

Cha-Ching Classroom Activity #10

Invisible Money

Overview: In this activity, students explore what “invisible money” is and how it can impact their money goals. They begin by brainstorming what credit cards are and where the money comes from when you use a credit card. Next, students watch the video “Invisible Money” and describe what happened to the band’s budget for Prudence’s party. Students play a class game to build basic understanding of interest as it relates to credit cards and savings accounts and discuss how it could affect their ability to stay on budget. Finally, students weigh the pros and cons of the various ways to spend.

Target Audience: Grades 3-6

Activity Duration: 45-60 minutes

Essential Questions

- *What is invisible money?*
- *How can invisible money affect my spending and saving goals?*
- *What are the pros and cons of different ways to spend?*

Objectives

Students will:

- Describe ways invisible money can impact earning, saving, and spending goals
- Define interest
- Analyze how invisible money can affect their earning, spending, and saving goals

Activity Vocabulary

- Earn
- Budget
- Savings
- Spend
- Interest
- Goal
- Credit
- Cost
- Invisible money
- Online purchases

Materials

- A credit card that can be used as a visual aid
- Video: [Invisible Money](#)
- Handout: *Invisible Money* lyrics (1 per group)
- Handout: *Invisible Money Game: "Team Save" Financial Organizer* (Half of the class - 1 per student)
- Handout: *Invisible Money Game: "Team Spend" Financial Organizer* (Half of the class - 1 per student)
- Chart paper
- Self-stick notes

Procedure

1. Engage students in a warm-up conversation by asking questions such as the following to determine what they know about ways to purchase things:
 - What is a credit card? How does it work? Where is the money?
 - What about debit cards – how do they work? Where is the money?
 - What happens if there isn't enough money "in the bank" to pay for all that is bought using the debit card or credit card bill?
2. Introduce and show the video [Invisible Money](#). As students view the video, ask them to pay attention to the different ways the band members pay for items for the party. Listen for the term "invisible money" and think about what that might mean.
3. After viewing the video, ask questions to gauge and develop students' understanding. If necessary, distribute the "Invisible Money" lyrics sheet and use it to help students review the events in the video.
 - What happened to the budget the band had for the party?
 - Where did the money come from to pay for the DJ? What about the banner, music, lights and pizza?
 - What is the difference between paying for something with cash and paying for something with credit?
 - When you buy something online, where does the money come from to pay for the purchase?
 - What happens when you can't pay the bill?
 - What do you think the band meant by "invisible money?"
4. Explain to students that they're going to play a simulation game to learn more about invisible money and how it can affect our goals and our financial health. Say, "But first, I want to ask you a question. Let's say [Student 1] purchases an item for \$10 and [Student 2] purchases the exact same item for \$10. Is it possible that the purchase will cost one of the students more than it cost

the other student? Why do you think so? Why not?" Allow time for students to discuss their thoughts and ideas. Let's find out."

5. Divide the class into two groups: **Team Spend** and **Team Save**. Explain that each group will "purchase" the same item for the same price.
 - **Team Save** wants to purchase an item for \$10. But instead of buying it when they have \$0 in their bank account, they will work together to determine how many weeks it takes them to save enough cash to purchase an item that costs \$10. Once they purchase the item, they will continue to save until the other team has finished paying off the credit card balance.
 - **Team Spend** will immediately purchase the same \$10 item using a credit card. They will then receive a monthly "bill" for the credit card and will work together to pay off the balance.

6. Using an overhead projector or an interactive whiteboard, use the **Answer Keys** and the simulation notes below (if needed) to help students calculate their earnings, interest, and payments. Note that the two groups have different recording sheets, since Team Spend will have to pay their credit card bill, which accrues interest each month. Be sure Team Save and Team Spend see what happens with each other's finances at the end of each four-week period.
 - Instructional Options:
 - Younger students will need more support than older students, who may be able to work together to complete the simulation on their own once you help them get started. Choose a procedure that works best for your students.
 - Consider having students work in pairs or small groups to calculate and record each week of the game.
 - Allow students to use a calculator. Help them understand that the point of the simulation is not to be able to calculate exact interest, but to understand the real cost of spending more money than you have using "invisible money."

Simulation Notes

- In Weeks 1-4, both groups earn \$1.00 each week:
 - **Team Save** and **Team Spend** should record their Balance each week for Weeks 1-4, then calculate the interest they earned on their savings. Both groups earned \$.20. Students should record that amount in the *Interest Earned* cell for Week 4 and calculate their *New Account Balance*. Both groups should have the same savings account balance after 4 weeks.
 - However, it is the end of the month and **Team Spend** has a credit card bill due. Because it has been a month since their purchase, the amount they owe has earned interest! Interest is the additional fee you must pay the credit card company for borrowing their money. If needed, help students calculate 15% of \$10, add the interest, and calculate

and record their credit card balance. Ask/say, “Where will you get the money to pay your credit card bill? You have to use real money to pay for the money you spent using a credit card, so you have to take money out of your savings account. How much can you pay toward your credit card bill? What is your credit card balance after you pay your bill this month? What is the balance of your savings account now?”

- Have students compare **Team Save’s** and **Team Spend’s** finances after 4 weeks.
- Repeat the process for Weeks 5-8:
 - **Team Save** continues to earn \$1.00 a week and accrue interest. Help students calculate their interest earned after Week 8 and their new savings account balance.
 - **Team Spend** earned some money back – the exact same amount and interest they earned during Weeks 1-4, but since they started at \$0 again they don’t have enough to pay off their credit card bill and interest. In fact, another month has passed and the total has earned interest again! Help students determine how much interest they have to add to the amount that was due in Week 4 and how much they will have left in their savings account after they make their payment.
 - Have students compare **Team Save’s** and **Team Spend’s** finances after 8 weeks.
- Repeat the process for Weeks 9-12:
 - **Team Save** will have enough money to make their \$10 purchase in Week 10. Once they make the purchase, they should subtract the \$10 from their savings account balance and record their new balance. They should work from the new balance starting in Week 11.
 - **Team Spend** earned some money back – the exact same amount and interest they earned during Weeks 1-4 and 5-8, but since they started at \$0 again they don’t have enough to pay off their credit card bill and interest. In fact, another month has passed and the total has earned interest again! Help students determine how much interest they have to add to the amount that was due in Week 8 and how much they will have left in their savings account after they make their payment.
 - Have students compare **Team Save’s** and **Team Spend’s** finances after 12 weeks.
- Repeat the process for weeks 13-16:
 - **Team Save** is on the road to saving again and will have \$7.08 in their savings account at the end of 16 weeks.

- **Team Spend** has finally earned enough to pay off the balance of their credit card bill! After paying the final amount due, they will have \$3.48 in their savings account at the end of 16 weeks.
 - Have students compare **Team Save's** and **Team Spend's** finances after 16 weeks.
7. Discuss the game results as a class. Ask questions to help students understand the real financial costs of "invisible money."
- **Team Save:** How many weeks did you have to save before you could purchase the item? (10)?
 - **Team Spend:** How many weeks did you save before you could purchase the item? (0)
 - **Team Save:** How much money did you have in your savings account at the end of 4 months? (\$7.08)
 - **Team Spend:** How much money did you have in your savings account at the end of 4 months? (\$3.48)
 - **How much more did Team Save have in their savings account than Team Spend at the end of the simulation?** (\$3.60)
 - **Team Save:** How much did the \$10 item you purchased really cost you? (\$10)
 - **Team Spend:** How much did the \$10 item you purchased really cost you? (\$13.32)
 - Using payments to calculate: $4.20 + 4.20 + 4.20 + .72 = \13.32
 - Using initial purchase plus interest to calculate: $\$10 + \$1.50 + \$1.10 + \$0.63 + \$0.09 = \13.32
 - **How much more did the \$10 item cost Team Spend than Team Save?** (\$3.32)
 - It may not seem like a lot, but that means a \$10 purchase cost Team Spend *30% more* for than it cost Team Save! Imagine if you don't have enough money in your bank account and you used a credit card to purchase something that cost \$25.00, \$100.00, or \$5,000!
 - Consider: Team Save *saved* \$3.60 more than Team Spend and *spent* \$3.32 less. That's a difference of \$6.92!
 - Why is there such a big difference between the two teams?
 - How would a change in *earning* change the equation? In other words, how would this simulation change if **Team Spend** earned \$2.00 each week and **Team Save** still earned \$1.00?
 - This activity demonstrates the balancing act of Earn, Save, Spend and Donate. It also shows how important it is to consider if something is a need or a want and to think about your goals. What do you want to be sure to have money for? How does your spending impact how much you want or need to earn, save and donate?

8. Close the activity with a class discussion about the concepts students explored in this activity. Use questions to help students uncover and express what they learned about invisible money and the importance of balancing earning, saving, spending, and donating when planning and working toward personal money goals.
- How do we get money?
 - When we pay for things with a credit card, where is the money?
 - When we had to pay the credit card bill with our actual money, what happened to our savings account? Why?
 - When we pay for things with a credit card, we are deducting the amount we owe with how much money we have in the bank. If we have enough, our savings just goes down. If we don't have enough, then we have to borrow money from the bank. They will make us pay an extra fee for that. We have to pay back the bank the money we borrowed, plus the fee, which makes it harder to pay it back and it costs us more money.
 - When we pay for things with a debit card, where is the money?
 - A debit card is not borrowed money. It is money that is currently in your account. A debit card only allows one to spend if they have the money. That's the benefit of using debit rather than credit. But it also means you have to know how much money you have in the bank. Your debit card charge will be rejected if you don't have enough money.
 - What is the difference between credit cards and debit cards?
 - Credit cards are not money, but they are connected to money in our bank accounts. If you don't have the money, the bank will let you borrow it. which we borrow. Credit card use makes the most sense when you can pay the balance in full each month.
 - Credit cards are not inherently "bad." Sometimes it makes sense to pay for things with credit cards as long as we are aware of – and plan for – the invisible costs.
 - Debit cards are not money, but they are connected directly to real money. If we spend too much and overextend our bank account, the bank will charge us penalty fees (or will the purchase be rejected).
 - What are the pros and cons of each type of money?
 - If students need help, suggest they consider cash, gift cards, credit cards, debit cards, and other ways we spend "invisible money," such as EZ Pass, coffee shop smartphone apps, and gas station easy-pay cards/devices.
 - When we're trying to reach our financial goals, what is the most important thing to do – earn, save, spend, or donate?
 - Facilitate discussion to help students understand that it is important that we *balance* these four concepts to achieve our money goals.
 - When you spend, will it help you think differently about what you use to pay? Do you think you will make different money decisions in the future? Why or why not?

Additional Resources

- [7 Facts to Consider Before Talking to Kids About Credit](#)
- [How to Establish Money Rules for Your Child at Any Age](#)
- [Better Money Habits Middle School Lesson: Credit and Debit: Two Very Different Cards](#)
- [16 Money Habits to Teach Your Kids Now So They Can Be Financially Fit Adults](#)
- [A Consumer’s Guide to Credit Cards](#)

National Standards

National Standards for Financial Literacy	<p>2: Buying Goods and Services People cannot buy or make all the goods and services they want; as a result, people choose to buy some goods and services and not buy others. People can improve their economic well- being by making informed spending decisions, which entails collecting information, planning, and budgeting.</p>
	<p>2.BM 4.2. People make choices about what goods and services they buy because they can’t have everything they want. This requires individuals to prioritize their wants.</p>
	<p>2.BM 4.4. Whenever people buy something, they incur an opportunity cost. Opportunity cost is the value of the next best alternative that is given up when a person makes a choice.</p>
	<p>2.BM 4.5. Informed decision making requires comparing the costs and benefits of spending alternatives. Costs are things that a decision maker gives up; benefits are things that a decision maker gains.</p>
C3 Framework for Social Studies State Standards	<p>Economic Decision Making</p>
	<p>D2.Eco.2.K-2. Identify the benefits and costs of making various personal decisions.</p>
	<p>The National Economy</p>
	<p>D2.Eco.10.K-2. Explain why people save.</p>

Invisible Money

Lyrics

Hey Prudence, would you mind checking the fuse box? It's out the back.
Band huddle: It's Prudence's birthday soon and we're going to throw her a surprise party.
Cha-Ching has money saved from the last gig. Party time!

Before the party starts we need to buy a few things.
We have \$200 in the bank account of Cha-Ching!
Buy party supplies to throw this excellent bash,
Gotta go electronic and it's done in a flash.

Pepper booked the DJ on her Dad's credit card.
There's a cost to this that we can't disregard!
It's easy to lose track of cash we've splashed.
Don't forget there's a bill that will have to be paid!

Invisible, Invisible Money
Traveling down the wire
Invisible, Invisible Money
Making the bill go higher and higher
Final touches are on to make the party feel wow

Tunes? Buy now! Food? Buy now! Lights? Buy now, now!
Invitations gone out by phone and by text
For less than \$200 the party is next

Oh what a night, we had an excellent time
Our \$200 bought all that was fine, we partied so hard with all the whistles and frills
Then along with the memories arrived the bill

What? We owe how much? A \$150 more, how did this happen?
But we have \$15 cash left over, we totally stuck to the budget of \$200.
Did you really? I don't think so
How did you pay for the DJ? Credit Card
There's invisible charges there Pepper.
The invitations? Our phones? There's invisible charges there too.
You've spent almost \$200 cash, plus \$150.

Right everyone, hand them over.
No more spending invisible money until we've paid what we owe.
But how are we going to pay what we owe?
OK we don't have enough money in the bank
so the bank will pay our bills for now
but every month they will charge us interest, for lending us what we don't have.
So we'll have to work to pay it off as quickly as possible.

Invisible, Invisible Money - Made the bill go higher
Invisible, Invisible Money - Added interest, adds more money
We did it Cha-Ching! We've paid off our debt.
Party time!
Oh Pepper!!!!

Invisible Money Game Team Save Financial Organizer

You wait until you have enough money to pay cash for your item

- GOAL: To purchase an item for \$10.00.
- INCOME: \$1.00 a week
- ACCOUNT INFORMATION: Every four weeks, your savings account earns 5% interest

		Savings Account				
Weeks elapsed	Money Earned	Balance	Interest Earned <small>Balance x 5%</small>	New Account Balance <small>Balance + Interest</small>	Purchases <small>When you purchase the item, remember to subtract the amount from your account balance!</small>	Savings Account New Balance After Purchase
1	\$1.00					
2	\$1.00					
3	\$1.00					
4	\$1.00					
5	\$1.00					
6	\$1.00					
7	\$1.00					
8	\$1.00					
9	\$1.00					
10	\$1.00					
11	\$1.00					
12	\$1.00					
13	\$1.00					
14	\$1.00					
15	\$1.00					
16	\$1.00					

**Invisible Money Game
Answer Key
Team Save**

Weeks elapsed	Money Earned	Savings Account			Purchases When you purchase the item, subtract the amount from your account balance!	Savings Account
		Balance	Interest Earned Balance x 5%	New Account Balance Balance + Interest		New Balance After Purchase
1	\$1.00	\$1.00				
2	\$1.00	\$2.00				
3	\$1.00	\$3.00				
4	\$1.00	\$4.00	\$.20	\$4.20		
5	\$1.00	\$5.20				
6	\$1.00	\$6.20				
7	\$1.00	\$7.20				
8	\$1.00	\$8.20	\$.41	\$8.61		
9	\$1.00	\$9.61				
10	\$1.00	\$10.61			-\$10.00	\$0.61
11	\$1.00	\$1.61				
12	\$1.00	\$2.61	\$.13	\$2.74		\$2.74
13	\$1.00	\$3.74				
14	\$1.00	\$4.74				
15	\$1.00	\$5.74				
16	\$1.00	\$6.74	\$.34	\$7.08		\$7.08

**Invisible Money Game
Answer Key
Team Spend**

Week	Money Earned	Savings Account			Credit Card				New Savings Balance
		Balance	Interest Earned <small>Balance x 5%</small>	Account Balance <small>Balance + Interest</small>	Interest Charged <small>(15%)</small>	Balance	Payment	New Balance	
0	\$0	\$0	\$0	\$0	\$0	\$10.00	\$0	\$10.00	\$0
1	\$1.00	\$1.00		\$1.00					
2	\$1.00	\$2.00		\$2.00					
3	\$1.00	\$3.00		\$3.00					
4	\$1.00	\$4.00	\$.20	\$4.20	\$1.50	\$11.50	\$4.20	\$7.30	\$0
5	\$1.00	\$1.00		\$1.00					
6	\$1.00	\$2.00		\$2.00					
7	\$1.00	\$3.00		\$3.00					
8	\$1.00	\$4.00	\$.20	\$4.20	\$1.10	\$8.40	\$4.20	\$4.20	\$0
9	\$1.00	\$1.00		\$1.00					
10	\$1.00	\$2.00		\$2.00					
11	\$1.00	\$3.00		\$3.00					
12	\$1.00	\$4.00	\$.20	\$4.20	\$0.63	\$4.83	\$4.20	\$.63	\$0
13	\$1.00	\$1.00		\$1.00					
14	\$1.00	\$2.00		\$2.00					
15	\$1.00	\$3.00		\$3.00					
16	\$1.00	\$4.00	\$.20	\$4.20	\$0.09	\$.72	\$.72	\$0	\$3.48

Credit Card Bill Notes:

- *Bill 1st month = At the end of the first month, the \$10 credit card balance has accrued 15% interest (\$1.50), raising your balance due to \$11.50. You only have \$4.20, so pay that much on your bill. You now owe \$7.30.*
- *Bill 2nd month = Interest has accrued on the \$7.30 you owed, so you now owe \$8.40. Because you had to start saving all over again, your savings account has earned only \$.20 interest, bringing your savings account balance to \$4.20. You pay \$4.20 on your bill. You now owe \$4.20.*
- *Bill 3rd month – Interest has accrued on \$4.20 you owed, so you now owe \$4.83. Because you had to start saving all over again, your savings account has earned only \$.20 interest, bringing your savings account balance to \$4.20. You pay \$4.20 on your bill. You now owe \$.63.*
- *Bill 4th month – Interest has accrued on the \$.63 you owed, so you now owe \$.72. Because you had to start saving all over again, your savings account has earned only \$.20 interest, bringing your savings account balance to \$4.20. You pay your bill in full. At the end of 4 months, you have \$3.48 remaining in your savings.*