FINAN¢IAL FUNDAMENTAL$ FROM THE FED

Credit

UNITED STATES FEDERAL RESERVE SYSTEM

100 YEARS
FEDERAL RESERVE SYSTEM

Lesson Description

In this lesson, students, through a series of interactive and group activities, will explore the concept of credit and the impact of liabilities on an individual's net worth, monthly budget and balance sheet. Working in groups, students analyze a borrowing scenario and evaluate the advantages and disadvantages of using credit.

Concepts

Assets
Budget
Credit
Liabilities
Net Worth

Objectives

Students will:

- Analyze the impact of purchases financed with credit on a balance sheet.
- Analyze the effects of debt payments on a budget.
- Evaluate the advantages and disadvantages of financing various purchases.

Common Core Standards

Gr. 6-12 English Language arts Standards, Literacy in History/Social Studies and Technical Studies

- Key Ideas and Details
- Integration of Knowledge and Ideas

Content Standards

National Standards in Economics

- **Standard 2**: Effective Decision-Making

National Personal Financial Literacy

- **Standard 1:** Buying Goods and Services
- **Standard 4:** Using Credit

Grade Level

9-12

Time Required

50 minutes

Materials

- A copy of Handouts 1 and 3 for each student
- A copy of Handout 2, one scenario for each group
- A copy of Handouts 1, 2, and 3 Answer Keys
- Visuals 1 and 2

Procedures

1. Display *Visual 1: Net Worth*. Use the visual and the information below to discuss net worth.
    - **Assets** – anything an individual or business owns that has commercial or exchange value. Examples include land, buildings, stocks and vehicles.
    - **Liabilities** – money an individual or organization owes; same as debt. Examples include mortgages, car loans, credit card balances and student loans.
    - **Net Worth** – the difference between total assets and total liabilities. Net worth is a way to measure a person's wealth.

    Ask students how a person could increase his or her net worth. Answers should include:

    - By increasing total assets
    - By decreasing total liabilities

    Emphasize that people often use **credit** to purchase new assets, such as a house or a car, though credit also increases an individual's liabilities; new liabilities decrease net worth. Credit involves a promise to repay in the future.

2. Distribute *Handout 1: Sandra's Balance Sheet*. Have the students complete the worksheet by sorting the items into assets and liabilities. Use *Handout 1: Sandra's Balance Sheet–Answer Key* to discuss the suggested answers. Extend the discussion by asking students the following questions.
    - How would the balance sheet and net worth be affected if Sandra borrowed $3800 to buy a new car? *(The car would be listed as a new asset, even though it will begin to decline in value over time. The loan is a new liability.)*
    - How would the balance sheet and net worth be affected if Sandra took out $12,000 in student loans to pay for college? *(Even though a college degree can increase future earning potential, a college education does not have a market (or resale) value, so it is not considered an asset on her balance sheet. However, the student loan is a new liability.)*

- How would the balance sheet and net worth be affected if Sandra charged $450 on a credit card to pay for spring break trip with her friends? *(Because many of the expenses of the trip are consumed [lodging, food and transportation], they do not add new assets. The credit card balance is a new liability.)*

Remind students that net worth is a measure of wealth and that every additional loan or liability decreases wealth, whereas increasing assets increases net worth.

3. Display *Visual 2: Monthly Budget*. Use the visual and the information below to discuss how a budget allows a person to accurately track income and expenses.
   - Budgets allow people to account for all sources of income, including jobs, investments and other regular income.
   - Budgets help people track and categorize expenses, including food, clothes, entertainment, transportation and gas, etc.
   - Budgets allow people to plan for regular (or monthly) expenses, such as loan payments, utility bills and rent, as well as allocate money to savings.

4. Remind students that Sandra added three loans to her balance sheet. In addition to affecting her net worth, each loan will have an impact on her monthly budget. Use Visual 2 and the information below to discuss the impact of borrowing decisions on a budget.
   - How would her budget be affected if Sandra borrowed $3800 to buy a car—a loan that adds a $120 monthly car payment for 48 months? *(She must add that expense to her monthly budget. For the entire term of the loan, Sandra has to increase income or reduce other expenses to offset the $120 payment.)*
   - How would her budget be affected if she took out $12,000 in student loans to pay for college, therefore adding a $125 monthly loan payment for 120 months? *(She must add that expense to her monthly budget. For the entire term of the loan, Sandra has to increase income or reduce other expenses to offset the $125 payment.)*
   - How would her budget be affected if Sandra charged $450 on a credit card to pay for a spring break trip and pays off the balance in 10 months with a $50 monthly payment? *(For 10 months, Sandra must add the expense to her monthly budget. She must increase income or reduce other expenses to offset the $50 payment.)*

5. Divide students into four groups. Give each group one scenario from *Handout 2: Use Credit Wisely,* and ask students to read the scenario and consider the advantages and disadvantages of borrowing. After discussing the advantages and disadvantages, as well as the impact on the person's balance sheet and budget, each group should make a recommendation and select a spokesperson to explain the recommendation to the class. (For larger classes, assign scenarios to more than one group and solicit responses from each group.)

6. Ask the spokesperson from each group to read the group's scenario, explain some of the advantages and disadvantages of borrowing and make a recommendation. Use the Handout 2–Answer Key suggested discussion points to assist students if necessary. Allow all four groups to present.

Closure

7. Review the important content by asking the following question.
   - How does the use of credit–a loan–affect a borrower's balance sheet? *(Debt increases the person's liabilities, which reduces their net worth, or wealth.)*
   - How does the use of credit–a loan–affect a borrower's budget? *(Loans require repayment. A borrower must decide if the payments are currently and in the future affordable considering all other obligations.)*

Assessment

8. Distribute a copy of *Handout 3: Assessment* to each student, and ask them to complete it. Use *Handout 3: Assessment—Answer Key* to discuss student responses.

Visual 1: Net Worth

Assets – Liabilities = Net Worth

Assets

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

Liabilities

Money an individual, business, or organization owes; same as debt

Net Worth

The difference between the total assets and total liabilities of an individual, business, or organization

Visual 2: Monthly Budget

Sources of Income	Current Income
Total Income	

Spending Categories	Current Expenses
Total Expenses	

	Current Savings
Available to Save (Income - Expenses)	

Handout 1: Sandra's Balance Sheet

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

Description	Amount
Owed to her mother for extra cell phone charges	$250
Current value of a savings bond that her uncle gave her	$150
Balance on a car loan	$1,500
Savings account from summer job	$750
DVD collection	$200
Car	$3,500
Balance on prom dress	$200
Assets	**Amount**
Liabilities	**Amount**
Total assets	
Total liabilities	
Assets – Liabilities = Net Worth	

Handout 1: Sandra's Balance Sheet—Answer Key

Description	Amount
Assets	**Amount**
Current value of a savings bond that her uncle gave her	$150
Savings account from summer job	$750
DVD collection	$200
Car	$3,500
Liabilities	**Amount**
Owed to her mother for extra cell phone charges	$250
Balance on a car loan	$1,500
Balance on prom dress	$200
Total assets	$4,600
Total liabilities	$1,950
Assets – Liabilities = Net Worth	**$2,650**

Handout 2: Use Credit Wisely

Patrick's Prom Problem

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

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

Handout 2: Use Credit Wisely, cont.

Debra's Degree Dilemma

Debra graduated from high school and is halfway through a program to become a dental hygienist. She expects to earn about $55,000 after she graduates, but there are no guarantees. Right now she needs a student loan to finish the last year of her associate's degree. She is confident that her summer internship in a dentist's office will lead to a full-time job.

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

Handout 2: Use Credit Wisely, cont.

Carlos' Comic Conundrum

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

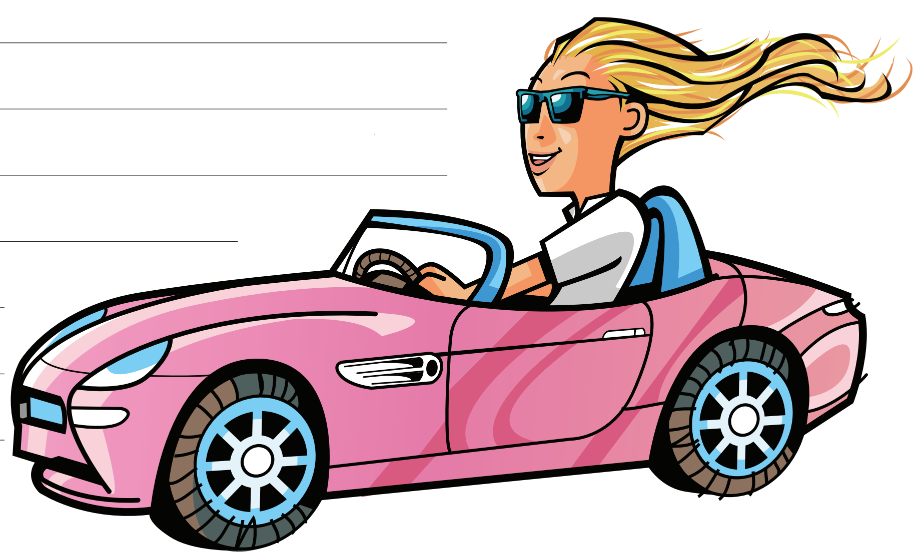
Think about Carlos's balance sheet and budget. What are some advantages and disadvantages to borrowing? Should he borrow?

Handout 2: Use Credit Wisely, cont.

Veronica's Vehicle Vexation

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

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



Handout 2: Use Credit Wisely—Answer Key

Suggested discussion points

Should Patrick borrow?
Advantage—by borrowing he increases his ability to consume something that he cannot presently afford
Disadvantage—borrowing negatively impacts his balance sheet by adding a new liability with no new asset

Considerations:

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

Should Debra borrow?
Advantage—by borrowing she has the opportunity to complete her degree and possibly earn more money
Disadvantage—by borrowing she adds the burden of the student loan payment if she does not get the expected job

Considerations:

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

Should Carlos borrow?
Advantage—by borrowing he is presented the opportunity to purchase an asset that may increase in value over time
Disadvantage—by borrowing he is presented the risk of misjudging the market and purchasing an asset that loses value

Considerations:

- Investing in collectables requires knowledge of the market and careful consideration of purchases. If the asset increases in value, his net worth will increase. However, Carlos could have misjudged the market, and the asset could lose value.

Handout 2: Use Credit Wisely—Answer Key, cont.

- What has Carlos done to minimize the finance charges that he will incur? What if he takes longer to repay the loan?
- Investing in collectables can limit liquidity. If he needs cash, could he quickly sell the book? Is this an important consideration for Carlos?

Should Veronica borrow?

Advantage—borrowing provides her the ability to buy a car that she currently cannot afford
Disadvantage—borrowing negatively impacts her balance sheet and adds additional constraints to her ability to handle unexpected expenses in the future

Considerations:

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

Handout 3: Assessment

1. Review Tony's assets and liabilities below, and classify each as one or the other.
   - A $350 loan from parents for a new iPad Mini
   - B. $500 savings bond
   - C. $400 in a checking account
   - D. $65 cash
   - E. $3000 car loan

2. Using the information above, compute Tony's net worth.

3. Review the items below and construct a monthly budget for Tony. Include sections for total income, total expenses and amount available for savings.
   - A. After-tax monthly income from part-time job: $675
   - B. Entertainment expenses (movies, dates, dinners out with friends, etc.): $400
   - C. Monthly payment on car loan: $200
   - D. Monthly payment to parents for iPad loan: $50

4. Given his current income and expenses, is it possible for Tony to add a new monthly expense—a $50 date night with his girlfriend—to his budget? Why or why not?

5.

Tony's Transportation Trouble

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

Think about Tony's balance sheet and budget. Discuss some advantages and disadvantages to borrowing. Include a recommendation on whether he should borrow.

Handout 3: Assessment—Answer Key

Suggested answers

1. Review Tony's assets and liabilities below, and classify each as one or the other.
   A $350 loan from parents for a new iPad Mini *(Liability)*
   B. $500 savings bond *(Asset)*
   C. $400 in a checking account *(Asset)*
   D. $65 cash *(Asset)*
   E. $3000 car loan *(Liability)*

2. Using the information above, compute Tony's net worth.

   Assets: ($500 + $400 + $65 =) $965
   Liabilities: ($350 + $3000 =) $3350
   Net worth: (965-3350 =) $-2385

3. Review the items below and construct a monthly budget for Tony. Include sections for total income, total expenses and amount available for savings.
   A. After-tax monthly income from part-time job: $675
   B. Entertainment expenses (movies, dates, dinners out with friends, etc.): $400
   C. Monthly payment on car loan: $200
   D. Monthly payment to parents for iPad loan: $50

   Total income = $675
   Total expenses = $650 ($400 + $200 +50)
   Total income – total expenses = $25 available to save

4. Given his current income and expenses, is it possible for Tony to add a new monthly expense—a $50 date night with his girlfriend—to his budget? Why or why not?

   No, not currently. Because he only has $25 left after he pays his expenses, he would not have enough money each month to add a new $50 expense. He would need to add $25 in income or decrease expenses by $25—or some combination of the two—to add a new $50 expense.

Handout 3: Assessment—Answer Key, cont.

5.

Tony's Transportation Trouble

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

Think about Tony's balance sheet and budget. Discuss some advantages and disadvantages to borrowing. Include a recommendation on whether he should borrow.

Should Tony borrow?

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

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