

Budget Bunny

Financial Youth Training

Teacher Resource | 5.1



Lesson Plan Grade Level:

5th Grade

Jump Start National Standards for Financial Literacy

Interested in Interest

Credit and Debt

Standard 1. Analyze the costs and benefits of various types of credit.

- A. Identify situations when people might pay for certain items in small amounts over time
- C. Explain why financial institutions lend money

Investing

Standard 1. Explain how investing may build wealth and help meet financial goals.

- A. Describe reasons for investing
- B. Calculate simple interest earnings

Lesson Description & Objectives:

In this lesson, students will simulate situations in which they take out a loan and then owe interest to pay it back, as well as situations in which they invest money and earn interest.

What students will know:

- Students will understand interest as an economic concept, and be introduced to simple interest and the formula $I = PRT$ (Interest = Principal x Rate x Time)

What students will be able to do:

- Students will consider and evaluate the costs and benefits of taking out a loan that requires them to pay back principal and interest, as well as those associated with investing money in a savings account or other interest-generating option

Terms:

- Interest, loan, principal, rate, investment

Materials Needed:

- White or chalkboard, markers/chalk, eraser
- Cards with loan/investment amounts, interest rates, times to pay back (see printouts)
- Possibly: student notebooks and pencils

Missouri Math Standards

5.NBT.A

Multiply multi-digit whole numbers and decimals to the hundredths place and justify the solution.

Missouri Social Studies Standards

5.E.4.A.a

Explain how scarcity, supply, and demand, opportunity costs, income, labor, wages, and other economic concepts affect our nation's past, present, and future.



Procedure

Attention Grabber:

Today we are going to learn about an economic concept called interest. What do you think of when you hear the word “interest?” How have you used that word before?

Prior Knowledge:

Pre-comprehension questions: Have a quick discussion around the following questions. Give time for individual students to respond, or for partners to talk about their answers and then share out. In the money world, the term “interest” is related to borrowing money. Have you ever borrowed money from someone before? Did you pay it back? How long did it take you to pay back what you owed? Have you ever heard of someone borrowing money from the bank? How do you think that works?

Learning Activity:

Whole Group Learning

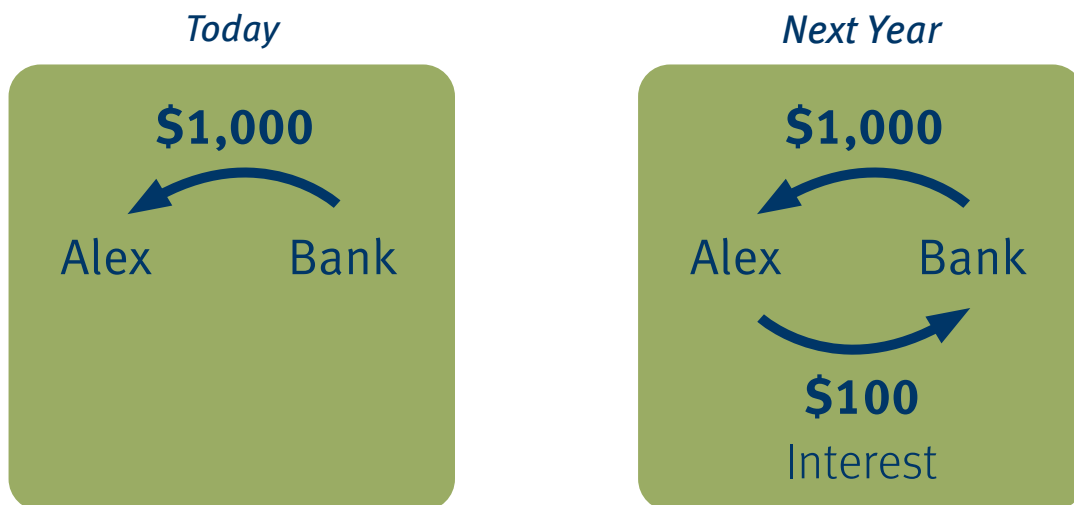
Together we’re going to learn what exactly interest is and how it is related to some important financial decisions people make. Let’s say we want to start a business. What kind of business could we start?

Choose one idea as an example, like a lemonade stand or game shop.

Make a list of what’s needed to start the business (ideally: human, natural, capital resources, and materials).

Entrepreneurs often need extra money to get their businesses started because of all the resources they need to make it possible. This is where borrowing money comes into play. A common option for entrepreneurs is to borrow money from a bank. This is called taking out a loan. (Write the term “loan” and a simple definition on the board.)

You all said when you borrow money from a friend or family member, you usually have to pay that money back. When we take out a loan from a bank, we owe that money but also something extra called interest. It’s like saying money is not “free” to borrow, or it costs money to borrow money. (Write the term interest and a simple definition on the board. Use the image below to show this concept.)



Alex borrows \$1,000, but has to pay back \$1,100
The idea of interest is paying for the use of money



Besides starting a business, when else might someone need to take out a loan? Do you know if anyone in your family has borrowed from a bank?

Guide the discussion to the idea that people also take out loans to help them make large purchases, like for a car or house.

Let's take a look at some examples to get a better understanding of what we mean by paying back a loan with interest.

**Write the formula for finding simple interest on the board.*

Interest = Principal x Rate x Time ($I = PRT$)

Explain and write on the board what each term in the formula means.

Interest: how much extra you owe (already on the board)

Principal: the amount of money you borrowed

Rate: the interest rate (a percentage)

Time: how long you take to pay back what you owe

Remind students that a percentage can be converted to a decimal and vice versa ($10\% = 0.1$; $25\% = 0.25$; etc).

Do a couple of examples together (ideas for examples in the table below). Use the cards to make it more interesting. Pull a card to decide what your values are for the loan amount, interest rate, and time to pay back. Students may do the math to figure out the total, or the students and teacher might show/use a calculator and just write down those amounts.

Loan Amount	Interest Rate	Time to Pay Back	Interest Owed	TOTAL to Repay
\$1,000	1%	1 year	\$10	\$1,010
\$1,000	5%	2 years	\$100	\$1,100
\$2,000	10%	1 year	\$200	\$2,200

Have a short debriefing discussion with questions: What do you think is important when deciding if you should take out a loan? How would you decide how much money to borrow for a loan? What would it depend on? Why would it be important to pay back what you owe on time?

Call on a few students to answer each question, or do a think-pair-share to give all students more opportunity to discuss.

**Think-pair-share is a strategy where students think individually about a topic or answer to a question, talk with a partner about their thinking, and then share ideas with classmates.*

Bring up the concept of having good "credit" when you pay back loans on time.

Loans and paying back interest can be helpful when someone wants to purchase relatively expensive items, or if someone wants to start a business.

But wait! There's more to interest than that. Did you know you can also earn interest?



What do you think of when you hear the word investment? (Write a few notes on the board as students respond with their ideas.)

Add a simple definition of investment to the board.

The same idea for interest making an amount grow over time applies here, only this way you actually get more money over time, like when you open a savings account or invest in other ways. Let's look at a few examples together. (Ideas are in the following table, again using the cards for random amounts for each item.)

Loan Amount	Interest Rate	Time to Pay Back	Interest Owed	TOTAL to Repay
\$1,000	1%	1 year	\$10	\$1,010
\$1,000	5%	2 years	\$100	\$1,100
\$2,000	10%	1 year	\$200	\$2,200

Have another short debriefing discussion with questions: How does interest work when you're investing? How is that similar to the loan idea? How is it different? Why might someone take out a loan? Why would someone invest their money?

Small-Group Learning

Now you'll work with a partner to see what happens in different, 'real-life' scenarios with loans and investments!

Assign students to pairs, and have each pair draw 1-2 cards for each portion of the interest formula. They then use a calculator to figure out what happens when interest is owed vs. when it is earned and talk with each other about what happens when the amounts on the different cards change.

Closing:

The whole group comes back together; students take turns presenting their business plans to each other. If needed, due to time constraints, the teacher could partner with businesses to share their business with one other student or group.

Have a short final discussion including these questions:

- Who or what is an entrepreneur? Why are they important in communities?
- What felt challenging in making a business plan? What did you enjoy?
- What do entrepreneurs need to consider/decide when planning for a business?

Differentiation

- Alter what the teacher provides for the students based on needs and abilities (i.e., business ideas, resource ideas and costs, loan amounts, and interest rates). The teacher could provide envelopes with sets of business options (i.e., "This is your loan amount, here are three possible interest rates and times to pay back from 3 different banks..."). You could also have cards with different business options on them, and each group or student selects one at random depending on group needs/best fit.
- Students may work independently, in partners, or in small groups
- If needing an extension (and/or if there is more time for this lesson/project): some students could research approximate costs for their lists of resources using the Internet and then use those for determining their loans



Continue the Learning

Teachers and families can continue the learning beyond what we have done together today.

Today I learned...

- Entrepreneurs are people who create new businesses
- There is a risk (cost) and reward (benefit) in creating a new business
- Entrepreneurs often need a loan to borrow money to get started, then they need to pay back what they borrowed, plus interest

Questions to spark discussion

- If you could create any kind of business, what would it be? Why?
- What types of businesses do you think are the riskiest? The most rewarding?
- How do you decide if you need a loan, and how much will the loan be?
- Why is it important to pay loans back - on time?

Extend the learning at home or school

- Simulate the actual making of the businesses students planned by creating models for their goods and services, then have a mini-society in the classroom where students visit and patronize each others' businesses
- Each student or group could make an advertisement for their business. This can be a poster, a smaller flyer, or something digital like a short slideshow or video. What will be needed: poster or computer paper, coloring materials, and/or access to a digital platform like a slideshow or video maker.
- Explore *Budget Bunny* and *the Game Cafe* to learn more about borrowing money

Books

- *Lunch Money* by Andrew Clements
- *Kid Start-Up: How YOU Can Become an Entrepreneur* by Mark Cuban, Shaan Patel, and Ian McCue
- "What Do You Do with an Idea?" by Kobi Yamada
- *Kidpreneurs: Young Entrepreneurs with Big Ideas!* by Adam & Matthew Toren
- *The Everything Kids' Money Book* by Brette Sember

This Lesson Plan, a **FREE** resource for classroom teachers and other educators, was thoughtfully developed by The Soulard Education Center and made possible by Stifel Bank & Trust and the United Way of Greater St. Louis. Find additional lesson plans and more at www.BUDGETBUNNY.com.

The Soulard Education Center is a non-profit organization that creates original and experiential educational programming that empowers teachers, engages families, and includes students' voices in their learning. Through innovative leadership programs, relevant community partnerships, and authentic experiences that elevate every type of learner, our model results in children who know they can have an impact. Learn more about us at www.SoulardSchool.org.

