

OVERVIEW

Even if you don't need to borrow money today, you'll soon be flooded with tempting offers for car loans, credit cards, cash-advance loans, cellphone service, and more. Boosting your borrowing IQ now will prepare you to make smarter decisions whenever you decide to take the credit plunge.

This lesson will help you calculate the costs of borrowing options.

LEARNING OUTCOMES

In this lesson students calculate the costs of borrowing options. Along the way they will:

- Give examples of how credit is used.
- Identify typical costs and terms of credit.
- Calculate the cost of using credit.

Students will use what they learn to consider borrowing options for a specific situation.

PREPARATION

- Order a Module 2 Student Guide for each student. (The Guide is also available online to download.)
- Preview the lesson PowerPoint presentation, learning tasks, and Module 2 Student Guide, particularly pages 9-15.
- Print or download the Student Learning Plan for this lesson so each student has a copy.

WHAT YOU WILL NEED

- Module 2 Student Guide (pages 9-15)
- PowerPoint presentation 2-2
- Student Learning Plan 2-2
- Task: Pick an Option (Tasks 1 and 4)
- Activity 2-3: Simply Tell the Total
- Activity 2-4: What is the Average Payment?
- Challenge 2-A: DECIDE the Best Deal for You
- (optional) Calculators (Tasks 2 and 4)
- Internet, amortization calculator (Task 3)

NOTES

Approximate time: 45 minutes (minimum) - 90 minutes (with extension activities)

LEARNING TASKS	TEACHING NOTES	MATERIALS
<p>1. Jesse did the math on a laptop deal and realized the bargain wasn't a bargain at all. See if you can spot a bargain from several offers.</p>	<p>PROCEDURE TIME ESTIMATE: 5 minutes</p> <p><input type="checkbox"/> Read about Jesse's laptop deal to introduce the activity (Student Guide, page 12).</p> <p><input type="checkbox"/> [Slide 2] Distribute the Pick an Option task to each student or team of students. Have students read through each purchasing opportunity and, based on a quick analysis or gut hunch, select what they think would be the better borrowing option. At this time, they will only do a quick response to fill in the left column. (Note: Students will fill in the remaining columns later in the lesson. Although there are right and wrong answers—students will perform the math during Learning Task 4 to compare the monthly and total costs for each scenario.)</p> <p><input type="checkbox"/> Once they are finished, relate to students that many salespeople hope that consumers will make purchasing and financing decisions based on whether something seems like a deal, rather than doing the math to see if it really is or not.</p> <p>EXTENSION: Assign students to bring in examples of local sales flyers, brochures, or ads designed to get consumers to buy a big ticket item without thinking about the real cost of the item once it is financed. Examine the advertising and sales techniques used. Discuss the psychology of advertising.</p> <p><input type="checkbox"/> [Slide 3] Transition into the lesson by telling the students that they will learn about the costs of using credit. Preview the Learning Outcomes in the Student Learning Plan. By the end of this lesson, the students should be able to compare costs and terms to select credit for a specific situation.</p>	<p>Module 2 Student Guide</p> <p>Student Learning Plan 2-2</p> <p>Student Guide pages 9-13</p> <p>SLIDES 2 – Which is Better? 3 – Preview</p> <p>ACTIVITY Task: Pick an Option</p>
<p>2. Listen to a presentation about the costs of using credit. Complete Activity 2.3: Simply Tell the Total to calculate the total costs of credit purchases.</p>	<p>PROCEDURE TIME: 10 minutes</p> <p><input type="checkbox"/> [Slide 4] Provide an explanation of credit terminology. Explain that borrowing money comes with a price. A lender is willing to extend credit because it can be profitable if the amount is repaid with interest. When deciding if using credit is worthwhile, the borrower needs to take into consideration all costs of credit and how repayment will impact the ability to meet other spending obligations. [Note: The slide example was calculated using the amortization formula, which is presented later in this lesson.]</p>	<p>STUDENT GUIDE Pages 9-10</p> <p>SLIDES 4 – The Language of Credit 5 – Adding It Up 6 – Simple Interest</p> <p>ACTIVITY Activity 2.3: Simply Tell the Total</p>

LEARNING TASKS	TEACHING NOTES	MATERIALS
	<p><input type="checkbox"/> [Slide 5] Provide an example of how borrowing adds costs to a purchase by sharing the experience of Jesse’s brother. Ask for answers to the questions as a transition into calculating interest.</p> <p style="padding-left: 40px;">[Answer: Jesse’s brother will pay more than \$150 for the tire. Using the simple interest formula, he will pay a total of \$151.25 because he will repay the amount borrowed (\$150) plus the interest charged (10%) for 30 days (1/12 year).</p> <p style="padding-left: 40px;">$\\$150 (P) \times .10 (R) \times 1/12 (T) = \\$1.25 (I)$</p> <p><input type="checkbox"/> Point out that interest is the main cost involved with borrowing. Explain that payments made to repay borrowed amounts will vary depending on how the interest is calculated. This will vary due to the rate of interest, the amount borrowed, and how often interest is calculated.</p> <p><input type="checkbox"/> [Slide 6] Review how interest is calculated using the simple interest formula and example.</p> <p><input type="checkbox"/> Guide students to practice calculating interest as they complete Activity 2.3: Simply Tell the Total.</p>	
<p>3. Calculate average monthly payments to repay a loan. Complete Activity 2.4: What is the Average Payment.</p>	<p style="text-align: center;">PROCEDURE TIME: 15 minutes</p> <p><input type="checkbox"/> [Slide 7] Point out that lenders actually use a more complex formula to calculate the average monthly payments due on loans. Explain that as the principal is paid off on a loan, interest is recalculated on the adjusted lower principal balance. Because this would be cumbersome for someone to recalculate every time a payment is due, the Amortization Calculation Formula is used to figure out the average monthly payment over the term of the loan. Knowing an average amount to be paid each month is helpful when planning a monthly spending plan or budget.</p> <p><input type="checkbox"/> [Slide 8] Illustrate how much of a monthly payment is applied to interest and to the principal each month using the amortization calculations. (Student Guide, page 11).</p> <p><input type="checkbox"/> Prompt the students to calculate the monthly amounts owed for changes in Activity 2.4: What is the Average Payment? using the amortization calculation formula (either by hand or using a financial calculator). Note: A calculation worksheet is available online for instructors to reference for both Activity 2.4 the Pick and Option Task.</p>	<p>STUDENT GUIDE Pages 10-11</p> <p>SLIDES 7 – Average Monthly Payment 8 – Amortization Chart</p> <p>ACTIVITY Activity 2.4: What is the Average Payment?</p> <p>Internet, online amortization calculator (or) electronic spreadsheet software (MS Excel)</p>

LEARNING TASKS	TEACHING NOTES	MATERIALS
<p>4. Mariah did a good job of comparing credit card options available to her. How good were your instincts? Time to find out if you were right.</p> <p>Figure out the monthly payment, total interest paid, and total cost for several purchases by completing the Pick an Option task. Figure out which is the better deal. Then, choose which deal you would take, and explain why you made that choice.</p>	<p style="text-align: right;">TIME: 10 minutes</p> <p>PROCEDURE</p> <ul style="list-style-type: none"> <input type="checkbox"/> [Slide 9] Introduce additional credit terminology. [Slide 10] Review types of credit options and how payments may differ with related costs. <input type="checkbox"/> [Slides 11-12] Illustrate ways that credit can get expensive when someone encounters a high interest rate or chooses to make minimal payments. <input type="checkbox"/> Facilitate a discussion about the long-term impact of compound interest when minimum payments are made. Point out that each month a credit card balance is unpaid, interest is calculated on the new amount owed which includes the original amount that was borrowed and also the amount of interest that was applied to any previously unpaid balances (aka compounding). <input type="checkbox"/> Direct the students to the Pick an Option task that was used earlier in the lesson. Arrange for the students to work alone, in pairs, or small groups to calculate the monthly payment amount, the total amount that will be paid and the total finance charges. (If time is pressing, assign one scenario to each person, team, or group.) <p>Note: If the students' math skills are strong, reinforce their abilities by guiding them to complete calculations on their own. Encourage the students to create an amortization schedule/chart using an electronic spreadsheet.</p> <p>Note: A calculation worksheet is available online for instructors to reference for both Activity 2.4 the Pick and Option Task.</p> <ul style="list-style-type: none"> <input type="checkbox"/> If time allows, have students share their answers, including which deal they would accept and why. Sometimes, the better money deal is not the right answer for an individual, especially if the monthly payment is high and goes beyond one's income-debt ratio or puts a strain on a monthly spending plan. 	<p>STUDENT GUIDE Pages 11, 19</p> <p>SLIDES 9 – More Terms to Know 10 – Credit Options 11 – Beware of Compound Interest 12 – When You Charge Stuff 13 – How Long Will it Take?</p> <p>ACTIVITY Task: Pick an Option</p>
<p>5. Pick a situation where you or your family uses credit. Complete Challenge 2-A: DECIDE The Best Deal for You.</p>	<p style="text-align: right;">In- class or out-of-class assignment</p> <p>PROCEDURE</p> <ul style="list-style-type: none"> <input type="checkbox"/> [Slide 13] Assign the students to complete Challenge 2-A: DECIDE The Best Deal for You. This challenge will also apply to Lesson 2-4: Risks and Responsibilities. 	<p>STUDENT GUIDE Page 23</p> <p>SLIDE 14 - Challenge</p> <p>ACTIVITY Challenge 2-A: DECIDE the Best Deal for You</p>

LEARNING TASKS	TEACHING NOTES	MATERIALS
TAKING IT HOME Compare phone calling plans to decide the best option for your family.	PROCEDURE Out-of-class assignment <input type="checkbox"/> Have students gather information alone or in pairs to research local options for cellphones and phone plans that are available in the community. Assign students to apply the DECIDE steps to select a phone or phone plan that works best for their needs and their budget (real or potential budget).	Internet
FURTHER STUDY Gather information about leasing a car to compare to purchasing a car.	PROCEDURE In-class or out-of-class assignment <input type="checkbox"/> Either have students conduct their own research, or arrange for a car dealership representative to share with the class information about car lease agreements. Guide students to compare the costs of leasing to purchasing a car as well as other factors that might influence a person's decision to lease or own a vehicle.	Internet or car dealership representative

TAKING IT HOME

Compare phones and calling plans for your family. Gather information about at least two local phone plans provided by different companies. Find out what information you need to provide to the phone companies when you apply for the phone plans.

Use the DECIDE decision-making process learned in Module 1 to establish criteria for selecting a phone plan based on your current needs and financial situation. Compare the terms of each plan, and consider the advantages and disadvantages of each plan. Decide which option best meets your criteria.

FURTHER STUDY

Bring in car ads that include leasing options and financing information. Calculate out the cost of vehicles, comparing leasing versus purchasing. Discuss the financial issues (good and bad) related to leasing a vehicle. Who would be the best candidate to lease a car? When might it make sense to lease a car versus purchasing a car?