Shopping in Credit City

Students play a shopping game to see how much money they would spend on four major purchases that require borrowing money.

Learning goals

Big idea

Borrowing money instead of paying cash for items can increase the total amount paid.

Essential questions

- How can you plan ahead when you need or want to make a large purchase?
- How can borrowing money to pay for items increase the total amount you spend?

Objectives

- Calculate the total cost of items using a simplified interest formula
- Reflect on how borrowing affects the way you feel about purchases

NOTE

Please remember to consider your students' accommodations and special needs to ensure that all students are able to participate in a meaningful way.

KEY INFORMATION

Building block:

Financial habits and norms

Grade level: High school (9–12)

Age range: 13–19

Topic: Borrowing (Getting loans, Managing credit)

School subject: CTE (Career and technical education), Math

Teaching strategy: Gamification

Bloom's Taxonomy level: Apply, Evaluate

Activity duration: 75–90 minutes

National Standards for Personal Financial Education, 2021
Managing credit: 8-3, 12-1

These standards are cumulative, and topics are not repeated in each grade level. This activity may include information students need to understand before exploring this topic in more detail.

What students will do

- Roll a die to determine the purchase price, interest rate, and length of loan needed to pay for four big-ticket items.
- Analyze how purchases made with a credit card may increase an item's total cost when compared with paying with cash.
- Reflect on the experience of purchasing with cash versus credit.

Preparing for this activity

- ☐ While it's not necessary, completing the "Calculating loan payments" activity first may make this one more meaningful.
- ☐ Print copies of all student materials for each student, or prepare for students to access them electronically.
- ☐ Make sure students have access to calculators.
- ☐ Gather dice for students to use or prepare to use a virtual die on a computer or tablet.

What you'll need

THIS TEACHER GUIDE

- **Shopping in Credit City** (guide)
  cfpb_building_block_activities_shopping-credit-city_guide.pdf

STUDENT MATERIALS

- **Shopping in Credit City** (worksheet)
  cfpb_building_block_activities_shopping-credit-city_worksheet.pdf
- **Calculators**
- **Dice**

Exploring key financial concepts

Borrowing can increase the cost of items because consumers may be charged interest, which must be repaid along with the principal. But most people don't make enough money or have enough in savings to purchase a big-ticket item (like a house or car) with cash. Instead, people often take out installment loans. These loans allow them to make payments, usually each month, until the item is paid off.

The amount due each month depends on several factors, including the cost of the item, the size of the down payment at the time of purchase, the interest rate of the loan, and the length of the repayment period. To help reduce the monthly payment amount of a loan, you can choose the lowest purchase price, lengthen the term of the loan, increase the down payment, skip loan add-ons and item options (such as extended warranties or window tinting for a car), and shop for a lower interest rate.

TIP

Because financial products, terms, and laws change, students should be encouraged to always look for the most up-to-date information.

But remember, the total cost of your loan depends on how long you must make payments, not just on your monthly payment. A lower monthly payment may result in a longer repayment period, which could increase the total cost of the loan. You may want to examine your net income and monthly cash flow to determine the monthly payment you can afford.

Teaching this activity

Whole-class introduction

- Ask students to share things that people borrow money to buy.
  - Examples may include a house, a car, or a vacation.
- Read the "Exploring key financial concepts" section to students.
- Be sure students understand key vocabulary:
  - **Credit:** Borrowing money, or having the right to borrow money, to buy something. Usually it means you're using a credit card, but it might also mean that you got a loan.
  - **Down payment:** Initial cash payment made when something is bought on credit, such as a home or vehicle. The down payment reduces the amount of money that is borrowed.
  - **Interest rate:** A percentage of a sum borrowed that is charged by a lender or merchant for letting you use its money.
  - **Loan:** Money that needs to be repaid by the borrower, generally with interest.
  - **Principal:** In the lending context, principal is the amount of money that you originally received from the lender and agreed to pay back on the loan with interest.
  - **Repayment:** Paying back money you borrowed.

TIP

Visit CFPB's financial education glossary at consumerfinance.gov/financial-education-glossary/.

  - **Term:** A fixed or limited period of time for which something lasts or is intended to last (for example, a five-year loan, a three-year certificate of deposit, a one-year insurance policy, a 30-year mortgage).

- Remind students that principal, rate, and time are factors that affect the total amount of a credit purchase. Explain that time, in the case of a loan, is defined by the term of the loan.

Individual or group work

- Distribute the "Shopping in Credit City" worksheet to each student.
- Students can complete this activity individually or in pairs.
- Give each student or pair of students a single die (or provide a way to generate random numbers from 1 to 6).
  - Alternatively, roll for everyone using a virtual die on a computer or tablet (you also could use a projector or smartboard).
  - To find a virtual die, enter "roll a die" into an online search engine.
- Explain the rules of the game to students:
  - Roll a single die and multiply the number rolled by 100 to determine the price of the item (principal).
  - If you roll a 3 or higher in the first roll, roll the die two more times.
    - The second roll determines the interest rate (rate).
      - Multiply the number on the die by 3 to get the interest rate.
      - For example: A roll of 3 would be 3 x 3 = 9%.
    - The third roll determines the term of the loan (time).
      - Multiply the number on the die by 4 to get the number of months.
      - For example, a roll of 2 indicates a loan with an 8-month term.
- You can pay cash for any item that costs $100 or $200, but for items $300 and above, you will have to charge it and pay interest on the money you borrow.
- Instruct students to play the game to complete calculations for all four items.
- Ask students to complete the reflection questions on their own.

Wrap-up

Have students share and discuss their answers to the reflection questions.

Suggested next steps

Consider searching for other CFPB activities that address the topic of borrowing, including getting loans and managing credit. Suggested activities include "Determining how down payments affect loans" and "Role-playing borrowing and lending".

Measuring student learning

Students' answers on their worksheets and during discussion can give you a sense of their understanding. **Keep in mind that students' answers may vary.** The important thing is for students to have reasonable justification for their answers.