## It's Your Paycheck!

## Lesson 8:

# How Much Are You Really Paying for That Loan? 

Standards and Benchmarks (see page 8.13)

## Lesson Description

Students learn what a payday loan is and the high cost involved in using such a loan. They work in groups to calculate the cost of loans at given annual percentage rates (APRs). As an assessment, students select four scenarios involving payday lending, offer reasons why payday loans might not be the best alternative, and suggest other options for financing what the individuals want.

## Grade Level

6-12

## Concepts

Annual percentage rate (APR)
Interest
Interest rate
Loan
Payday Ioan

## Compelling Question

Why is it important to understand annual percentage rate (APR) when borrowing?

## Objectives

Students will be able to

- define annual percentage rate, interest, interest rate, loan, and payday loan;
- calculate annual percentage rates; and
- explain key facts regarding payday loans.


## Time Required

60 minutes

## Materials

- PowerPoint slide deck for "It's Your Paycheck! Lesson 8: How Much Are You Really Paying for That Loan?"
- Handouts 8.1, 8.2, and 8.3, one copy of each for each student
- Handout 8.3 Answer Key, one copy for the teacher
- A calculator for each student


## Procedure

1. Display Slide 1 and introduce the topic by asking the following:

- Have you ever borrowed money from someone? (Answers will vary.)
- What are some examples of things for which you have borrowed money? (Answers will vary but may include lunch, gas, clothes, or a movie ticket.)
- Have you ever lent money to someone? (Answers will vary.)
- How did the person who borrowed the money spend it? (Answers will vary but may include to buy lunch, gas, clothes, or a movie ticket.)

2. Display Slide 2 and define a loan as a sum of money provided temporarily on the condition that the amount borrowed be repaid, usually with interest.
3. Display Slide 3 and explain that when people borrow money, they are using money that belongs to someone else. The price of using someone else's money is interest. Explain that the amount of interest on a loan is often expressed as an interest rate, such as 5 percent, which is the percentage of the amount of a loan that is charged for the loan and must be repaid (in addition to the amount borrowed) over a specified time period. For example, if the simple interest rate on a $\$ 1,000$ loan is 10 percent, the borrower must repay the $\$ 1,000$ plus $\$ 100$ in interest.
4. Display Slide 4 and define annual percentage rate (APR) as the percentage cost of credit on an annual basis. Explain that lenders are required by law to disclose APRs to borrowers. Display Slides 5-6 and discuss the following:

- An APR may differ from the stated interest rate because APR includes the fees and costs related to the loan.
- An APR is the total cost of credit a consumer pays per year of a loan-it combines the interest paid over the life of the loan and all fees that are paid up front, which together are called finance charges. APRs are commonly used to compare loan costs from different lenders to help consumers make better-informed choices. (NOTE: Rules regarding fees that must be included in an APR are different for mortgage loans than for auto loans and shortterm loans.)
- The fees and costs vary depending on the type of loan you're applying for (e.g., a home loan or an auto loan).
- Some examples of possible fees included in the APR are processing fees, underwriting fees, document fees, and appraisal fees. For most loans, other than mortgages, the fees usually pertain to processing and managing the loan.
- The APR gives you an easy way to compare loan rates. For example, credit cards come with all types of fees and costs, and they are all different. But the APR makes it easy to compare rates, and credit card companies must provide the APR.
- Generally, the lower the APR the better.
- When you apply for a loan, you should always be able to see both the interest rate and the APR.
- The APR does not affect the monthly payment on a loan. Monthly payments are a function of the interest rate and length of the loan.

5. Display Slide 7 and explain that the following information is needed to calculate an APR:

- the amount of credit-the amount of the loan-to be received,
- the dollar amount of the credit costs-that is, the dollar amount of fees and interest charges associated with the loan, and
- the length (term) of the loan.

6. Explain that the length of a loan is often referred to as the "term" of the loan. Computing an APR of a loan longer than a year requires some complicated mathematics. Display Slide 8 and explain that in these cases, it is easier to use an APR calculator, such as the one found at http://www.efunda.com/formulae/finance/apr calculator.cfm. Tell the students you are going to calculate APRs of loans. Discuss the following:

- For example, let's say you borrow $\$ 3,000$ to buy a used car. The amount of credit-the amount of the loan-is $\$ 3,000$.
- To calculate the APR of this loan, you must know the dollar amount of the credit coststhat is, the amount of the fees and interest charges associated with the loan. Examples of fees include loan-processing fees and underwriting fees. Let's say that for your \$3,000 loan, the loan-processing fee is $\$ 50$ and the interest rate is 7 percent. (NOTE: When using an APR calculator, it is not necessary to know the dollar amount paid in interest; knowing the interest rate is enough.)
- Let's say that for the $\$ 3,000$ car loan the term is 24 months.
- (Input the information into the calculator.) Entering this information into the APR calculator tells us that this loan, with a stated interest rate of 7 percent, has an APR of 8.63791 percent.
- (Recalculate the loan with a 6 percent interest rate and a $\$ 100$ fee.) If another dealer offered a stated interest rate of 6 percent for a two-year loan but charged a $\$ 100$ fee, the APR would be 9.24659 percent.
- As these examples show, APR is as important to consider as the stated interest rate when comparing loans. The interest rate on the second loan is 6 percent, which is lower than the rate on the first loan. However, the APR on the second loan is 9.25 percent, which is higher than the 8.64 percent on the first loan. This is because the processing fee on the second loan was higher ( $\$ 100$ ) than on the first loan ( $\$ 50$ ).

7. Distribute a copy of Handout 8.1: Calculating the APR of a Short-Term Loan and a calculator to each student. Tell the students that the handout includes the steps for calculating an APR of a short-term (less than a year) loan. Display Slide 9 and review the steps with the students. Use the following example to calculate an APR on the board: A consumer borrows $\$ 500$ for car repairs. The sum of the up-front fees and interest charges is $\$ 50$. The term of the loan is 21 days.
Step 1: Add all fees and interest charges to calculate total fees: $\$ 50$.
Step 2: Divide the total fees by the amount financed (borrowed): $\$ 50 / \$ 500=0.1$.
Step 3: Multiply the answer by the number of days in a year-365: $0.1 \times 365=36.5$.
Step 4: Divide the answer by the term of the loan in days: 36.5/21 $=1.7381$.
Step 5: Move the decimal point two places to the right and add a percent sign:
1.7381 becomes $173.8 \%$ (rounded) to state the APR.

SOURCE: http://stoppaydaypredators.org/.
8. Remind students that an APR expresses the cost of a loan by incorporating not only the interest paid based on the stated interest rate, but also all up-front fees paid by the borrower. This becomes very important when comparing loans and analyzing the cost of short-term loans. Instruct the students to complete the problems on Handout 8.1. Allow time for the students to complete their work. Display Slide 10 and review the answers as follows:

| Calculation | Finance <br> charge | Loan amount | Term | APR |
| :--- | :---: | :---: | :---: | :---: |
| A. $[(\$ 5 / \$ 500) \times 365] / 14=26 \%$ | $\$ 5$ | $\$ 500$ | 14 days | $26 \%$ |
| B. $[(\$ 12 / \$ 200) \times 365] / 21=104 \%$ | $\$ 12$ | $\$ 200$ | 21 days | $104 \%$ |
| C. $[(\$ 5 / \$ 750) \times 365] / 14=17 \%$ | $\$ 5$ | $\$ 750$ | 14 days | $17 \%$ |

9. Review the definition of APR as the percentage cost of credit on an annual basis. Remind the students that an APR is the total cost of credit to the consumer each year of a loan. APRs make it easier to compare loan options and help consumers make better-informed choices. Point out
that the APRs of the short-term loans on Handout 8.1 were much higher than the APR of the car loan-a longer-term loan.
10. Display Slide 11 and discuss the following:

- Have you or people you know used short-term loans to buy things? (Answers will vary.) Point out that when fees and interest are combined for short-term loans, the APRs become very high, as illustrated by the short-term loans on Handout 8.1.
- Have you ever heard advertisements for payday loans? (Answers will vary.) Explain that these are short-term loans that typically have very high APRs.

11. Display Slide 12 and explain the following:

- A payday loan is usually a small, short-term loan intended to cover a borrower's expenses until his or her next payday.
- A payday loan may also be called a "paycheck advance" or "payday advance."
- Usually, the initial term for a payday loan is two weeks.
- Payday loans are also sometimes called "cash advances," although that term can also refer to cash provided through a prearranged line of credit, such as a credit card.

12. Distribute a copy of Handout 8.2: Payday Loan Fact Sheet to each student. Ask students to read the sheet, and display Slides 13-15 to review the content.
13. Display Slides 16-18 and discuss the following:

- What is the amount of a typical payday loan? (\$375)
- What fees are charged for a payday loan? (Loan fees and, if the loan is extended past the initial term, rollover fees)
- When rollover fees are included, what is the common range of APRs for payday loans? (About 390 percent to 780 percent, depending on the amount and length [term] of the loan)
- What percentage of borrowers do not repay their payday loans? (About 91 percent)
- What percentage of payday loans go to repeat borrowers? (99 percent)
- Do any states prohibit or greatly restrict payday loans? (Yes-as of 2019, 14 states and the District of Columbia prohibit payday loans; 9 states allow only low-cost payday loans by severely restricting the interest rate and fees payday loan companies can charge. Many other states in which payday loans are legal restrict some payday lender practices by prohibiting rollover loans or loan refinancing.) SOURCE: National Conference of State Legislatures, http://www.ncsl. org/default.aspx?tabid=12473; and Consumer Federation of America Payday Loan Consumer Information, http://paydayloaninfo.org/.
(NOTE: Students might find it interesting that payday lenders were labeled "loan sharks" during the Great Depression. [This is the origin of the term.])

14. Divide the class into groups. Instruct the groups to each use the information on Handout 8.2 as a guide to develop a short public service announcement (commercial) aimed at high school students that outlines the drawbacks of using a payday loan. Have the groups deliver the announcements in class, and then discuss with the class which group was most effective in delivering the message and illustrating the facts in the handout.

## Closure

15. Display Slides 19-25 and review the key points of the lesson by discussing the following:

- What is a loan? (A loan is a sum of money provided temporarily on the condition that the amount borrowed be repaid, usually with interest.)
- What is interest on a loan? (Interest is the price of using someone else's money.)
- What is an APR (annual percentage rate)? (An APR is the percentage cost of credit on an annual basis; it is the total cost of credit a consumer pays per year of a loan. It combines the interest paid over the life of the loan and all fees that are paid up front, which together are called finance charges.)
- Why it is important for consumers to know what an APR is and be able to calculate it? (An APR is the total cost of credit to the consumer and allows the consumer to compare loan options and to make better-informed decisions.)
- What help is available online for consumers to determine the APRs of long-term loans such as car loans or mortgages? (APR calculators are available online.)
- What loan information must a consumer have to use an APR calculator? (The dollar amount of the loan, the length [term] of the loan, fees, and the interest rate)
- What are the steps for calculating the APR of a short-term loan?

Step 1: Add all fees and interest charges to calculate total fees.
Step 2: Divide the total fees by the amount financed (borrowed).
Step 3: Multiply the answer by the number of days in a year-365.
Step 4: Divide the answer by the term of the loan in days.
Step 5: Move the decimal point two places to the right and add a percent sign.

- What is a payday loan? (A payday loan is a small, short-term loan intended to cover a borrower's expenses until his or her next payday.)
- What are the disadvantages of payday loans? (Disadvantages of payday loans include high APRs, additional fees, and increased debt.)
- Why do people use payday loans? (Answers will vary but should include that people use payday loans for emergencies, to buy goods and services they want, or to pay a bill when they don't have enough money to do so.)


## Assessment

16. Distribute a copy of Handout 8.3: Assessment to each student. Students will choose four scenarios and write arguments for each against payday lending and suggest alternative ways of solving the problem. Use Handout 8.3: Assessment—Answer Key to review student responses.

## Handout 8.1: Calculating the APR of a Short-Term Loan

Steps for calculating the annual percentage rate (APR) of a loan with a term of one year or less.
Step 1: Add all fees and interest charges to calculate total fees.
Step 2: Divide the total fees by the amount financed (borrowed).
Step 3: Multiply the answer by the number of days in a year-365.
Step 4: Divide the answer by the term of the loan expressed in days.
Step 5: Move the decimal point two places to the right and add a percent sign.
SOURCE: http://stoppaydaypredators.org/.

Directions: For each problem below, calculate the APR. Use the steps found above. Show your work. Round answers to the nearest whole number.
A. Andrew borrowed $\$ 500$ to repair his car. The finance charge on the loan was $\$ 5$, and the term of the loan was 14 days. What was the APR of Andrew's loan?
B. Shondra borrowed $\$ 200$ for the books she needed for her second semester of college. The finance charge on the loan was $\$ 12$, and the term of the loan was 21 days. What was the APR of Shondra's loan?
C. Mario borrowed $\$ 750$ to pay a doctor bill. The finance charge on the loan was $\$ 5$, and the term of the loan was 14 days. What was the APR of Mario's loan?

## Handout 8.2: Payday Loan Fact Sheet

- The term of a payday loan is usually two weeks-until the next paycheck—and the loan (the amount borrowed plus fees) must be paid back in full at the end of the term.
- Lenders charge "rollover fees" when borrowers want to extend the loan beyond the original term.
- Annual percentage rates (APRs) are commonly 390 percent to 780 percent when loan fees and rollover fees are included.
- A typical payday loan is about $\$ 375$.
- The borrower can give a postdated check to a lender to be held until the next paycheck is deposited.
- Approximately 91 percent of borrowers are unable to repay their payday loans at the end of a term.
- Approximately 99 percent of payday loans go to repeat borrowers, and government reports conclude that the industry relies on repeat (rollover) borrowers.
- Fees paid on payday loans that exceed 90 days amount to approximately $\$ 4.2$ billion annually.
- Currently, 14 states and the District of Columbia prohibit payday loans; nine states allow only low-cost payday loans by severely restricting the interest rate and fees payday loan companies can charge. Many other states in which payday loans are legal restrict some payday lender practices by prohibiting rollover loans or loan refinancing.
- Payday lenders have partnered with national banks in some states to avoid state prohibitions and restrictions.

SOURCE: http://www.paydayloaninfo.org/; http://www.pewtrusts.org/en/research- and-analysis/ reports/2012/07/19/who-borrows-where-they-borrow-and-why; http://www.responsiblelending.org/; and http://www.stlouisfed.org/publications/br/articles/?id=524.

## Handout 8.3: Assessment

Directions: Read and select four of the following scenarios. Answer the questions for the selected scenarios.

- Renaldo lives and works in Metroland. He has been unable to pay his full rent for three months. His landlord is threatening to evict him if doesn't catch up on his rent. He is thinking about visiting a payday lender in his community. He normally pays all of his bills on time, but he has struggled the past few months because he had to pay for car repairs. He has a savings account at a local bank, and he has the money to pay the rent. However, using this money would leave him with no emergency savings. Why shouldn't he use a payday lender? What could he do instead?
- Henry has been traveling more than 30 miles one way to visit his new girlfriend each evening. His truck does not get very good gas mileage, so he has to fill up almost every day. His truck payment is due in a few days, and he doesn't have enough money to pay it. He needs his truck to get to and from work each day. He thinks taking out a payday loan would help. Why shouldn't he use a payday loan? What could he do instead?
- Brandi lent her brother $\$ 400$ to pay for his emergency room visit. Unfortunately, he was unable to return to work because of his injury, and he doesn't have short-term disability insurance. He can't pay his sister back, and she needs the money for day care. Without day care she'll be unable to go to work herself. She has an account at the local credit union, and she pays her bills regularly. She is thinking about visiting a payday lender in her community. Why isn't this a good idea? What could she do instead?
- Alex left her purse on the bus-with her company-provided cell phone inside. It is now her responsibility to replace the phone with the same or a newer model. The same phone will cost her $\$ 250$ plus the activation fee. She just spent the last of her paycheck on new shoes. She has a credit card, but she is concerned about the $18 \%$ APR her credit card will charge if she doesn't pay the full amount of the bill when it comes in. She is considering visiting a payday lender in her community. What are the reasons for not using a payday loan service? What could she do instead?
- Jamie borrowed $\$ 150$ from a payday loan service to pay for her car insurance. Now that it is time to pay the loan back, she doesn't have the money. Why shouldn't she just extend the loan? What could she do instead?


## Handout 8.3: Assessment—Answer Key (page 1 of 2)

Directions: Read and select four of the following scenarios. Answer the questions for the selected scenarios.

- Renaldo lives and works in Metroland. He has been unable to pay his full rent for three months. His landlord is threatening to evict him if doesn't catch up on his rent. He is thinking about visiting a payday lender in his community. He normally pays all of his bills on time, but he has struggled the past few months because he had to pay for car repairs. He has a savings account at a local bank, and he has the money to pay the rent. However, using this money would leave him with no emergency savings. Why shouldn't he use a payday lender? What could he do instead?

Answers will vary but may include the following: The fees and interest charged by a payday lender are high. His best option would be to use his savings to pay the rent and then start saving again. He could also borrow money from family or friends, find a roommate, find a less expensive place to live, get a second job, or cut other expenses.

- Henry has been traveling more than 30 miles one way to visit his new girlfriend each evening. His truck does not get very good gas mileage, so he has to fill up almost every day. His truck payment is due in a few days, and he doesn't have enough money to pay it. He needs his truck to get to and from work each day. He thinks taking out a payday loan would help. Why shouldn't he use a payday loan? What could he do instead?

Answers will vary but may include the following: The fees and interest charged by a payday lender are high. He could borrow money from family or friends, visit his girlfriend less often, or reduce his gas costs by purchasing a fuel-efficient vehicle or using public transportation.

- Brandi loaned her brother $\$ 400$ to pay for his emergency room visit. Unfortunately, he was unable to return to work because of his injury, and he doesn't have short-term disability insurance. He can't pay his sister back, and she needs the money for day care. Without day care she'll be unable to go to work herself. She has an account at the local credit union, and she pays her bills regularly. She is thinking about visiting a payday lender in her community. Why isn't this a good idea? What could she do instead?

Answers will vary but may include the following: The fees and interest charged by a payday lender are high. She could ask her brother to watch her child or ask the day care to work out a payment plan. She could also arrange a loan through her credit union. The interest charged by the credit union for the loan would be much less than the fees and interest charged by a payday lender.

## Handout 8.3: Assessment—Answer Key (page 2 of 2)

- Alex left her purse on the bus-with her company-provided cell phone inside. It is now her responsibility to replace the phone with the same or a newer model. The same phone will cost her $\$ 250$ plus the activation fee. She just spent the last of her paycheck on new shoes. She has a credit card, but she is concerned about the $18 \%$ APR her credit card will charge if she doesn't pay the full amount of the bill when it comes in. She is considering visiting a payday lender in her community. What are the reasons for not using a payday loan service? What could she do instead?

Answers will vary but may include the following: The fees and interest charged by a payday lender are high. She could charge the phone on her credit card. The 18\% APR for her credit card is low relative to the fees she would have to pay for a payday loan. She could also borrow the money from family or friends, return the shoes, or work out a payment plan with her employer.

- Jamie borrowed $\$ 150$ from a payday loan service to pay for her car insurance. Now that it is time to pay the loan back, she doesn't have the money. Why shouldn't she just extend the loan? What could she do instead?

Answers will vary but may include the following: She shouldn't extend the loan because she might be in the same situation again and face higher and higher charges from rollover fees and interest. She could borrow money from family or friends, sell items at a garage sale, or pay the payday loan in full and try to negotiate an alternative arrangement with the creditor of a different bill.

## Standards and Benchmarks

## National Standards for Personal Finance Education

## Standard V: Managing Credit

- Benchmarks: Grade 8

1. Interest rates and fees vary by type of lender, type of credit, and market conditions.
2. Financial institutions advertise loan costs to potential borrowers using the Annual Percentage Rate (APR), expressed as an annual percentage of the loan principal. Low introductory rates offered to attract customers may increase later.
3. The longer a loan repayment period and the higher the interest rate, the larger the total amount of interest paid by a borrower.

- Benchmarks: Grade 12

1. Borrowers can compare the cost of credit using the Annual Percentage Rate (APR) and other terms in the loan or credit card contract.
2. Alternative financial services, such as payday loans, checkcashing services, pawnshops, and instant tax refunds, provide easy access to credit, often at relatively high cost.
