 ?
7. What was the total dollar amount of all debits made from Jane's account from March 10 through March 26 ?
8. How many credits were made to Jane's account from March 10 through March 26?
9. What was the total dollar amount of all credits made to Jane's account from March 10 through March 26 ?
10. How does responsibility relate to using a debit card?

## Handout 3.6: Analyzing Jane's Transactions—Answer Key

Directions: After completing Jane's bank account register, answer the following questions:

1. What problems could have been prevented if Jane had recorded all transactions in her bank account in a timely manner? (She would have known that she had only 75 cents left in her account after writing the check to the gas station on March 20. She could have prevented two overdrafts.)
2. How much, if any, currency did Jane end up "throwing away" because of overdraft fees? ( $\$ 35+\$ 35=\$ 70.00$ currency "thrown away" because of overdraft fees)
3. On March 25, Jane used her debit card to buy food at a fast-food restaurant. How much did this transaction actually cost Jane? $(\$ 2.50+\$ 35$ overdraft fee $=\$ 37.50)$
4. On March 26, Jane used her debit card to purchase school supplies. How much did this transaction actually cost Jane? $(\$ 3.00+\$ 35.00$ overdraft fee $=\$ 38.00)$
5. If no other transactions occur before the April bank statement, what will Jane's beginning balance be on the April bank statement? (-\$74.75)
6. How many debits did Jane make from March 10 through March 26? (nine)
7. What was the total dollar amount of all debits made from Jane's account from March 10 through March 26? (\$793.50)
8. How many credits were made to Jane's account from March 10 through March 26? (one)
9. What was the total dollar amount of all credits made to Jane's account from March 10 through March 26? (\$250.00)
10. How does responsibility relate to using a debit card? (A person must be responsible in recording all debits and credits in a bank-account register; otherwise there may be overdrafts and fees.)

## Handout 3.7: Debit Card Survey

1. Do you use a debit card? Yes $\qquad$ No
2. How many times a week do you use a debit card?

Fewer than five times $\qquad$ Five times or more $\qquad$
3. What would you estimate the average dollar amount of each transaction is on your debit card?
\$10 or less $\qquad$
More than $\$ 10$, less than $\$ 50$ $\qquad$
$\$ 50$ or more $\qquad$
4. What are the benefits of using a debit card?
5. What are the disadvantages of using a debit card?
6. Have you ever been overdrawn at your bank as a result of using your debit card?

Yes $\qquad$ No $\qquad$
7. Estimate the percentage of use for each method of payment when making an in-store transaction. (The sum of all methods of payment should be 100 percent.)
$\qquad$ credit card $\qquad$ debit card $\qquad$ check $\qquad$ cash

## Handout 3.8: The Pros and Cons of Debit Cards

## Advantages

1. $\qquad$
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$

## Disadvantages

1. $\qquad$
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$

## Handout 3.9: The Pros and Cons of Credit Cards

## Advantages

1. $\qquad$
2. $\qquad$
3. $\qquad$
4. 
5. $\qquad$

## Disadvantages

1. $\qquad$
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$

## Cards, Cars and Currency | Lesson 3: Banking on Debit Cards

## Handout 3.10: Debit or Credit

When you use this card to order expensive furniture by phone, and it never arrives, and the furniture company cannot be located, the card company must remove the questionable charge from your bill while it investigates the charges.

When you use this card to order expensive furniture by phone, and it never arrives, and the furniture company cannot be located, the money will be taken from your bank account by the company, and your bank does not have an obligation to investigate.

When you use this card you will not have to pay interest charges.

When you use this card you can have an interest-free loan when the full balance is paid off at the end of the billing period.

When you use this card you are liable for no more than \$50 if fraud occurs, according to federal law.

This card is a convenient form of borrowing with a revolving line of credit.

A consumer used this card to purchase $\$ 84.85$ and one year later owed $\$ 365.79$ on this account because of fees and penalties that were added to the account.

This card is a service offered by banks and is used for a point-of-sale transaction. It replaces both cash and checks.

## Handout 3.10: Debit or Credit—Answer Key

When you use this card to order expensive furniture by phone, and it never arrives, and the furniture company cannot be located, the card company must remove the questionable charge from your bill while it investigates the charges. (credit card)

When you use this card to order expensive furniture by phone, and it never arrives, and the furniture company cannot be located, the money will be taken from your bank account by the company, and your bank does not have an obligation to investigate. (debit card)

When you use this card you will not have to pay interest charges. (debit card)

When you use this card you can have an interest-free loan when the full balance is paid off at the end of the billing period. (credit card)

When you use this card you are liable for no more than $\$ 50$ if fraud occurs, according to federal law. (credit card)

This card is a convenient form of borrowing with a revolving line of credit. (credit card)

A consumer used this card to purchase $\$ 84.85$ and one year later owed $\$ 365.79$ on this account because of fees and penalties that were added to the account. (credit card)

This card is a service offered by banks and is used for a point-of-sale transaction It replaces both cash and checks. (debit card)

## Handout 3.11: Banking on Debit Cards—Part I

| Bebits | withdrawal | fees | credits | debit card |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| bank | deposit | ATM | account | check |
| credit card | financial <br> responsibility | free | currency | bank statement |
|  |  |  |  |  |
| service | checking account <br> benefit | consumer |  |  |

## Handout 3.12: Banking on Debit Cards—Part II

| purchase | bank-account <br> register | credit card | deposit | credits |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| financial <br> responsibility | ATM | check | debit card | bank |
| account | withdrawal | free | fees | debits |
|  |  |  |  |  |
| consumer |  |  |  |  |
|  |  |  |  |  |

## Lesson Description

Using examples of three types of cars as a reference-an economy car, a moderately priced car and a luxury car-students learn about the decisions involved in purchasing a car. The students work in groups to compare different car deals, using three criteria-the income test, the down-payment option and the time option. The students analyze the terms of a sample car contract and consider the effects of signing the contract without understanding the terms. The students use an online calculator to collect information for informed decision-making.

## Concepts

Collateral
Contract
Gross pay
Interest
Lien
Net pay
Opportunity cost
Principal
Secured loan
Truth in Lending Act

## Objectives

Students will:

- Define the terms listed in the Concepts section of the lesson.
- Analyze the price of consumer credit.
- Identify the factors that affect the total price for a car including the interest rate, the length of a contract and the size of a down payment.
- Evaluate the costs and benefits of car purchase options.
- Identify an advantage and a disadvantage of secured loans.
- Analyze a car contract.


## Content Standards

## National Standards in K-12 Personal Finance

National Standards in K-12 Personal Finance
Financial Responsibility and Decision Making: Apply reliable information and systematic decision making to personal financial decisions.

- $\quad$ Standard 1: Take responsibility for personal financial decisions.
- Eighth-grade expectation 1: Identify ways to be a financially responsible young adult.
- Eighth-grade expectation 2: Give examples of the benefits of financial responsibility and the costs of financial irresponsibility.
- Twelfth-grade expectation 1: Explain how individuals demonstrate responsibility for financial well-being over a lifetime.
- Standard 2: Find and evaluate financial information from a variety of sources.
- Twelfth-grade expectation 3: Given a scenario, identify relevant financial information needed to make a decision.
- Standard 3: Summarize major consumer protection laws.
- Twelfth-grade expectation 1: Match consumer protection laws to descriptions of the issues that they address and the safeguards that they provide.
- Standard 4: Make financial decisions by systematically considering alternatives and consequences.
- Eighth-grade expectation 3: Evaluate the results of a financial decision.
- Eighth-grade expectation 4: Use a financial or online calculator to determine the cost of achieving a medium-term goal.
- $\quad$ Standard 5: Develop communication strategies for discussing financial issues.
- Twelfth-grade expectation 3: Give examples of contracts between individuals and between individuals and businesses, and identify each party's basic responsibilities.

Credit and Debt: Maintain creditworthiness, borrow at favorable terms and manage debt.

- Standard 1: Identify the costs and benefits of various types of credit.
- Eighth-grade expectation 2: Explain how interest rate and loan length affect the cost of credit.
- Twelfth-grade expectation 5: Given a scenario, apply systematic decision making to identify the most cost-effective option for purchasing a car.
- Standard 4: Summarize major consumer credit laws.
- Eighth-grade expectation 1: Give examples of protections derived from consumer credit law.
- Twelfth-grade expectation 1: Summarize consumer credit laws and the protections that they provide.


## National Standards in Economics

- Standard 1: Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.
- Benchmark 7, Grade 4: The opportunity cost of a choice is the value of the best alternative given up.
- Standard 12: Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, thus affecting the allocation of scarce resources between present and future uses.
- Benchmark 1, Grade 12: An interest rate is a price of money that is borrowed or saved.
- Benchmark 6, Grade 12: Riskier loans command higher interest rates than safer loans because of the greater chance of default on the repayment of risky loans.
- Benchmark 7, Grade 12: Higher interest rates reduce business investment spending and consumer spending on housing, cars and other major purchases.


## Time Required

180-240 minutes

## Materials

- Three toy cars-one economy model, one moderately priced model and one luxury model (Alternatively, use photographs of cars from magazines or printed out from the Internet.)
- A copy of Handouts 4.1, 4.2 and 4.3 for each student, assembled and stapled together to form a "Car Deal Package" for each student
- A calculator for each student
- A copy of Handouts 4.1, 4.2, 4.3, 4.5, 4.6 and 4.9—Answer Keys for the teacher
- A copy of Handouts 4.4, 4.5, 4.6, 4.8 and 4.9 for each student
- Computers with Internet access
- A copy of Handout 4.7 for every four students, cut apart to make enough cards to provide one card for each student in the class


## Procedures

1. Display three toy cars or three pictures of cars: one economy car, one moderately priced car and one luxury car. Do not mention the price of each car. Call on various students, asking which of the cars they would like to buy and why.
2. After the students have made their choices, explain that there are many factors to consider when buying a car. Tell the students that prospective car buyers are often asked if they can make the monthly payment when they consider buying a car. Explain that the monthly payment is not all that is important when buying a car. Another factor to consider is the price of the car.
3. Provide the following estimated price for each car:

- Economy car: \$17,000
- Moderately priced car: $\$ 24,000$
- Luxury car: \$55,000

4. Ask the students to think about paying for the car they chose. Explain that most people cannot afford to pay the full price of a car at the time they purchase the car. Most people finance a car-they borrow the money to pay for the car-over many months and make a monthly payment.
5. Explain that financing is often obtained through the dealership that sells the car. This means the buyer signs a contract with the dealership. Define contract as an exchange, promise or agreement between parties that is enforceable by law. Under the terms of a financing contract, a car buyer agrees to pay the amount financed, at an agreed-upon interest rate, for the length of the contract. One advantage of dealer financing is that sometimes the dealership offers manufacturer promotions and incentives for purchases.
6. Explain that a consumer's net pay is the amount received after all deductions have been subtracted from a paycheck. Discuss types of payroll deductions, such as Social Security tax, Medicare tax, income tax and other optional deductions such as insurance premiums. Point out that gross pay is the amount earned before any taxes or other deductions are subtracted and that net pay can be much less than the gross pay. Income available to purchase a car can be reduced further when monthly payments such as credit card payments and home equity loans are subtracted.
7. Point out that, according to GMAC Financial Services, generally a vehicle payment should be no more than 20 percent of a car-buyer's net pay after first subtracting monthly payments such as credit cards and home equity loans. (www.gmacfs.com/SmartEdge/en/general/budgeting/shopbudget.html)
8. Returning to the example of the three types of cars and tell the class to consider that each car is available through a loan with an interest rate of 8 percent, for a 48 -month term. Based on this information, write the following estimated monthly payments for each model on the chalkboard:

- Economy car: \$415
- Moderately priced car: $\$ 586$
- Luxury car: \$1,343

9. Demonstrate how to calculate the monthly net pay needed for each of these cars using a 20 percent rule of thumb. Since $5 \times 20 \%=100 \%$, multiply each of the monthly payments by five, as follows:

- Economy car: If $\$ 415=20 \%$, then $100 \%=\$ 2,075$ ( $5 \times \$ 415$ equals the amount of monthly net pay needed)
- Moderately priced car: If $\$ 586=20 \%$, then $100 \%=\$ 2,930(5 \times \$ 586$ equals the amount of monthly net pay needed)
- Luxury car: If $\$ 1,343=20 \%$, then $100 \%=\$ 6,715$ ( $5 \times \$ 1,343$ equals the amount of monthly net pay needed)

These net pay amounts are what is required after other monthly payments such as credit card bills and mortgage payments have been made.
10. Discuss the fact that choosing and buying a car requires a decision-making process. People must first decide if they can afford to pay for a car. This entails identifying all expenses associated with buying a car and determining whether they can afford those expenses.
11. Ask the students what the phrase "living within your means" has to do with car buying. ("Living within your means" implies keeping your expenses below your income. Expenses often include a car payment.)
12. Write the term "opportunity cost" on the board. Define opportunity cost as the highest-valued alternative given up when a choice is made. Ask the students to name possible opportunity costs when a person purchases a car. Compile a list of the possible opportunity costs on the chalkboard. (Answers may vary depending on individual tastes and preferences, but might include eating out or going to movies or concerts.) Explain the importance of weighing the opportunity cost and the perceived benefits of having the car before making the purchase.
13. Explain that another factor to consider when buying a car is the type of loan involved. A car loan is a secured loan. Define a secured loan as a loan that is backed with collateral, a loan for which the lender requires and the borrower offers property as a guarantee of repayment. Because car loans are secured loans, interest rates are usually lower because there is less risk to the lender.
14. Explain that collateral is property that will be taken in the event that payments are not made on a loan. Define collateral as property required by a lender and offered by a borrower as a guarantee of payment on a loan. The collateral for the loan is the car. When a vehicle is financed, the finance company holds a lien on the vehicle until the loan has been paid in full. Define a lien as the legal right to take or sell property as security for a debt. The lender can repossess the car if the borrower does not make the payments, and the creditor (the lender) can sell the vehicle to apply the proceeds from the sale to the outstanding balance on the loan. If the vehicle is sold for less than what is owed, the consumer is responsible for the difference. In some states, the law allows creditors to repossess a vehicle without going to court.
15. Ask the students to reconsider which car they would choose to buy and explain why, based on the monthly payment, the net pay required to make the payment and the type of loan. Allow time for discussion. (Answers may vary but should include information on opportunity cost and the risk of having the car repossessed if payments cannot be made.)
16. Tell the students that the effective annual interest rate is another factor to consider. Define interest as the price of using someone else's money. The interest rate is the amount of interest charged, expressed as an annual percentage of the amount borrowed. The total amount of interest paid on a loan will vary depending on the interest rate. Model calculating interest by using examples of simple interest, such as the following:
$10 \%$ of $\$ 1,000$ borrowed for a year $=.10 \times \$ 1,000=\$ 100$
$5 \%$ of $\$ 1,000$ borrowed for a year $=.05 \times \$ 1,000=\$ 50$
Thus if a consumer borrows $\$ 1,000$ and repays the full amount within one year, the difference between borrowing the money at 10 percent interest and borrowing the money at 5 percent interest is $\$ 50$.
17. Explain that borrowing a larger amount also affects the amount of interest paid.
$10 \%$ of $\$ 1,000$ borrowed for a year $=.10 \times \$ 1,000=\$ 100$
$10 \%$ of $\$ 2,000$ borrowed for a year $=.10 \times \$ 2,000=\$ 200$
Thus a person borrowing $\$ 2,000$ and repaying the amount in full within a year at 10 percent interest would pay twice as much interest as a person borrowing $\$ 1,000$ at the same rate of interest.
18. Ask the students if they would be more likely to buy a car when their loan has a higher interest rate or when their loan has a lower interest rate. Would car dealers be more likely to sell more cars at higher or lower interest rates on car loans? Why? (The students should indicate they would be more likely to buy a car, and car dealers would likely sell more cars, when the interest rates are lower. Higher interest rates reduce consumer spending because the total expense of the purchase would be higher.)
19. Tell the students that another factor to consider is the length of the term of the loan. Explain that when a loan has a longer term-a longer period of time for paying off the loan-the amount of total interest paid is greater. Provide the following example:
$10 \%$ of $\$ 2,000$ borrowed for one year $=.10 \times \$ 2,000=\$ 200$ interest for one year
$\$ 200$ interest per year $\times 2$ years $=\$ 400$ interest for two years
20. Explain that the above calculation is only an estimate because after the first year a borrower will have repaid some of the principal of the loan. Define principal as the original amount of money borrowed or still owed on which interest is charged. When the borrower repays some of the principal, the amount of money subject to interest is reduced, and thus the amount of interest charged is also reduced.
21. Emphasize that a car loan and making payments on the car loan are a package deal: purchasing and paying. Tell the students that factors to consider when purchasing a car include the income test, the down-payment option and the time option.
22. Distribute a "Car Deal Package" and a calculator to each student. Divide the class into pairs. Instruct each pair of students to work together to complete the Car Deal Package.
23. After all the pairs of students have completed the Car Deal Package, discuss the following questions with the class:

- What are some advantages and disadvantages of a longer-term contract? What are some advantages and disadvantages of a shorter-term contract? (Answers may vary but should include information on the amount of the monthly payment and the total cost of the car. For example, a longer-term contract will usually result in lower monthly payments, but the total cost of the car will usually be greater. The monthly payment for a shorter-term contract will usually be greater, but the total cost of the car will usually be less. Emphasize the importance of analyzing individual contracts to make this determination.)
- What are some advantages and disadvantages of making a down payment? (Answers may vary. The initial cash down payment may be difficult to make because of income limits. Making a down payment will usually reduce the total cost of the car because less is paid in finance charges. Emphasize the importance of analyzing individual contracts to make this determination.)
- Why is it important to consider the "income test"-the 20 percent rule of thumb-when choosing a car? (Answers may vary but should include information on "living within your means" and the opportunity cost of buying a car.)

24. Share with the students the Latin phrase "caveat emptor," which means "let the buyer beware." Explain that this phrase means the consumer is responsible for knowing and understanding the terms of the agreement in a car contract. After signing a contract, the consumer becomes obligated to the terms of the contract.
25. Distribute a copy of Handout 4.4: Sample Car Contract and Security Agreement to each student. Allow time for the students to read the contract and then point out the Truth in Lending Disclosures on the contract. Tell students that the Truth in Lending Act is a federal law that requires disclosure of information about the cost of credit. Both the finance charges and the annual percentage rate (APR) must be displayed prominently on forms and statements used by creditors.
26. Tell the class that the interest rate charged on car contracts varies from one consumer to another, based on consumers' credit reports and credit histories. Although a secured loan usually has a lower interest rate than an unsecured loan because of lower risk for the lender, some consumers may be charged higher interest rates because they are credit risks based on their past credit behavior.
27. Divide the class into pairs. Provide each student with a calculator and a copy of Handout 4.5: It's in the Contract. Instruct the students to refer to Handout 4.4 to find the information needed to answer the questions on Handout 4.5. Have each pair of students work together to complete the activity.
28. When all pairs of students have completed the work on Handout 4.5, review student answers using Handout 4.5: It's in the Contract-Answer Key.
29. Ask the students to refer to Handout 4.4 again. Review the specific terms of the contract, as indicated on the handout: interest rate, number of payments, monthly payment amounts, total amount of finance charges, late charges, amount financed and the collateral for the contract. Tell the students to use this information to write a paragraph defending a decision to sign or not sign this contract. (Answers may vary. The completed paragraphs should demonstrate that the students have analyzed the contract, in the spirit of "caveat emptor." Besides the fact that the number of payments is missing from the contract, the students should analyze the amount of finance charges stemming from the high interest rate. Another consideration might be the $\$ 585.04$ monthly payment. Using the income test, a person needs approximately $\$ 2,925$ in monthly income to be able to afford the monthly payment.)

## Closure

30. Give each student a copy of Handout 4.6: Car Deals. Instruct the students to complete the chart on the handout and determine which of the car deals would be the best choice by using a calculator and an online calculator found at www. bankrate.com/calculators/auto/auto-loan-calculator.aspx. Ask the students to write an explanation defending this decision. Review the answers using Handout 4.6: Car Deals-Answer Key.
31. Review key concepts in the lesson by asking the following questions.

- What is the difference between gross and net pay? (Gross pay is income earned prior to deductions. Net pay is income remaining after all deductions [required and voluntary.])
- What is interest? (the price of using someone else's money; the price of borrowing money)
- What is collateral? (property required by a lender and offered by a borrower as a guarantee of payment on a loan)
- What is a lien? (the legal right to take or sell property as security for a debt)
- What is opportunity cost? (the highest-valued alternative given up when a decision is made)
- What is the opportunity cost of purchasing a new pair of jeans? (Answers will vary, but students should know that the opportunity cost is the other goods/ services that they could have purchased with the same amount of money now or in the future.)
- What is principal? (the original amount of money borrowed or still owed on which interest is charged)
- What is a secured loan? (a loan backed by collateral)
- What is an advantage and a disadvantage of a secured loan? (advantage: lower interest rate on the loan; disadvantage: collateral for the loan can be repossessed and sold if payments aren't made)
- What is a contract? (an exchange, promise or agreement between parties that is enforceable by law)
- What factors affect the total price of a car? (interest rate, length of contract and size of down payment)
- What is the Truth in Lending Act? (It's a federal law that requires disclosure of information about the cost of credit. Both the finance charges and the annual percentage rate [APR] must be displayed prominently on forms and statements used by creditors.)
- What is the recommended maximum percent of net pay that should be spent on a monthly car payment? (20 percent)


## Assessment

32. Tell the students they are going to be involved in a role-play activity. They are going to play the part of staff at a car dealership, promoting a special car deal.
33. Divide the class into four groups. Distribute one car-deal card, cut out from Handout 4.7: Promotion Deals to each group member. Distribute Deal 1 cards to group one, Deal 2 cards to group 2, Deal 3 cards to group 3 and Deal 4 cards to group 4. Instruct each group to prepare to present the car deal on its card to the class, attempting to convince the class to accept the deal. Each group should prepare its presentation as an advertisement for its special promotion.
34. Provide a copy of Handout 4.8: Deals to Think About to each student. Tell the students that as each group makes its presentation, the rest of the class should identify at least one advantage and one disadvantage of each car deal presented and write the advantages and disadvantages on the handout alongside the deal described.
35. Allow time for each group to make its presentation.
36. After all four groups have made their presentations, ask the class to vote for the deal that they would choose based on the presentations. Write the number of votes on the board as follows:

| Deal | Number Voting for Deal |
| :--- | :--- |
| 1 |  |
| 2 | - |
| 3 | - |
| 4 |  |

37. Give each student a copy of Handout 4.9: Special Deals. Tell the students that these are the same deals as those heard in the presentations. Instruct the students to complete the chart on the handout and analyze the financial effects of different car deals by using an online calculator found at www.bankrate.com/calculators/auto/ auto-loan-calculator.aspx.
38. Tell the students to compare the choices they made during the group presentations with the facts in the completed chart in Handout 4.9. Call on students to answer the following questions:

- How did the presentation influence your decision?
- What terms of the deals were most influential in making your decision?
- What did you learn from analyzing the different deals?
- How can you take what you have learned from this activity and apply it to other financial decisions throughout your lifetime?
- What was the total price of the car, based on your choice? Could you have saved money by making another choice? If so, how much?
(Answers to the above questions may vary but should include the ideas that zero interest is not always better than other options; the length of a contract does not always determine the best deal; and the amount of the monthly payment does not reflect the best deal. The students should note that making a financial commitment is important and should be studied carefully before entering into a contract.)


## Handout 4.1: Cars: The Time Option

You are buying a car, and the dealer has offered several options for the length of the contract. The dealer has computed the amounts in the first three columns but has left the last two columns blank. Complete the last two columns.

Total price of car-\$20,000
Down payment-\$0

| CHART A: Amount Financed \$20,000 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| APR | Length of Contract | Monthly Payment | Total Price of Car | Total Finance <br> Charge |
| $9.75 \%$ | 24 months | $\$ 921$ |  |  |
| $9.75 \%$ | 36 months | $\$ 643$ |  |  |
| $9.75 \%$ | 48 months | $\$ 505$ |  |  |
| $9.75 \%$ | 60 months | $\$ 422$ |  |  |
| $9.75 \%$ | 72 months | $\$ 368$ |  |  |

Answer the following questions by referring to the completed Chart A above:

1. How much money would you save if you chose to finance the car for 36 months instead of 60 months?
2. How much money would you save if you chose to finance the car for 48 months instead of 72 months?
3. How much more in finance charges would you pay if you chose to finance the car for 72 months instead of 24 months?
4. What is the difference in the monthly payment between 36-month financing and 72-month financing?

## Handout 4.1: Cars: The Time Option—Answer Key

You are buying a car, and the dealer has offered several options for the length of the contract. The dealer has computed the amounts in the first three columns but has left the last two columns blank. Complete the last two columns.

Total price of car-\$20,000
Down payment-\$0

| CHART A: Amount Financed \$20,000 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| APR | Length of Contract | Monthly Payment | Total Price of Car | Total Finance <br> Charge |
| $9.75 \%$ | 24 months | $\$ 921$ | $\$ 22,104$ | $\$ 2,104$ |
| $9.75 \%$ | 36 months | $\$ 643$ | $\$ 23,148$ | $\$ 3,148$ |
| $9.75 \%$ | 48 months | $\$ 505$ | $\$ 24,240$ | $\$ 4,240$ |
| $9.75 \%$ | 60 months | $\$ 422$ | $\$ 25,320$ | $\$ 5,320$ |
| $9.75 \%$ | 72 months | $\$ 368$ | $\$ 26,496$ | $\$ 6,496$ |

Answer the following questions by referring to the completed Chart A above:

1. How much money would you save if you chose to finance the car for 36 months instead of 60 months? $(\$ 25,320-\$ 23,148=\$ 2,172$ saved)
2. How much money would you save if you chose to finance the car for 48 months instead of 72 months? $(\$ 26,496-\$ 24,240=\$ 2,256$ saved)
3. How much more in finance charges would you pay if you chose to finance the car for 72 months instead of 24 months? ( $\$ 6,496-\$ 2,104=\$ 4,392$ )
4. What is the difference in the monthly payment between 36-month financing and 72 -month financing? ( $\$ 643-\$ 368=\$ 275$ )

## Handout 4.2: The Down Payment Option

Making a down payment on the car will reduce your monthly payments. You decide to make a down payment of $\$ 2,000$ on the $\$ 20,000$ car. Complete the last three columns in the table below. Remember to include the $\$ 2,000$ down payment in the total price of the car in the last column.

| CHART B: Amount Financed \$18,000 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| APR | Length of <br> Contract | Monthly <br> Payment | Total Cost of <br> Payments | Total Finance <br> Charge | Total Price of Car <br> Including Down <br> Payment |  |
| $9.75 \%$ | 24 months | $\$ 829$ |  |  |  |  |
| $9.75 \%$ | 36 months | $\$ 579$ |  |  |  |  |
| $9.75 \%$ | 48 months | $\$ 454$ |  |  |  |  |
| $9.75 \%$ | 60 months | $\$ 380$ |  |  |  |  |
| $9.75 \%$ | 72 months | $\$ 331$ |  |  |  |  |

Answer the following questions by comparing Chart A on Handout 4.1 and Chart B above:

1. If you finance the car for 36 months, how much would you save by making the $\$ 2,000$ down payment?
2. If you finance the car for 48 months, how much would you save by making the $\$ 2,000$ down payment?
3. If you finance the car for 60 months, how much would you save by making the $\$ 2,000$ down payment?
4. If you finance the car for 72 months, how much would you save by making the $\$ 2,000$ down payment?

## Handout 4.2: The Down Payment Option—Answer Key

Making a down payment on the car will reduce your monthly payments. You decide to make a down payment of $\$ 2,000$ on the $\$ 20,000$ car. Complete the last three columns in the table below. Remember to include the $\$ 2,000$ down payment in the total price of the car in the last column.

| CHART B: Amount Financed \$18,000 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| APR | Length of <br> Contract | Monthly <br> Payment | Total Cost of <br> Payments | Total Finance <br> Charge | Total Price of Car <br> Including Down <br> Payment |  |
| $9.75 \%$ | 24 months | $\$ 829$ | $\$ 19,896$ | $\$ 1,896$ | $\$ 21,896$ |  |
| $9.75 \%$ | 36 months | $\$ 579$ | $\$ 20,844$ | $\$ 2,844$ | $\$ 22,844$ |  |
| $9.75 \%$ | 48 months | $\$ 454$ | $\$ 21,792$ | $\$ 3,792$ | $\$ 23,792$ |  |
| $9.75 \%$ | 60 months | $\$ 380$ | $\$ 22,800$ | $\$ 4,800$ | $\$ 24,800$ |  |
| $9.75 \%$ | 72 months | $\$ 331$ | $\$ 23,832$ | $\$ 5,832$ | $\$ 25,832$ |  |

Answer the following questions by comparing Chart A on Handout 4.1 and Chart B above:

1. If you finance the car for 36 months, how much would you save by making the $\$ 2,000$ down payment? (\$23,148-\$22,844 = \$304)
2. If you finance the car for 48 months, how much would you save by making the $\$ 2,000$ down payment? ( $\$ 24,240-\$ 23,792=\$ 448$ )
3. If you finance the car for 60 months, how much would you save by making the $\$ 2,000$ down payment? $(\$ 25,320-\$ 24,800=\$ 520)$
4. If you finance the car for 72 months, how much would you save by making the $\$ 2,000$ down payment? (\$26,496-\$25,832=\$664)

## Handout 4.3: The Income Test

Easy financing can be tempting, especially when you get caught up in the excitement of buying a new car. But before you drive that car off the dealer's lot, make sure you can afford it. Cars should be purchased based on your wants AND your wallet! The bottom line is that car payments should fit your budget.

Rule of thumb: Your vehicle payment should be no more than 20 percent of your net pay after subtracting monthly bills such as credit card payments and home equity payments.

The charts below have options for length of contract and monthly payments based on the amount financed. If your monthly car payment is 20 percent of your net pay, calculate the minimum net pay you should have for each payment in the charts below.

| Amount Financed: \$20,000 |  |  |
| :---: | :---: | :---: |
| Length of Contract | Monthly Payment | Minimum Monthly Net Pay |
| 24 months | $\$ 921$ |  |
| 36 months | $\$ 643$ |  |
| 48 months | $\$ 505$ |  |
| 60 months | $\$ 422$ |  |
| 72 months | $\$ 371$ |  |


| Amount Financed: $\mathbf{\$ 1 8 , 0 0 0}$ |  |  |
| :---: | :---: | :---: |
| Length of Contract | Monthly Payment | Minimum Monthly Net Pay |
| 24 months | $\$ 829$ |  |
| 36 months | $\$ 579$ |  |
| 48 months | $\$ 454$ |  |
| 60 months | $\$ 380$ |  |
| 72 months | $\$ 331$ |  |

## Problems:

1. You work an average of 170 hours a month at $\$ 20$ per hour. Approximately 15 percent of your gross income is withheld for taxes and other deductions. What is your monthly net pay?
2. If your other monthly bills are $\$ 850$, which options in the charts above can you afford, based on your income?

## Handout 4.3: The Income Test—Answer Key

Easy financing can be tempting, especially when you get caught up in the excitement of buying a new car. But before you drive that car off the dealer's lot, make sure you can afford it. Cars should be purchased based on your wants AND your wallet! The bottom line is that car payments should fit your budget.

Rule of thumb: Your vehicle payment should be no more than 20 percent of your net pay after subtracting monthly bills such as credit card payments and home equity payments.

The charts below have options for length of contract and monthly payments based on the amount financed. If your monthly car payment is 20 percent of your net pay, calculate the minimum net pay you should have for each payment in the charts below.

| Amount Financed: \$20,000 |  |  |
| :---: | :---: | :---: |
| Length of Contract | Monthly Payment | Minimum Monthly Net Pay |
| 24 months | $\$ 921$ | $\$ 4,605$ |
| 36 months | $\$ 643$ | $\$ 3,215$ |
| 48 months | $\$ 505$ | $\$ 2,525$ |
| 60 months | $\$ 422$ | $\$ 2,110$ |
| 72 months | $\$ 371$ | $\$ 1,855$ |


| Amount Financed: $\mathbf{\$ 1 8 , 0 0 0}$ |  |  |
| :---: | :---: | :---: |
| Length of Contract | Monthly Payment | Minimum Monthly Net Pay |
| 24 months | $\$ 829$ | $\$ 4,145$ |
| 36 months | $\$ 579$ | $\$ 2,895$ |
| 48 months | $\$ 454$ | $\$ 2,270$ |
| 60 months | $\$ 380$ | $\$ 1,900$ |
| 72 months | $\$ 331$ | $\$ 1,655$ |

## Problems:

1. You work an average of 170 hours a month at $\$ 20$ per hour. Approximately 15 percent of your gross income is withheld for taxes and other deductions. What is your monthly net pay?

170 hours $\times \$ 20.00=\$ 3,400$
$\$ 3,400 \times .15=\$ 550.00$

$$
\$ 3,400-\$ 550.00=\$ 2,850
$$

2. If your other monthly bills are $\$ 850$, which options in the charts above can you afford, based on your income? (without the $\$ 2,000$ down payment, only the 72-month option; with the $\$ 2,000$ down payment the 60-month and the 72-month option)
$\$ 2,850-\$ 850=\$ 2,000$

## Handout 4.4: Sample Car Contract and Security Agreement

| Retail Installment | Seller | Buyer |
| :--- | :--- | :--- |
| Contract and | XYZ Auto Sales | Jane Doe |
| Security | 100 Any Street | 200 Any Street |
| Agreement | Any City, USA | Any City, USA |

SALE: You agree to purchase from us, on a time basis, subject to the terms and conditions of this contract and security agreement, the Motor Vehicle and services described below.

| Description of motor <br> vehicle purchased | Year 20XX Make USA Motors <br> Model Joybug  | VIN 234567890abcdefg |
| :--- | :--- | :--- |

SECURITY: To secure your payment and performance under the terms of this contract, you give us a security interest in the Vehicle, all accessions, attachments, accessories and equipment placed in or on the Vehicle, together called Property, and proceeds of the Property.

## TRUTH IN LENDING DISCLOSURES:

| Annual Percentage <br> Rate | Finance Charge | Amount <br> Financed | Total of <br> Payments | Total Sale Price <br> The total cost of your pur- <br> chase on credit, including <br> your down payment of |
| :--- | :--- | :--- | :--- | :--- |
| $17.83 \%$ | $\$ 14,291.13$ | $\$ 24,321.51$ | $\$ 38,612.64$ | $\$ 2,857.40$ |
|  |  |  |  | $\$ 41,470.04$ |

PAYMENT SCHEDULE: Your payment schedule will be

| Number of <br> Payments | Amount of <br> Payments | When Payments are Due |  |
| :--- | :--- | :--- | :--- |
|  | $\$ 585.04$ | Monthly Beginning | July 30, 20XX |

Security: You are giving a security interest in the Motor Vehicle purchased.
Late Charge: If a payment is more than 10 days late, you will be charged $\$ 1.00$ or $5 \%$, whichever is greater.

|  | NOTICE TO BUYER: <br> Do not sign this agreement before you read it or if it con- <br> tains any blank spaces. By signing below, buyer agrees to <br> the terms of this contract and acknowledges receipt of a <br> copy of this contract. |  |
| :--- | :--- | :--- |
|  | Buyer: $\frac{\text { Signature }}{}$ | Date |

## Handout 4.5: It's in the Contract

Jane Doe read the contract and refused to sign it. She contends that XYZ Auto Sales has not complied with The Truth in Lending Act, which requires creditors to give written notice of terms of the credit agreement:

- Annual percentage rate
- Finance charge
- Number of payments
- Amount of payments
- Total of payments
- Payment due dates
- Amount financed
- Total sale price
- Late-payment fees

1. Is Jane correct? If so, fill in the missing information on the contract. Show your work.
2. Jane had some unexpected expenses in September and had to wait until she got her paycheck on Oct. 10 to mail in her September payment. How much was the late fee? Show your work.
3. If Jane had paid cash for the Joybug, how much would the price of the car have been? Show your work.
4. The rule of thumb is that a vehicle payment should be no more than 20 percent of net pay. Jane's annual salary is $\$ 35,000$, and 29 percent of this is withheld for taxes and other deductions. If Jane follows the rule of thumb, can she afford this car? Show your work.
5. Jane made her payments on time for several months and received a special invitation from the finance company. The special offer stated that, as a way of saying thanks for being one of the company's best clients, she qualified to skip her next payment. To take advantage of the special offer, Jane must return a Skip-a-Payment Certificate and a check for $\$ 65$ to the finance company before the expiration date on the certificate. The certificate stated that her loan contract would be amended to be extended one month and that her account would continue to accrue interest at the contract rate. What advice would you give Jane?

## Handout 4.5: It's in the Contract—Answer Key

Jane Doe read the contract and refused to sign it. She contends that XYZ Auto Sales has not complied with The Truth in Lending Act, which requires creditors to give written notice of terms of the credit agreement:

- Annual percentage rate
- Finance charge
- Number of payments
- Amount of payments
- Total of payments
- Payment due dates
- Amount financed
- Total sale price
- Late-payment fees

1. Is Jane correct? If so, fill in the missing information on the contract. Show your work. (Jane is correct. The number of payments is missing. The number of payments is 66 . [ $\$ 38,612.64 / \$ 585.04=66]$ )
2. Jane had some unexpected expenses in September and had to wait until she got her paycheck on Oct. 10 to mail in her September payment. How much was the late fee? Show your work. ( $\$ 585.04 \times .05=\$ 29.25$ )
3. If Jane had paid cash for the Joybug, how much would the price of the car have been? Show your work. ( $\$ 2,857.40$ down payment $+\$ 24,321.51$ amount financed $=\$ 27,178.91$ )
4. The rule of thumb is that a vehicle payment should be no more than 20 percent of net pay. Jane's annual salary is $\$ 35,000$, and 29 percent of this is withheld for taxes and other deductions. If Jane follows the rule of thumb, can she afford this car? Show your work.
$\$ 35,000$ salary $X .71$ not withheld $=\$ 24,850$ annual net pay
$\$ 24,850 / 12$ months $=\$ 2,071$ monthly net pay (rounded to the nearest whole dollar)
$\$ 2,071$ X. $20=\$ 414$; Jane can afford a maximum monthly payment of $\$ 414$ (rounded to the nearest whole dollar).
Jane would have to have a monthly net pay of \$2,925.20 to afford the current payment.
5. Jane made her payments on time for several months and received a special invitation from the finance company. The special offer stated that, as a way of saying thanks for being one of the company's best clients, she qualified to skip her next payment. To take advantage of the special offer, Jane must return a Skip-a-Payment Certificate and a check for $\$ 65$ to the finance company before the expiration date on the certificate. The certificate stated that her loan contract would be amended to be extended one month and that her account would continue to accrue interest at the contract rate. What advice would you give Jane? (The $\$ 65$ fee for one month would be in addition to the finance charges already in the contract. This means the skipped month's payment would be [\$585.04 + $\$ 65.00=\$ 650.04]$ as the final payment. Instead of a reward, this would be another way to add more finance charges.)

## Handout 4.6: Car Deals

Buying a car can be confusing, especially when different deals are available. You are in the market for a new car and will need to finance $\$ 20,000$. You have a good job with a monthly net pay of $\$ 3,000$ and want to make an informed decision. The dealer has presented different options as listed in the chart below. Use a calculator and the online calculator found at www.bankrate.com/ calculators/auto/auto-loan-calculator.aspx to complete the chart and help determine which deal to choose. Round your answers to the nearest dollar.

|  | DEAL 1 | DEAL 2 | DEAL 3 | DEAL 4 |
| :--- | :---: | :---: | :---: | :---: |
| Amount of Loan | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ |
| APR | $5 \%$ | $6 \%$ | $8 \%$ | $9 \%$ |
| Length of Loan | 48 months | 36 months | 72 months | 60 months |
| Est. Monthly Payment |  |  |  |  |
| Total Price for Car |  |  |  |  |
| Total Paid in Interest |  |  |  |  |

Based on the completed chart above, which deal would you choose? Give reasons to defend your decision, include something about your individual circumstance to support your decision.

Deal choice: $\qquad$

Reasons for choosing this deal:
1.
2.
3.

## Handout 4.6: Car Deals—Answer Key

Buying a car can be confusing, especially when different deals are available. You are in the market for a new car and will need to finance $\$ 20,000$. You have a good job with a monthly net pay of $\$ 3,000$ and want to make an informed decision in this purchase. The dealer has presented different options as listed in the chart below. Use a calculator and the online calculator found at www. bankrate.com/calculators/auto/auto-loan-calculator.aspx to complete the chart and help determine which deal to choose. Round your answers to the nearest dollar.

|  | DEAL 1 | DEAL 2 | DEAL 3 | DEAL 4 |
| :--- | :---: | :---: | :---: | :---: |
| Amount of Loan | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ |
| APR | $5 \%$ | $6 \%$ | $8 \%$ | $9 \%$ |
| Length of Loan | 48 months | 36 months | 72 months | 60 months |
| Est. Monthly Payment | $\$ 461$ | $\$ 608$ | $\$ 351$ | $\$ 415$ |
| Total Price for Car | $\$ 22,128$ | $\$ 21,888$ | $\$ 25,272$ | $\$ 24,900$ |
| Total Paid in Interest | $\$ 2,128$ | $\$ 1,888$ | $\$ 5,272$ | $\$ 4,900$ |

Based on the completed chart above, which deal would you choose? Give reasons to defend your decision, include something about your individual circumstance to support your decision.

Deal choice: $\qquad$

Reasons for choosing this deal:
1.
2.

3
(Answers may vary based on individual circumstances. For example, even though the total price of the car is less in Deal 2, the monthly payment of \$608 may not be affordable based on other financial obligations. In this case, Deal 1 may be chosen because the difference in the total price of the car is only $\$ 240$ and Deal 1 provides a more affordable monthly payment.)

Handout 4.7: Promotion Deals

| DEAL 1 |  |
| :---: | :---: |
| Car Price | \$20,000 |
| Amount of Rebate | \$0 |
| Amount of Loan | \$20,000 |
| APR | 0\% |
| Length of Loan | 36 months |


| DEAL 2 |  |
| :---: | :---: |
| Car Price | \$20,000 |
| Amount of Rebate | \$3,000 |
| Amount of Loan | \$17,000 |
| APR | 6\% |
| Length of Loan | 60 months |


| DEAL 3 |  |
| :--- | :---: |
| Car Price | $\$ 20,000$ |
| Amount of |  |
| Rebate |  |$\quad \$ 2,000 \quad$| Amount of Loan | $\$ 18,000$ |
| :---: | :---: |
| APR | $5 \%$ |
| Length of Loan | 72 months |


| DEAL 4 |  |
| :--- | :---: |
| Car Price | $\$ 20,000$ |
| Amount of | $\$ 1,000$ |
| Rebate |  |
| Amount of Loan | $\$ 19,000$ |
| Length of Loan | $48 \%$ |
| APR months |  |

## Handout 4.8: Deals to Think About

| DEAL 1 |  | Advantages: |
| :---: | :---: | :---: |
| Car Price | \$20,000 |  |
| Amount of Rebate | \$0 |  |
| Amount of Loan | \$20,000 | Disadvantages: |
| APR | 0\% |  |
| Length of Loan | 36 months |  |


| DEAL 2 |  | Advantages: |
| :--- | :---: | :--- |
| Car Price | $\$ 20,000$ |  |
| Amount of Rebate | $\$ 3,000$ |  |
| Amount of Loan | $\$ 17,000$ |  |
| APR | $6 \%$ |  |
| Length of Loan | 60 months |  |


| DEAL 3 |  | Advantages: |
| :--- | :---: | :--- |
| Car Price | $\$ 20,000$ |  |
| Amount of Rebate | $\$ 2,000$ |  |
| Amount of Loan | $\$ 18,000$ |  |
| APR | $5 \%$ |  |
| Length of Loan | 72 months |  |


| DEAL 4 |  | Advantages: |
| :--- | :---: | :--- |
| Car Price | $\$ 20,000$ |  |
| Amount of Rebate | $\$ 1,000$ |  |
| Amount of Loan | $\$ 19,000$ |  |
| APR | $3 \%$ |  |
| Length of Loan | 48 months |  |

## Handout 4.9: Special Deals

You are in the market for a new car that costs $\$ 20,000$. After being informed that the dealership is offering special promotions that include $0 \%$ interest, you are ready to buy. The salesman has informed you that there are other special promotions available that involve rebates with interest rates based on contract terms. Review the special promotions available as listed in the chart below. Use a calculator and the online calculator found at www.bankrate.com/calculators/ auto/auto-loan-calculator.aspx to complete the chart and help determine which deal to choose. Round your answers to the nearest dollar.

|  | DEAL 1 | DEAL 2 | DEAL 3 | DEAL 4 |
| :--- | :---: | :---: | :---: | :---: |
| Car Price | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ |
| Amount of Rebate | $\$ 0$ | $\$ 3,000$ | $\$ 2,000$ | $\$ 1,000$ |
| Amount of Loan | $\$ 20,000$ | $\$ 17,000$ | $\$ 18,000$ | $\$ 19,000$ |
| APR | $0 \%$ | $6 \%$ | $5 \%$ | $3 \%$ |
| Length of Loan | 36 months | 60 months | 72 months | 48 months |
| Est. Monthly Payment | $\$ 556$ |  |  |  |
| Total Price for Car | $\$ 20,000$ |  |  |  |
| Total Paid in Interest | $\$ 0$ |  |  |  |

*Because of rounding, the sum of the monthly payments and the total amount paid for the car will not be exact.

Which of the deals would be the best deal to accept? Explain your answer.

## Handout 4.9: Special Deals—Answer Key

You are in the market for a new car that costs $\$ 20,000$. After being informed that the dealership is offering special promotions that include a $0 \%$ interest, you are ready to buy. The salesman has informed you that there are other special promotions available that involve rebates with interest rates based on contract terms. Review the special promotions available as listed in the chart below. Use a calculator and the online calculator found at www.bankrate.com/calculators/ auto/auto-loan-calculator.aspx to complete the chart and help determine which deal to choose. Round your answers to the nearest dollar.

|  | DEAL 1 | DEAL 2 | DEAL 3 | DEAL 4 |
| :--- | :---: | :---: | :---: | :---: |
| Car Price | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ | $\$ 20,000$ |
| Amount of Rebate | $\$ 0$ | $\$ 3,000$ | $\$ 2,000$ | $\$ 1,000$ |
| Amount of Loan | $\$ 20,000$ | $\$ 17,000$ | $\$ 18,000$ | $\$ 19,000$ |
| APR | $0 \%$ | $6 \%$ | $5 \%$ | $3 \%$ |
| Length of Loan | 36 months | 60 months | 72 months | 48 months |
| Est. Monthly Payment | $\$ 556$ | $\$ 329$ | $\$ 290$ | $\$ 421$ |
| Total Price for Car | $\$ 20,000$ | $\$ 19,740$ | $\$ 20,880$ | $\$ 20,208$ |
| Total Paid in Interest | $\$ 0$ | $\$ 2,740$ | $\$ 2,880$ | $\$ 1,208$ |

*Because of rounding, the sum of the monthly payments and the total amount paid for the car will not be exact.

Which of the deals would be the best deal to accept? Explain your answer.
(Answers may vary but should include the fact that Deal 2 is a better deal than Deal 1. Although Deal 2 has $\$ 2,740$ in interest, the total price of the car was only $\$ 19,740$ which is $\$ 260$ less than the total price of Deal 1. Although the payment for Deal 1 is for 36 months and the payment for Deal 2 is for 60 months, the monthly payment for Deal 2 is $\$ 227$ less. This payment would be much easier to make each month. Although in other examples in this lesson, the longer term of the loan increased the total price of the car, in this case the total price of the car is less because of the rebates.)

Cards, Cars and Currency | Lesson 4: The Car Deal Package

## Lesson Description

Students read four scenarios involving take-home pay and fees that banks and credit card companies charge, along with what-if alternatives for each scenario. Working in pairs, the students calculate the amount of currency that the characters in each scenario saved or lost as a result of their decisions. The students play a second version of "Keep the Currency" from Lesson One. From this game, which serves as a post-test for the unit, the students learn that financial literacy is important in keeping currency-and that keeping (or saving) currency as a result of knowledge about finances can be the same as earning.

## Concepts

Fees
Gross pay
Net pay
Disposable income
Saving

## Objectives

Students will:

- Explain the difference between gross and net pay.
- Evaluate their financial literacy skills.
- Explain the importance of financial literacy.
- Explain the importance of taking responsibility for personal financial decisions.


## Content Standards

## National Standards in K-12 Personal Finance

Financial Responsibility and Decision Making: Apply reliable information and systematic decision making to personal financial decisions.

- $\quad$ Standard 1: Take responsibility for personal financial decisions.
- Eighth-grade expectation 1: Identify ways to be a financially responsible young adult.
- Eighth-grade expectation 2: Give examples of the benefits of financial responsibility and the costs of financial irresponsibility.
- Twelfth-grade expectation 1: Explain how individuals demonstrate responsibility for financial well-being over a lifetime.
- Standard 4: Make financial decisions by systematically considering alternatives and consequences.
- Eighth-grade expectation 3: Evaluate the results of a financial decision.
- Eighth-grade expectation 4: Use a financial or online calculator to determine the cost of achieving a medium-term goal.


## Planning and Money Management

- Standard 4: Apply consumer skills to purchase decisions.
- Eighth-grade expectation 1: Explain the relationship between spending practices and achieving financial goals.


## Income and Careers

- $\quad$ Standard 3: Describe factors affecting take-home pay.
- Eighth-grade expectation 1: Explain all items commonly withheld from gross pay.


## Saving and Investing

- $\quad$ Standard 1: Discuss how saving contributes to financial well-being.
- Eighth-grade expectation 1: Give examples of how saving money can improve financial well-being.


## National Standards in Economics

- $\quad$ Standard 4: People respond predictably to positive and negative incentives.
- Benchmark 1, Grade 12: Acting as consumers, producers, workers, savers, investors and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide the highest possible returns to them.


## Time Required

135-180 minutes

## Materials

- Visuals 5.1, 5.2 and 5.3
- A copy of Handout 5.1 for each student
- A copy of Handout 5.2 for each student
- A calculator for each student
- A copy of Handout 5.2-Answer Key.
- Enough copies of Handouts 5.3, 5.4, 5.5 and 5.6 to give each student one of the four handouts (enough copies of each handout for one-fourth of the students)
- Enough copies of Handouts 5.3, 5.4, 5.5 and 5.6-Answer Key for each student to have a copy of the answer key corresponding to the handout he or she is given
- A copy of Handout 5.7 for each pair of students
- Enough copies of Handouts 5.8 and 5.9, cut apart, to provide one set of " $T$ " and "F" cards to each pair of students. Copy Handout 5.8 on paper of one color and Handout 5.9 on paper of another color before cutting the handouts apart.
- A copy of Handout 5.10 for the teacher
- (Optional) Small prizes for the student pairs who have kept the most currency at the end of the "Keep the Currency" game


## Procedures

1. Display Visual 5.1: Payday Decisions and distribute a copy of Handout 5.1: Payday Decisions to each student.
2. Discuss the difference between net pay and gross pay. Define gross pay as the amount earned per pay period before any deductions or taxes are subtracted, and define net pay as the amount received after all deductions have been subtracted from a paycheck. Give examples of deductions from a paycheck, such as Social Security tax, Medicare tax, income tax and optional deductions such as insurance. Point out that net pay can be much less than gross pay.
3. Explain that net pay and disposable income are different ways of looking at the same amount of currency. Net pay is the amount a worker takes home, but it also reflects the amount available to spend or save, called disposable income.
4. Tell the students that although the amount of disposable income varies from person to person based on an individual's circumstances, all people face the same task: using the amount of their disposable income to best secure their wants now and in the future. Regardless of the amount of their net pay, people must decide how to use their disposable income for the greatest benefit.
5. Refer to Visual 5.1 and tell the class that the circle on the visual represents disposable income. The circle is divided into equal sections that represent categories for spending disposable income.
6. Demonstrate how a person might use his or her disposable income by writing the following examples of spending decisions into the sections on the visual:

- Write "car payment and expenses" across four sections of the circle.
- Mark four sections "food."
- Mark two sections "clothing."
- Mark six sections "rent."
- Mark two sections "utilities."
- Mark two sections "miscellaneous expenses."

7. Remind the students that personal responsibility involves informed financial deci-sion-making based on individual values. Point out that one person's good decision may not be a good decision for another person. For example, a person who lives in a city may choose to use city public transportation rather than use part of her or his disposable income for making a car payment, whereas another person might not have reliable access to public transportation and so might find it important to purchase a car.
8. Tell the students to imagine they are deciding how to use disposable income of their own. Instruct the students to designate how they think they should use their disposable income by writing the decisions they would make into the sections on Handout 5.1. Allow time for the students to share their decisions. Discuss the ways in which the students' decisions differ, as well as the ways in which they are similar.
9. Ask if anyone included a "saving" category in their plan. Define saving as income not spent on current consumption or taxes. Saving involves giving up some current consumption for future consumption. Explain that saving should be thought of as an obligation, in much the same way that people think of rent or utilities. In this case, the obligation is to oneself to secure his or her future. Disposable income provides currency for spending and for saving.
10. Explain that a suggested rule of thumb for young adults is to save 10 percent of their disposable income. Have students suggest adjustments that could be made to their plans to accommodate saving 10 percent of their disposable income. Discuss the following:

- How many sections of the circle represent 10 percent of your disposable income? (There are 20 segments; 2 segments represent 10 percent.)
- What would you give up today in order to save for future purchases? (Answers will vary.)

11. Distribute a copy of Handout 5.2: Figure it Out to each student. Tell the students that fees are money charged to service an account, such as late fees, overdraft fees, over-the-credit-limit fees and maintenance fees. Fees resulting from misuse of bank accounts or credit cards reduce the amount of currency people have available as disposable income. Remind the students that when money (currency) is used for one thing it cannot be used for another. If disposable income is being used to pay fees, that part of disposable income cannot be used for other things.
12. Distribute a calculator to each student. Instruct the students to use the calculators to complete Handout 5.2.
13. After the students have completed the handout, have them share information about what they "figured out." (Answers may vary but should include differences in the amount of money available for spending after deducting the fees charged.) Discuss the following, using Handout 5.2—Answer Key as a guide.

- Though all four people had the same amount of disposable income, who had more disposable income to spend or save as he or she wanted? Why? (Bob had $\$ 2,440$ to spend or save each month, which was more than the other three people had. This was because he incurred fewer fees than the others. He also had more disposable income to spend after one year [\$29,280] for the same reason.)
- Even though all four people had the same amount of disposable income, who had the least amount to spend or save as she or he wanted? Why? (Michelle had only $\$ 2,380$ to spend or save each month, which was less than the other three people had. She incurred more fees, so she had less disposable income available to spend on other things. She also had the least amount of disposable income to spend after one year [ $\$ 28,560$ ] for the same reason.)

14. Ask the class to recall Visual 5.1. Ask the students what new category would have to be added to the visual if the four people from Handout 5.2 had to designate how their disposable income should be allocated. How would the addition of this category affect other categories? (A section would have to be included for fees. This would decrease the size of other categories for utilizing disposable income.)
15. As an out-of-class assignment, distribute a copy of either Handout 5.3: Figuring for Michelle, Handout 5.4: Figuring for Juan, Handout 5.5: Figuring for Sasha or Handout 5.6: Figuring for Bob to each student, so that each student has just one of the four handouts. Tell the students that when they read their handout, they should examine the alternatives presented for the person in their handout and calculate the amount of currency that person saved or lost in each case as a result of decision making. Remind the students to bring their completed handouts to the next class. The students will need to use a calculator and an online calculator found at: http://www.math.com/students/calculators/source/compound.htm.
16. When the students bring their completed assignments to class, distribute a copy of Handouts 5.3, 5.4, 5.5 and 5.6-Answer Key to each student, so that each student has the answer key for the handout he or she was assigned. Tell the students to use the answer keys to review and correct their work on the handouts. Allow time for the students to complete this task.
17. When the students have finished reviewing and correcting their handouts, ask the following questions:

- What difference can throwing away money by paying fees make to disposable income? (Answers may vary but should stress that fees reduce the amount of disposable income that is available to spend on other things or to save.)
- What difference can avoiding fees make to disposable income? (Answers may vary but should stress that avoiding fees increases the amount of disposable income that is available to spend or save.)


## Closure

18. Review the key concepts in the lesson by asking the following questions.

- What is the difference between gross and net pay? (Gross pay is the amount earned per pay period before any deductions or taxes are subtracted. Net pay is the amount received after all deductions and taxes have been subtracted from a paycheck.)
- Have your financial knowledge and skills improved as a result of the Cards, Cars and Currency lessons? (Answers will vary.)
- Why is financial literacy important? (Having and applying financial knowledge enables people to "hold on" to more of their hard-earned income.)
- Do you think that if you played another round of "Keep the Currency" right now, you would keep more currency than you did the first time that you played? (Answers will vary.) Why? (I know more now than I did before.)

19. Divide the students into pairs. Give each pair of students one copy of Handout 5.7: Keep the Currency Score Sheet and two cards-one T and one F card—cut from Handouts 5.8 and 5.9, or retained from Lesson One. Explain the rules of the game as follows:

- Each pair of students starts the game with $\$ 200$ in currency. The object of the game is to keep as much of this currency as possible by providing correct "true" or "false" responses to 20 statements.
- The teacher reads aloud the statements from Handout 5.10: Keep the Currency Statements with Answers. After each statement, the student partners should confer with one another to reach an agreement and hold up a card to designate their answer when given the signal by the teacher.
- When all pairs are holding up their cards, the teacher will announce the correct answer. Pairs holding a card indicating the correct response can keep their currency. If their answer is incorrect, they subtract $\$ 10$ from their balance.
- On Handout 5.7, each pair of students should circle either "Keep your currency!" if the question was answered correctly or "Deduct \$10" if the question was answered incorrectly. After each response, each pair of students also should enter its updated total of currency kept on the "Current Balance" line.
- After all statements have been read, students who have retained the most currency win. (Optional: Award prizes to the pairs that kept the most currency.)

20. After the game is completed, discuss the game. Ask the student pairs that kept more currency than when they played the game the first time, why they were able to keep more currency. (because they have additional knowledge and skills)

## Assessment

21. Ask the students to recall the very beginning of the unit, when you threw currency into the wastebasket. Ask the students if they agree that currency is thrown away every day because of poor personal financial decisions. (Most students will say yes.)
22. Ask the students what they know about Ben Franklin. (Answers may vary, but specifically discuss the fact that his portrait is on the $\$ 100$ bill.)
23. Tell the class that more than 200 years ago, Ben Franklin was concerned about financial decision-making. Display Visual 5.2: Quotations from Yesteryear. Read the two quotations from Ben Franklin and allow time for class discussion.
24. Tell the students that another Ben, Ben Bernanke, is the chairman of the Federal Reserve System. Ask the students if they have heard or seen Chairman Bernanke on news programs.
25. Display Visual 5.3: A Current Quotation and read the statement on the visual, which was made by Ben Bernanke.
26. Tell the students to choose one of the quotations from the two visuals and write an essay in response to the quotation, using information learned in this unit. The essays should include information on how making wise financial decisions can result in having more disposable income.

## Extension Activities

27. Instruct students to find and collect newspaper articles pertaining to the Federal Reserve System and Chairman Bernanke. Display the collection on a bulletin board with the caption "In the News."
28. Instruct the students to use research skills to find quotations about money, saving and spending made by people throughout history. Write the quotations with their authors on sentence strips and attach them to a bulletin board with the caption "Money: It's Worth a Quote."

## Visual 5.1: Payday Decisions

- Gross pay - The amount earned per pay period before any deductions or taxes are subtracted.
- Net pay - The amount received after all deductions or taxes have been subtracted from a paycheck.
- Disposable income - The amount of money a person has available to save or spend.


Visual 5.2: Quotations from Yesteryear

# "If you would be wealthy, think of saving as well as getting." 

> "A penny saved is a penny earned."

Benjamin Franklin<br>(1706-1790)

Visual 5.3: A Current Quotation

# "I am personally convinced that improving education is vital to the future of our economy and that promoting financial literacy in particular must be a high priority." 

Ben Bernanke
Chairman of the Federal Reserve System

## Handout 5.1: Payday Decisions

- Gross pay - The amount earned per pay period before any deductions or taxes are subtracted.
- Net pay - The amount received after all deductions or taxes have been subtracted from a paycheck.
- Disposable income - The amount of money a person has available to save or spend.



## Handout 5.2: Figure it Out

Michelle, Juan, Sasha and Bob each have $\$ 2,500$ in net pay each month. They have each analyzed the amount of late fees, overdraft fees and over-the-credit-limit fees they have been charged for the current month, as listed in the chart. Complete the last two columns of the chart.

| Chart A: Monthly Record of Fees |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Pay | Late Fees | Overdraft <br> Fees | Over-the- <br> Credit-Limit <br> Fees | Total <br> Amount of <br> Fees | Disposable <br> Income <br> Minus Fees |  |  |
| Michelle | $\$ 2,500$ | $\$ 50$ | $\$ 35$ | $\$ 35$ |  |  |  |
| Juan | $\$ 2,500$ | $\$ 50$ | $\$ 35$ | $\$ 0$ |  |  |  |
| Sasha | $\$ 2,500$ | $\$ 27$ | $\$ 70$ | $\$ 0$ |  |  |  |
| Bob | $\$ 2,500$ | $\$ 25$ | $\$ 35$ | $\$ 0$ |  |  |  |

If Michelle, Juan, Sasha and Bob each continue to pay the same amount of late fees, overdraft fees and over-the-credit-limit fees each month as given in Chart A above, how much will they each pay for an entire year? Calculate the total amount of fees they will pay for an entire year and the effects on their annual disposable income. Fill in the amounts on Chart B below.

Chart B: Annual Record of Fees

|  | Net Pay | Late Fees | Overdraft <br> Fees | Over-the- <br> Credit-Limit <br> Fees | Total <br> Amount of <br> Fees | Disposable <br> Income <br> Minus Fees |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Michelle | $\$ 30,000$ |  |  |  |  |  |
| Juan | $\$ 30,000$ |  |  |  |  |  |
| Sasha | $\$ 30,000$ |  |  |  |  |  |
| Bob | $\$ 30,000$ |  |  |  |  |  |

## Handout 5.2: Figure it Out—Answer Key

Michelle, Juan, Sasha and Bob each have \$2,500 in net pay each month. They have each analyzed the amount of late fees, overdraft fees and over-the-credit-limit fees they have been charged for the current month, as listed in the chart. Complete the last two columns of the chart.

| Chart A: Monthly Record of Fees |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Pay | Late Fees | Overdraft <br> Fees | Over-the- <br> Credit-Limit <br> Fees | Total <br> Amount of <br> Fees | Disposable <br> Income <br> Minus Fees |
| Michelle | $\$ 2,500$ | $\$ 50$ | $\$ 35$ | $\$ 35$ | $\$ 120$ | $\$ 2,380$ |
| Juan | $\$ 2,500$ | $\$ 50$ | $\$ 35$ | $\$ 0$ | $\$ 85$ | $\$ 2,415$ |
| Sasha | $\$ 2,500$ | $\$ 27$ | $\$ 70$ | $\$ 0$ | $\$ 97$ | $\$ 2,403$ |
| Bob | $\$ 2,500$ | $\$ 25$ | $\$ 35$ | $\$ 0$ | $\$ 60$ | $\$ 2,440$ |

If Michelle, Juan, Sasha and Bob each continue to pay the same amount of late fees, overdraft fees and over-the-credit-limit fees each month as given in Chart A above, how much will they each pay for an entire year? Calculate the total amount of fees they will pay for an entire year and the effects on their annual disposable income. Fill in the amounts on Chart B below.

Chart B: Annual Record of Fees

|  | Net Pay | Late Fees | Overdraft <br> Fees | Over-the- <br> Credit-Limit <br> Fees | Total <br> Amount of <br> Fees | Disposable <br> Income <br> Minus Fees |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Michelle | $\$ 30,000$ | $\$ 600$ | $\$ 420$ | $\$ 420$ | $\$ 1,440$ | $\$ 28,560$ |
| Juan | $\$ 30,000$ | $\$ 600$ | $\$ 420$ | $\$ 0$ | $\$ 1,020$ | $\$ 28,980$ |
| Sasha | $\$ 30,000$ | $\$ 324$ | $\$ 840$ | $\$ 0$ | $\$ 1,164$ | $\$ 28,836$ |
| Bob | $\$ 30,000$ | $\$ 300$ | $\$ 420$ | $\$ 0$ | $\$ 720$ | $\$ 29,280$ |

## Handout 5.3: Figuring for Michelle

If Michelle continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |
| 5 years |  |  |  |
| 10 years |  |  |  |
| 20 years |  |  |  |

Michelle has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 5 percent interest compounded monthly. If Michelle makes no withdrawals from this savings account, determine the amount of Michelle's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> 10 Years | Savings After <br> 20 years |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |

If Michelle continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Time <br> Period | Total Deposited to <br> Saving Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings Plus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |  |
| 5 years |  |  |  |  |
| 10 years |  |  |  |  |
| 20 years |  |  |  |  |

## Handout 5.3: Figuring for Michelle—Answer Key

If Michelle continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 1,440$ | $\$ 28,560$ |
| 5 years | $\$ 150,000$ | $\$ 7,200$ | $\$ 142,800$ |
| 10 years | $\$ 300,000$ | $\$ 14,400$ | $\$ 285,600$ |
| 20 years | $\$ 600,000$ | $\$ 28,800$ | $\$ 571,200$ |

Michelle has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 5 percent interest compounded monthly. If Michelle makes no withdrawals from this savings account, determine the amount of Michelle's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> $\mathbf{1 0}$ Years | Savings After <br> $\mathbf{2 0}$ years |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 120$ | $\$ 1,473$ | $\$ 8,161$ | $\$ 18,634$ | $\$ 49,324$ |

If Michelle continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Time <br> Period | Total Deposited to <br> Savings Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings Plus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 1,440$ | $\$ 28,560$ | $\$ 30,033$ |
| 5 years | $\$ 150,000$ | $\$ 7,200$ | $\$ 142,800$ | $\$ 150,961$ |
| 10 years | $\$ 300,000$ | $\$ 14,400$ | $\$ 285,600$ | $\$ 304,234$ |
| 20 years | $\$ 600,000$ | $\$ 28,800$ | $\$ 571,200$ | $\$ 620,524$ |

## Handout 5.4: Figuring for Juan

If Juan continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |
| 5 years |  |  |  |
| 10 years |  |  |  |
| 20 years |  |  |  |

Juan has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 5.5 percent interest compounded monthly. If Juan makes no withdrawals from this savings account, determine the amount of Juan's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> 10 Years | Savings After <br> 20 years |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |

If Juan continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Time <br> Period | Total Deposited to <br> Savings Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings Plus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |  |
| 5 years |  |  |  |  |
| 10 years |  |  |  |  |
| 20 years |  |  |  |  |

## Handout 5.4: Figuring for Juan—Answer Key

If Juan continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 1,020$ | $\$ 28,980$ |
| 5 years | $\$ 150,000$ | $\$ 5,100$ | $\$ 144,900$ |
| 10 years | $\$ 300,000$ | $\$ 10,200$ | $\$ 289,800$ |
| 20 years | $\$ 600,000$ | $\$ 20,400$ | $\$ 579,600$ |

Juan has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 5.5 percent interest compounded monthly. If Juan makes no withdrawals from this savings account, determine the amount of Juan's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> $\mathbf{1 0}$ Years | Savings After <br> $\mathbf{2 0}$ years |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 85$ | $\$ 1,046$ | $\$ 5,855$ | $\$ 13,558$ | $\$ 37,028$ |

If Juan continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Time <br> Period | Total Deposited to <br> Savings Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings Plus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 1,020$ | $\$ 28,980$ | $\$ 30,026$ |
| 5 years | $\$ 150,000$ | $\$ 5,100$ | $\$ 144,900$ | $\$ 150,755$ |
| 10 years | $\$ 300,000$ | $\$ 10,200$ | $\$ 289,800$ | $\$ 303,358$ |
| 20 years | $\$ 600,000$ | $\$ 20,400$ | $\$ 579,600$ | $\$ 616,628$ |

## Handout 5.5: Figuring for Sasha

If Sasha continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |
| 5 years |  |  |  |
| 10 years |  |  |  |
| 20 years |  |  |  |

Sasha has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 6 percent interest compounded monthly. If Sasha makes no withdrawals from this savings account, determine the amount of Sasha's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> 10 Years | Savings After <br> 20 years |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |

If Sasha continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Tome <br> Period | Total Deposited to <br> Savings Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings Plus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |  |
| 5 years |  |  |  |  |
| 10 years |  |  |  |  |
| 20 years |  |  |  |  |

## Handout 5.5: Figuring for Sasha—Answer Key

If Sasha continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on her total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 1,164$ | $\$ 28,836$ |
| 5 years | $\$ 150,000$ | $\$ 5,820$ | $\$ 144,180$ |
| 10 years | $\$ 300,000$ | $\$ 11,640$ | $\$ 288,360$ |
| 20 years | $\$ 600,000$ | $\$ 23,280$ | $\$ 576,720$ |

Sasha has decided to take actions to avoid any further monthly fees. Rather than paying fees, she will deposit an amount equal to what she was charged in fees in a savings account each month. She has found a savings account that pays 6 percent interest compounded monthly. If Sasha makes no withdrawals from this savings account, determine the amount of Sasha's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> 10 Years | Savings After <br> $\mathbf{2 0}$ years |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 97$ | $\$ 1,197$ | $\$ 6,768$ | $\$ 15,896$ | $\$ 44,818$ |

If Sasha continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Time <br> Period | Total Deposited to <br> Savings Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings Plus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 1,164$ | $\$ 28,836$ | $\$ 30,033$ |
| 5 years | $\$ 150,000$ | $\$ 5,820$ | $\$ 144,180$ | $\$ 150,948$ |
| 10 years | $\$ 300,000$ | $\$ 11,640$ | $\$ 288,360$ | $\$ 304,256$ |
| 20 years | $\$ 600,000$ | $\$ 23,280$ | $\$ 576,720$ | $\$ 621,538$ |

## Handout 5.6: Figuring for Bob

If Bob continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |
| 5 years |  |  |  |
| 10 years |  |  |  |
| 20 years |  |  |  |

Bob has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 4.5 percent interest compounded monthly. If Bob makes no withdrawals from this savings account, determine the amount of Bob's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> 10 Years | Savings After <br> 20 years |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |

If Bob continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Time <br> Period | Total Deposited to <br> Savins Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings flus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ |  |  |  |
| 5 years |  |  |  |  |
| 10 years |  |  |  |  |
| 20 years |  |  |  |  |

## Handout 5.6: Figuring for Bob—Answer Key

If Bob continues to have the same net pay and continues to be charged the same amount in fees each month, calculate the effects on his total disposable income over time. Complete the chart below.

| Length of Time | Total Amount of Net <br> Pay for Time Period | Total Amount of Fees <br> Charged for Time <br> Period | Total Disposable Income Minus <br> Amount <br> Charged for Fees |
| :--- | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 720$ | $\$ 29,280$ |
| 5 years | $\$ 150,000$ | $\$ 3,600$ | $\$ 146,400$ |
| 10 years | $\$ 300,000$ | $\$ 7,200$ | $\$ 292,800$ |
| 20 years | $\$ 600,000$ | $\$ 14,400$ | $\$ 585,600$ |

Bob has decided to take actions to avoid any further monthly fees. Rather than paying fees, he will deposit an amount equal to what he was charged in fees in a savings account each month. He has found a savings account that pays 4.5 percent interest compounded monthly. If Bob makes no withdrawals from this savings account, determine the amount of Bob's savings over time and complete the chart below. Round your answers to the nearest dollar and use this online calculator:
www.math.com/students/calculators/source/compound.htm

| Amount to Deposit in <br> Savings Each Month | Savings After <br> One Year | Savings After <br> Five Years | Savings After <br> $\mathbf{1 0}$ Years | Savings After <br> $\mathbf{2 0}$ years |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 60$ | $\$ 735$ | $\$ 4,029$ | $\$ 9,072$ | $\$ 23,287$ |

If Bob continues to have the same net pay, implements this savings plan and makes no withdrawals from this savings account, calculate the effects of saving over time. Complete the chart below. Round your answers to the nearest dollar.

| Length <br> of Time | Total Net <br> Pay for Time <br> Period | Total Deposited to <br> Savings Account <br> for Time Period | Total Disposable Income <br> Minus Amount Depos- <br> ited to Savings Account | Total Disposable <br> Income After Adding <br> Savings Plus Interest |
| :--- | :---: | :---: | :---: | :---: |
| 1 year | $\$ 30,000$ | $\$ 720$ | $\$ 29,280$ | $\$ 30,015$ |
| 5 years | $\$ 150,000$ | $\$ 3,600$ | $\$ 146,400$ | $\$ 150,429$ |
| 10 years | $\$ 300,000$ | $\$ 7,200$ | $\$ 292,800$ | $\$ 301,872$ |
| 20 years | $\$ 600,000$ | $\$ 14,400$ | $\$ 585,600$ | $\$ 608,887$ |

Handout 5.7: Keep the Currency Score Sheet

|  |  |  | Current Balance |
| :---: | :---: | :---: | :---: |
|  |  | Starting Balance | \$200 |
| 1. | Keep your currency! | Deduct \$10 | \$ |
| 2. | Keep your currency! | Deduct \$10 | \$ |
| 3. | Keep your currency! | Deduct \$10 | \$ |
| 4. | Keep your currency! | Deduct \$10 | \$ |
| 5. | Keep your currency! | Deduct \$10 | \$ |
| 6. | Keep your currency! | Deduct \$10 | \$ |
| 7. | Keep your currency! | Deduct \$10 | \$ |
| 8. | Keep your currency! | Deduct \$10 | \$ |
| 9. | Keep your currency! | Deduct \$10 | \$ |
| 10. | Keep your currency! | Deduct \$10 | \$ |
| 11. | Keep your currency! | Deduct \$10 | \$ |
| 12. | Keep your currency! | Deduct \$10 | \$ |
| 13. | Keep your currency! | Deduct \$10 | \$ |
| 14. | Keep your currency! | Deduct \$10 | \$ |
| 15. | Keep your currency! | Deduct \$10 | \$ |
| 16. | Keep your currency! | Deduct \$10 | \$ |
| 17. | Keep your currency! | Deduct \$10 | \$ |
| 18. | Keep your currency! | Deduct \$10 | \$ |
| 19. | Keep your currency! | Deduct \$10 | \$ |
| 20. | Keep your currency! | Deduct \$10 | \$ |
|  |  | Ending Balance | \$ |

Handout 5.8: T Cards


Handout 5.9: F Cards


## Handout 5.10: Keep the Currency Statements with Answers

1. APR means "a preferred rate" and is the annual interest rate for consumers with good credit. (False - APR means "annual percentage rate" and applies to all customers, regardless of their credit history or rating.)
2. A revolving line of credit means an unlimited number of purchases can be made up to a specific dollar amount. (True - The dollar amount is determined by the credit card company based on a credit cardholder's credit history. The number of purchases is unlimited up to the dollar limit.)
3. A lower interest rate can be obtained for credit cards if a consumer chooses to use collateral to secure the credit card loan. (False - Credit cards are not collateralized.)
4. When a car dealership offers different promotional offers and incentive programs, the best deal for the buyer is the one that offers the lowest interest rate. (False - Promotional offers and incentive programs can differ and should be considered individually to determine which deal is best. The lowest interest rate is not always the best deal.)
5. Beginning in 2010, if you have authorized the credit card company to allow transactions that will take you over your credit limit, the credit card company can impose only one fee per billing cycle. (True - If you opt-in to allow transactions that take you over your credit limit, your credit card company can impose only one fee per billing cycle.)

SOURCE: www.federalreserve.gov/consumerinfo/wyntk_creditcardrules.htm
6. An ATM card is a "pay now" point-of-sale transaction that replaces cash and checks. (False - An ATM card is not used to make purchases. It is used to access a computer that allows a bank customer to get cash, make deposits or transfer money between accounts. An ATM card allows bank customers to access their bank accounts.)
7. Most overdraft charges on bank accounts occur because people write checks when they don't have enough money in their account to cover the checks. (False - According to the Center for Responsible Lending, more and more banks are changing the way bank account overdrafts are handled. Most overdraft charges on bank accounts [46.3 percent] are caused by debit card purchases and ATM withdrawals.)

SOURCE: Center for Responsible Lending, by Julie Snider, USA TODAY, January 25, 2007.
8. Beginning in 2010, financial institutions must give consumers the choice as to whether the standard overdraft service will apply to debit card and ATM transactions. (True - A consumer can choose to have this overdraft service.)
SOURCE: www.federalreserve.gov/consumerinfo/wyntk_overdraft.htm
9. The interest rates on debit cards are usually lower than on credit cards because there is less risk to the lender. (False - A debit card does not have an interest rate. A debit card is a "pay now" point-of-sale transaction that replaces cash and checks. Transactions are deducted electronically from a cardholder's bank account or checking account.)
10. Beginning in 2010, if you want an increase in your credit limit, are under age 21 and have a credit card with a cosigner, your cosigner must agree in writing to the increase. (True - If you are under age 21 and have a card with a cosigner and want an increase in the credit limit, your cosigner must agree in writing to the increase.)

SOURCE: www.federalreserve.gov/consumerinfo/wyntk_creditcardrules.htm
11. A debit card is a secured loan with a revolving line of credit. (False - A debit card is not a loan. Money for debit card transactions is deducted directly from the debit card holder's bank account.)
12. "Caveat emptor" means consumers control the success of a business. (False - This is a Latin phrase which means "Let the buyer beware." It is meant to serve as a warning to consumers to make careful purchasing decisions.)
13. The interest rate on credit cards is often high because it is an unsecured loan and is quite risky for creditors. (True - A credit card is an unsecured loan. This means that there is no collateral required. Collateral is property required and offered as a guarantee of payment on a loan. From the lender's perspective, an unsecured loan is quite risky. If the borrower were to default, there is nothing for the lender to claim for payment or partial payment. This means that the possibility that the borrower may not repay is very high. Therefore, the interest rate on credit cards is often high.)
14. Beginning in 2010, the monthly credit card statements will include information on how long it will take you to pay off your balance if you only make minimum payments. (True - Credit card companies are required to have this on statements.)

SOURCE: www.federalreserve.gov/consumerinfo/wynth_creditcardrules.htm
15. Most Americans have four credit cards in their wallets. (True - This is according to a 2008 report.)

SOURCE: Arkansas Democrat Gazette, Parade Magazine, August 10, 2008, pp. 4-5, "Don't Get Clobbered by Credit Cards!" by Gary Weiss, www.parade.com/hot-topics/0808/dont-get-clobbered-by-credit cards
16. To avoid credit problems, making sure you can make the monthly payment is the most important factor to consider when purchasing a car. (False - There are many factors to consider, including the interest rate, the length of the contract and the total price of the vehicle.)
17. Consumers should record their transactions in a check register at the end of each month when they receive their bank statement in the mail. (False - Consumers should record transactions as they occur to prevent overdrafts on a bank account.)
18. It is more advantageous to use a debit card than a credit card because a debit card does not have interest, over-the-credit-limit fees and late fees. (False - There are advantages and disadvantages to using both cards.)

## Cards, Cars and Currency | Lesson 5: A Penny Saved

19. According to the Truth in Lending Act, the liability for unauthorized use of debit cards and credit cards is $\$ 50$ if a debit card or credit card is lost or stolen. (False - The Truth in Lending Act is a federal law that protects credit card holders against unauthorized use of their credit cards. Unlike credit cards, which cap your liability for unauthorized charges at $\$ 50$, your liability for a debit card depends on the situation. If you notify the bank within two business days of discovering an unauthorized transaction, your maximum liability is $\$ 50$. However, if you don't notify the bank until after those first two days, you could lose up to $\$ 500$.)

SOURCE: www.fdic.gov/consumers/consumer/news/cnfall09
20. According to the Truth in Lending Act, all car loans issued on the same day by a dealership must have the same interest rate. (False - This law mandates disclosure of information about the cost of credit. The interest rate charged on car contracts will vary from one consumer to another based on their credit report and credit history. Some consumers may be charged high interest rates because they are credit risks based on their past behavior.)

## Cards, Cars and Currency | Lesson 5: A Penny Saved

## Glossary of Terms

Annual percentage rate (APR)—The cost of credit on an annual basis and the total cost of credit to the consumer.

ATM (automated teller machine) card—A form of debit card that you use in an ATM by punching in your personal identification number. Using an ATM card, bank customers can access a computer to get cash, make deposits or transfer money between accounts.

Automated electronic transfer-An online payment that is automatically deducted from an account balance on a reoccurring basis.

Bank account register-A tool in which an account holder lists his or her initial balance in an account and then records all debits and credits in order to maintain an accurate record of account activity and an accurate balance.

Bank statement—A statement given to you by your bank or credit union to keep you informed of all transactions you made during the statement period. These statements are sent on a regular basis or posted online.

Balance transfer-The process of moving an unpaid credit card balance from one credit card to another.

Benefit-Something that is favorable to the decision-maker.
Billing cycle-The number of days between the last statement date and the current statement date.

Cash advance-Obtaining cash from a credit card instead of using the card to make a purchase. The grace period does not apply to cash advances. The advance is an instant loan and finance charges will be levied on this money from the time it is obtained until the loan is paid in full.

Caveat emptor-A Latin phrase meaning "let the buyer beware."
Check-A printed form directing a bank to withdraw money from an account and pay it to another account.

Checking account—An account held at a bank or credit union in which account owners deposit funds. Account owners have the privilege of writing checks on their accounts and are able to use ATM cards and debit cards to access funds.

Collateral—Property required by a lender and offered by a borrower as a guarantee of payment on a loan. A borrower's savings, investments or the value of the asset purchased that can be seized if the borrower fails to repay a debt.

Consumer-A person who buys and/or uses goods and services.
Consumer credit-Use of credit for personal wants as opposed to business wants.

Contract-A legally binding exchange, promise or agreement between parties that is enforced by law.

Credit-The ability of a consumer to obtain goods or services before payment, based on an agreement to pay later.

Credit Card Act of 2009—This act provided new credit card rules and amended previous acts with regulations prohibiting unfair credit card practices. This law, among other things, requires changes on credit card disclosures, places restrictions on credit card companies with limits on fees and rate increases, and requires consistency in payment dates and times.

Credit cards-Cards that represent an agreement between a lender-the institution issuing the card-and the cardholder. Credit cards may be used repeatedly to buy products or services or to borrow money on credit. Credit cards are issued by banks, savings and loans, retail stores, and other businesses.

Credit responsibilities-Refers to the actions or behaviors in which people should engage when they use credit.

Creditor-A person, financial institution or other business that lends money.

Credits—Additions or deposits to an account. In a bank account register, credits are added to the balance.

Debits-Charges to an account. In a bank account register, debits are subtracted from the balance.

Debit card—A card provided as a service by a bank that allows a point-of-sale transaction to replace cash and checks; transaction amounts are deducted electronically from a cardholder's bank account.

Deposit—An addition of funds to an account balance..

Down payment - A portion of the total cost of an item that must be paid at the time of purchase; also an initial payment used to reduce the amount financed.

Expenses—Payments for goods and services.
Fair Credit and Billing Act of 1974—This Act is an addition to the Truth and Lending Act. It requires prompt credit for payments made. It also allows cardholders to dispute billing errors on a credit card and withhold payment for damaged goods.

Fair Credit and Charge Card Disclosure Act (1989)—Part of the Truth in Lending Act that mandates a box on credit card applications describing key features and costs.

Fees-Money charged to service an account, such as late fees, overdraft fees, over-the-credit limit fees and maintenance fees.

Finance charge-The total dollar amount you pay to use credit, including interest, late charges and other fees.

Fixed interest rate-An interest rate that does not change during the term of the loan.
Foreclosure-In the case of non-payment of a credit obligation, the creditor has a legal right to take an asset pledged as collateral and sell it to pay the debt owed.

Grace period-A time period during which a borrower can pay the full balance of credit due and not incur any finance charges.

Gross pay-The amount earned per pay period before any deductions or taxes are subtracted.
Incentives-Perceived benefits that encourage certain behaviors.
Income-Money received for resources provided in the marketplace. People commonly earn income for providing labor (human resources). People also earn income when they provide natural, capital and entrepreneurial resources.

Interest-The price of using someone else's money; the price of borrowing money.
Interest rate-The price paid for using someone else's money, expressed as a percentage of the amount borrowed.

Introductory rate-A low interest rate that is offered for a limited time as an incentive to use credit cards.

Late payment fee-In a credit arrangement, a fee is charged when payment is received after the due date.

Lien-The legal right to take or sell property as security for a debt.
Loan-A sum of money provided temporarily on the condition that the amount borrowed be repaid, usually with interest.

Minimum payment-The minimum amount a card holder must pay each month to remain a borrower in good standing.

Net pay-The amount received after all deductions and taxes have been subtracted from a paycheck.

Opportunity cost-The highest-valued alternative given up when a decision is made.
Overdrawn-A condition that occurs when a checking account does not have enough money to cover transactions from checks, ATM withdrawals, debit card purchases or electronic payments.

Overdraft fee-A fee required for having a negative balance (being overdrawn) in an account.

Overdraft service-A fee-based service provided by financial institutions to generally approve and pay transactions when the account holder does not have enough funds to cover the transactions.

Over-the-credit-line fee-Consumers are assigned a credit limit by the credit card company. This is the maximum amount a consumer may borrow. When a consumer exceeds this limit, a fee is charged.

Periodic rate-The interest rate described in relation to a specific amount of time. The monthly periodic rate is the cost of credit per month; the daily periodic rate is the cost of credit per day.

Principal-The original amount of money borrowed or still owed, on which interest is charged; also the original amount of money deposited or invested, excluding any interest or dividends.

Repossess-To take back goods or property from a buyer who has failed to keep up payments for them.

Revolving credit line-This means an unlimited number of purchases can be made up to a specific dollar amount. This dollar amount is determined by the credit card company based on a customer's credit history.

Rule of 72—A method to estimate the number of years it will take for an investment or debt to double in value. Divide the number 72 by the percentage rate of interest being paid on a debt or being earned on an investment to determine the approximate number of years.

Saving-The amount of income not spent on consumption or taxes. Giving up some current consumption for future consumption.

Secured loan-A loan that is backed with collateral.
Truth in Lending Act (1969)—Federal law that mandates disclosure of information about the cost of credit. It also protects you against unauthorized use of your credit card. If it is lost or stolen, the maximum amount you have to pay is $\$ 50$.

Unsecured loan-Loan that is not backed with collateral.
Variable interest rate-An interest rate that can increase or decrease during any period of the loan term as written in the contract.

Withdrawal-The removal of cash from an account, either at a bank or ATM.

