## Pathway to Financial Success



## MIDDLE SCHOOL | UNIT 2 <br> Getting Paid

## Title

## How Interest Works

## LEARNING OBJECTIVES

Students will:

- discuss personal saving choices.
- differentiate between interest
that is paid to savers and interest that is charged to borrowers.
- simulate the process by which financial institutions accept deposits and make loans.
- draw conclusions regarding interest rates for savers and borrowers.


## Content Area

Financial Literacy: Family and Consumer Sciences and Business

## Grades

6-8

## Overview

Why do you earn interest on your savings? After examining sample ads for savings accounts and loan products, students will participate in an interactive demonstration of how money flows through and is used by banks. In the process, they will learn why and how savers earn interest on the money they deposit while borrowers are charged interest for loans.

## Themes

Personal Finance: Saving
Family and Consumer Sciences: Consumer and Family Resources
Business: Personal Finance

## National Standards for Personal Financial Education

## Council for Economic Education and Jump\$tart Coalition for Personal Financial Literacy, 2021

III. Saving 4-5 Financial institutions often pay interest on deposit accounts to attract customers to deposit money in their institution.
III. Saving 8-3 Financial institutions pay interest to depositors and loan out the money to borrowers who pay interest on their loans.
V. Managing Credit 4-1 Interest is the price a borrower pays for using someone else's money, and the income earned by the lender.
V. Managing Credit 4-2 When a person pays with credit, they have immediate use of purchased goods or services while agreeing to repay the lender in the future with interest.
V. Managing Credit 8-1 Interest rates and fees vary by type of lender, type of credit, and market conditions.
V. Managing Credit 8-3 The longer a loan repayment period and the higher the interest rate, the larger the total amount of interest paid by a borrower.
V. Managing Credit 8-4 Credit cards typically charge higher interest rates on balances due compared with rates on other types of loans.

## National Standards for Family and Consumer Sciences Education

National Association of State Administrators of Family and Consumer Sciences, 2018
2.7.6 Analyze saving and investing to build long-term financial security and wealth.

## National Standards for Business Education

## National Business Education Association, 2023

Personal Finance IV.1.6 Describe how financial institutions use funds deposited as savings and/or investment by customers.
Personal Finance VI.1.10 Evaluate products and services and related costs and fees associated with financial institutions in terms of personal banking needs.

Personal Finance VII.1.8 Define interest as a cost of credit and explain why it is charged.
Personal Finance VII.1.10 Explain how the amount of principal, the period of the loan, and the interest rate affect the amount of interest charged.

## Connect

How does this connect to the student?<br>Students are likely to be both savers and borrowers in the future. Without an understanding of interest rates, they may avoid saving money or pay more than they should on loans.

## How does this connect

 to careers?Bank or Credit Union Branch
Manager: Financial institutions usually have many locations, called branches. Each one usually has a manager. This person often assists individuals who wish to open accounts. They can provide information about the accounts that are offered, including the current interest rates.

## How does this connect to technology?

Interest rates can change at any time. There are websites which allow consumers to compare the interest rates being offered on various products by different financial institutions. Using these tools allows people to compare products and get the best interest rate available to them.

## Key Terms

Savings, savings goal, savings account, bank, credit union, interest, interest rate, deposit, borrow, loan, principal, compound interest, simple interest

## Prepare

Background: Interest is a complex concept for many middle school students to understand, especially because it can be earned by savers and charged to borrowers. In the case of savers, a higher interest rate is preferable along with a longer period of time. Both result in more interest being paid to the saver. On the other hand, borrowers should look for lower interest rates and seek to borrow for as short a time as they are able to manage. This helps them limit the amount they are charged in interest. Students should understand that financial institutions need both savers making deposits and borrowers taking out loans in order to operate.

## Materials

- Product Ads Signs 1-6-one copy of each to hang around the room (for repeated use, consider laminating each page)
- Gallery Walk Findings Student Capture Sheet-one copy per student
- Interest Simulation Signs 1-3-one copy (for repeated use, consider laminating each page)
- Map the Interest Student Capture Sheet-one copy per student
- How Can You Get the Most from Your Money? Unit 3 Student Video
- Play money (such as money from a board game) or blank slips of paper
- Whiteboard or chart paper and marker
- Tape or clips


## Engage

- Initiate a conversation with students about saving and borrowing money. Prompt students with questions such as those below:
- Have you ever saved money that you earned or received as a gift?
- Did you have a savings goal or reason you were saving the money?
- Where did you keep the money you were saving (e.g., wallet, piggy bank, sock drawer, savings account)?
- Have you ever needed to borrow money?
- Why did you borrow the money?
- What happened when you paid it back?


## Teach

- Share with students that banks and credit unions provide savings accounts for people who want to save their money and make loans to people who want to borrow money.
- Explain to students that they are going to take a "gallery walk" around the classroom. If you did not do so ahead of time, affix each of the six Advertisement Signs around the room or give them to students to hang using tape or clips.
- Distribute a copy of the Gallery Walk Findings Student Capture Sheet to each student. Direct students to walk around the classroom looking at each ad and documenting the information they find on their sheet. When they are done, they can sit back down and follow the directions on the handout.
- Ask students what the common element was in each ad (answer: interest rate). Explain that interest is extra money that is paid or charged to the customer-depending on the circumstances. It is expressed as a percentage, called the interest rate.
- Direct students to look at their chart of products and interest rates and determine which products would pay interest and which ones would charge interest. They should mark the ones they think pay interest with a $P$ and those that charge interest with a C.
- Inform students that you are going to need several volunteers to help you simulate how interest works with both savings accounts and loans. Select three volunteers to come to the front of the room and stand in a line-each facing the class.
- Distribute a sign from the Interest Simulation Signs to each volunteer:
- Give the Financial Institution sign to the student in the middle. This person will play the role of the banker.
- Give the Saver and Borrower signs to the other students.
- Provide several pieces of play money or scraps of paper representing money to each of the students.
- Explain that the saver wants to open a savings account. Direct the saver to hand some of their "money" to the banker. Ask if anyone knows what it is called when a person puts money into an account. Share that this is called a deposit.
- Ask the banker to choose the interest rate they will pay to the saver: $2 \%$ or $2.5 \%$.
- Direct the saver to step away or sit back down for a moment.
- Share that the borrower wants a loan. Ask students to select a reason the borrower is applying for a loan (buy a car, home improvement project, student loan). Reference the Product Ads or Gallery Walk Findings Student Capture Sheet to determine the interest rate based on the type of loan selected.
- Direct the banker to hand play money to the borrower.
- Explain to students that every month the borrower will make a payment to the bank. Over time, they pay back the amount of the loan (called the principal) plus the interest on the loan. Direct the borrower to hand back the money from the loan plus the money they started out with in the skit. Reinforce that the borrower was charged interest by the banker in order to borrow money.
- Allow the borrower to sit down and bring the saver back to the front. Let students know that the saver is going to withdraw or remove their money from their savings account. It has been earning interest. Direct the banker to pay the saver more money than they originally deposited.
- Thank the volunteers and allow them to return to their seats.
- Ask students the following questions:
- From where does the bank get the money to pay interest to savers? (Answer: It uses the money it collects in interest from borrowers.) Note: Financial institutions earn money in other ways, too, including fees. For the purpose of this activity, keep this explanation simple.
- What would happen if a bank only offered savings accounts and did not provide loans? (Answer: It would have a hard time paying people interest.)
- Would you prefer to have a higher interest rate for a savings account or a loan? (Answer: A higher interest rate is better when you are saving because you are earning the interest rather than paying it.)
- Play the video, How Can You Get the Most from Your Money? (3:17).
- Direct students to name the two types of interest discussed in the video. (Answers: simple interest and compound interest.)
- Let students know that most financial institutions pay compound interest on savings, but they also charge compound interest on money that is borrowed. As a result, borrowers pay more interest when interest rates are higher and/or they borrow for a longer period of time.
- Reinforce the information from the video about shopping around and comparing financial institutions. Let students know that banks and credit unions often offer different interest rates in order to compete for business. They should always compare rates when opening either a savings account or obtaining a loan.


## Conclude

- Distribute a copy of the Map the Interest Student Capture Sheet to each student. Direct students to work in pairs to label the diagram based on what they learned in the activity and write two to three sentences to summarize what it represents.
- Invite several students to share their summaries.
- Direct students to submit an exit ticket answering the question: What did you learn today about interest rates?


## Extend

- Research: Invite students to research and compare the rates offered to savers by several financial institutions.
- Math: Guide your students in an investigation into interest rates paid by several financial institutions and calculate the future value of a hypothetical account using the Earning Money by Saving Monev activity.
- Writing: Use the Save with Me! activity to have students play the role of bank managers who conduct market research, determine interest rates they will pay on savings, and then pitch their bank to peers.
- Technology: Challenge students to locate an online savings calculator and use it to determine how much money they would earn in interest, given several scenarios.



## DREAM STATE BANK

## COME BANK WITH US!

## Now offering 2\% interest for all new savings accounts!

## ONE FINANCIAL BANK

## Planning a home improvement project?

## Get a loan here. Just 12\% interest!



## NORTH AMERICAN BANK

# Heading to college? 

## Get a student loan with 6\% interest.

## JOHNSON CREDIT UNION

# BUYING A CAR? 

## Get a loan with 4\% interest!

## HIGH HOPES CREDIT UNION

# Start an emergency savings fund. 

## New savers earn 2.5\% interest!



## MENDEZ AND SMITH CREDIT UNION

## Need credit?

## Get a credit card with $21 \%$ interest and no annual fee!

## Gallery Walk Findings

Directions: Browse the ads provided by your teacher and follow the steps below.

1. Complete the chart with each interest rate.
2. Circle the loan with the highest interest rate.
3. Put a star or * next to the savings account with the highest interest rate.
4. Answer the questions that follow.

5. Why do you think that the credit card has a higher interest rate than the car loan?
6. Which savings account would you choose and why?




Directions: Use the word bank to fill in the labels on the "money map."
DEPOSIT INTEREST EARNED INTEREST PAID LOAN

SAVER L

BORROWER


