

Banks, Credit & the Economy

Time Needed: Two class periods

Materials Needed:

Student worksheets
 Projector (optional)
 Calculators (optional)

Copy Instructions:

Advance Organizer (*1/2 page; class set*)
 Reading (*4 pages; class set*)
 Worksheet (*2 pages; class set*)
 Yes/No Cards (*4 per sheet; class set*)

Learning Objectives. Students will be able to:

- Describe the role of the Federal Reserve as the nation's central bank.
- Explain the impact of banks and the Federal Reserve on the money supply and the national economy.
- Identify the importance of saving and borrowing in the U.S.
- Identify the role of banks in channeling funds from savers to borrowers.
- Explain that the government creates currency and coins and that there are additional forms of money.
- Describe the advantages and disadvantages of using credit.

STEP BY STEP

- ANTICIPATE** by having students complete the word bank activity on the Advance Organizer. Ask students to identify words they already know. Then ask why they think there is so much overlap on the organizer. How do they think the overlapped words might relate to each other? (For example, "money" is its own category, but it's also a word related to banks. Why?)
- PROJECT** the PowerPoint presentation (optional) and use the first slide to review the answers to the Advance Organizer.
- DISTRIBUTE** the reading pages to the class.
- READ** with the class, pausing to discuss as appropriate. Optional: Pause during the reading to use the resources on the PowerPoint slides:
 - Currency** (slide 3): Two links let you take a virtual tour of the U.S. Mint and see which large denominations of currency exist.
 - Loans & the Money Supply** (slide 4): A larger version of the diagram on page 2 of the reading.
 - The Federal Reserve** (slide 5): Follow a link to a video about the Fed on the Federal Reserve website.
 - Inflation** (slide 6): Follow a link to an inflation calculator, where you can find the past value of any amount of money you choose.
 - Credit** (slide 7): Links to financial education videos related to credit and borrowing.
- CHECK** for understanding by using the Mini Quiz found either in the teacher's guide or at the end of the PowerPoint presentation. Cut and distribute the included Yes/No cards to use for active participation unison response if you wish.
- DISTRIBUTE** the worksheets to the class.
- ASSIGN** the worksheets and allow time for the class to complete them. Review answers.
- CLOSE** by asking students to look at the Advance Organizer again. Ask them to identify ONE thing they learned from the lesson that describes how two of the categories (Money, Banks, Loans) relate to each other. Have them share with a partner.

Banks, Credit & the Economy

Name: _____

Preview. Use the word bank to fill in the missing letters. Some words may be used more than once. Circle any words you already know.

• m _____

• _____ v _____

• a _____

Banks



Money

• r _____

• a _____

• o _____

• k _____

• _____ t _____

• y _____

Loans



WORD BANK

- bank account
- banks
- interest rates
- loans
- money
- currency
- Federal Reserve

Advance Organizer



Banks, Credit & the Economy



Name: _____

Preview. Use the word bank to fill in the missing letters. Some words may be used more than once. Circle any words you already know.

• m _____

• _____ v _____

• a _____

Banks



Money

• r _____

• a _____

• o _____

• k _____

• _____ t _____

• y _____

Loans



WORD BANK

- bank account
- banks
- interest rates
- loans
- money
- currency
- Federal Reserve

Advance Organizer



It Makes the World Go Around!

Have you ever tried to imagine a world without money? Give it a try. Okay, done? How did it go? Easy? Probably not. No matter what your views are about money and how important it is, the fact remains: The world runs on money. We all use it to pay for the things we need and want. So what is money, and where does it come from? What role do banks play? And do you really need money? Can't you just use credit instead? It's time to find out.



Automatic teller machines (ATMs) make it easy to turn money stored in a bank account into cash. Bills and coins make up only 7% of the money in circulation in the U.S. Can you explain why?

Money, Money, Money

You think you know what it is, right? It's that cold, hard cash in your pocket—that paper with presidents' faces on it, those coins that say "e pluribus unum." But money is more than just that. **Money** is a "medium of exchange," which means it's what is commonly accepted in exchange for goods and services. Money also sets a common standard of value among people in a country. (Everyone knows what a dollar is, right?)

Money includes coins and notes printed by the government, which are called **currency**. But it also includes things that can be easily changed into currency, such as a deposit in a bank account. Think of it this way: When people say "I don't have any money," they don't just mean they aren't carrying any cash. Usually they mean they also don't have a positive bank account balance that they could turn into cash.

Bank Accounts

Most of the time, when you hear "bank" you think "account." Bank accounts are an important service that banks provide. When you have a bank account, you make **deposits** by putting your money in the bank, and you expect to be able to **withdraw** your money out of the bank whenever you want to.

With a **checking account**, you deposit your money into the bank with the expectation that you will be depositing and withdrawing money from the account often. You get paper **checks** that let you transfer your money to other people. Normally you also get a plastic **debit card** that lets you pay for things with your account money by swiping the card in a store or entering the card number online. It's called a debit card because it *debts*, or withdraws, money from your account. Debit cards also let you use ATM machines to withdraw money from your account.



Paper checks are used less often now that people have debit cards and pay bills online.



With a **savings account**, you deposit your money into the bank with the expectation that you will make limited withdrawals. (There's a reason why it's called a "savings" account.) In fact, federal regulations limit the type and number of withdrawals you're allowed to make each month from a savings account. But there's a benefit: The bank actually pays you to keep money in a savings account. The extra money you earn on a savings account is very low, though, so don't expect to get rich that way.

Banks & Lending

So, what happens to the money you put in the bank? Do they carefully take it back to the vault and keep it there until you need it? If that's what you always imagined, you might want to close your eyes for this part: The reason banks accept deposits is so they can let other people use the money. Yes, you heard that right. Banks let other people spend your money when you're not using it! But don't worry, it will be there when you need it.

Here's the thing: Banks are businesses. Businesses want profits. Instead of selling shoes or pizzas to make a profit, banks sell the right to use money. Ever heard of a loan? When you get a **loan** from a bank, you pay the bank to let you borrow money. But the bank wouldn't have any money to lend if nobody put money *into* the bank. That's why saving and lending go hand in hand in the world of banking. A bank pays people to keep money in savings accounts. Then the bank turns around and charges other people a fee for borrowing that same money. The bank makes a profit by charging borrowers a higher fee than it pays to people who have savings accounts.

It's safe to keep your money in the bank!

- 1) Bank deposits are insured by the federal government.
- 2) Banks keep money in reserve to handle the withdrawals people make from their accounts.



The fee charged for a loan is called **interest**. It is charged as a percent of the total loan amount. This percentage is the **interest rate**.

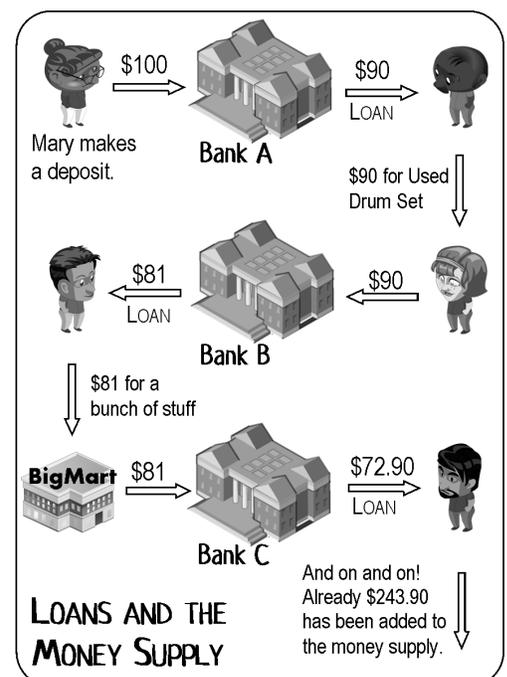
Loans are Big Business

Lending is a huge, HUGE business. Why? Because lots of things are too expensive to pay for outright. (Think cars and houses.) Businesses borrow even more money than individual people do. Say you want to open an auto repair shop downtown. How are you going to pay for everything you'll need to start your business? Most people would need a loan to do that. Even established businesses need loans to construct new buildings or buy expensive new equipment. The money savers deposit into banks goes back out into the community in the form of loans that are used to build houses, expand businesses, get college degrees, and more.

Loans: A Money Injection

Loans actually increase the amount of money available to spend. Magic? Sort of. When someone makes a deposit, the bank must keep part of the deposit in reserve. The bank is free to lend the rest to someone else. This starts a chain of depositing and lending that actually multiplies the amount of money available!

Here's what happens: Imagine that Mary deposits \$100 into her account at Bank A. Bank A keeps 10% (\$10) in reserve and loans \$90 to Bob. Bob buys a used drum set from Jane for \$90. He writes her a check. Jane deposits the check into Bank B. Bank B keeps 10% (\$9) and loans out the rest (\$81) to Keith. Keith goes to BigMart and buys a bunch of stuff that adds up to \$81. He writes BigMart a check for \$81. BigMart deposits the \$81 into Bank C. Bank C keeps 10%... Get the idea? Follow the diagram to see how Mary's \$100 deposit results in \$1,000 of money being made available for people to use.





The Federal Reserve headquarters in Washington, D.C. In addition to supervising our banking system, the Fed is the bank for the United States government.

The Federal Reserve

Bees have a queen, aliens have a mother ship, and banks... well, banks have the Federal Reserve. The **Federal Reserve** (known as "the Fed") is the central bank of the United States. It is made up of 12 Federal Reserve Banks—one for each of 12 districts covering the United States. A Board of Governors oversees these banks. Federal Reserve Banks don't deal with the public. They are "bankers' banks."

Together with other agencies in the federal government, the Federal Reserve supervises the banking industry and makes rules that banks must follow. The Fed also oversees electronic payment systems and processes the checks people write. In addition, when banks need coins and paper money, they order currency from the Fed. (Paper money is actually made by the U.S. Bureau of Printing and Engraving; coins are made at the U.S. Mint.) But one of the biggest jobs of the Federal Reserve is to help keep the United States economy healthy.

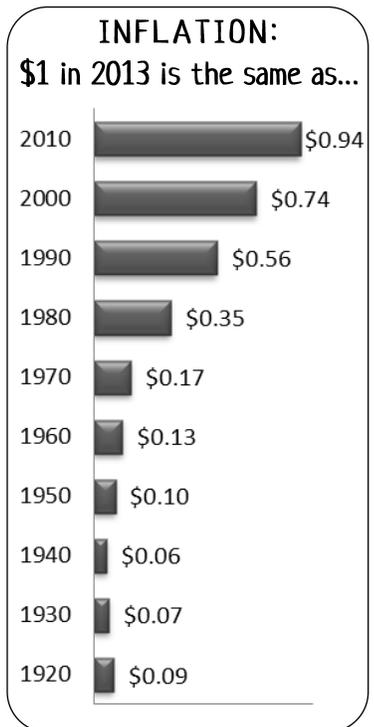
The Fed & the Economy

The Federal Reserve works toward three goals for a healthy economy:

- Making sure the highest possible number of citizens have jobs
- Keeping the price of goods and services stable
- Making sure the cost of a loan is not too high or too low

Here's how these goals are related: When interest rates on loans are low, it is cheap to borrow money. This encourages businesses and people to borrow and spend money. With more spending, there is more demand for stuff. Producers want to make more stuff to meet this demand, so they employ more people. In order to attract workers, wages go up. With lots of money in people's pockets but the supply of "stuff" not necessarily meeting the demand, prices can go up. The rise of prices over time is called **inflation**.

Prices can skyrocket if the economy grows too fast, so the Fed works to keep things in balance. It does this by making changes that affect the interest rates that banks charge for loans. Expensive loans discourage people and businesses from making decisions that require borrowing. There is less spending and less hiring, so the economy slows. The Fed keeps an eye on the economy and adjusts loan interest rates up or down as necessary.



Why Loans Work

Maybe you saw that chain of loans on the last page and wondered how all that money could be created out of thin air. Maybe you're thinking, "But there's nothing *behind* that money. Just Mary's \$100!" So why doesn't the whole system just collapse? Because there *is* something behind all those loans: each borrower's ability to pay back the loan. Banks are pretty careful about lending money. They want to know about the borrower's past history of paying back loans, and they want to know that the borrower has a source of income. Income depends on a person's ability to produce goods or services. This is what you do at your job, whether you're farming or designing video games or giving haircuts. Ultimately, the ability to produce is what keeps our economy going.

Loans for the Future

A loan always costs more than paying for something outright. That's because banks won't lend money for free. You have to pay back the amount of the loan *plus interest*. Interest can add up to a lot of money over time. Sometimes people take out a loan because they know that in the long run they will make more money on what they are buying than they will pay in interest on the loan. In that case, the borrower sees the loan as an **investment**—money spent in order to make more money. Loans to buy a house are viewed as investments because the value of a house normally increases over time. College loans are seen as investments because getting more education usually means you'll qualify for higher-paying jobs. Business loans are also considered investments. When someone takes out a loan to start or expand a business, they are investing in their own ability to produce in the future.



*People who take risks to start a new business are called **entrepreneurs**. In a market economy, loans help finance businesses and development of new ideas.*

Loans for the Now



On the other hand, sometimes people take out a loan because they need or want something they can't afford to buy outright. These are loans for things that will only decrease in value—or even be used up completely! Cars are an example of something most people can't pay cash for and must buy with a loan. Vehicles decrease in value very quickly, so buying one with a loan almost always means you're paying more than the car is worth. But most people don't have any choice. Vacations are an example of the other extreme. Once a vacation is over, all that's left is a memory. There are lots of great reasons to take a vacation, but if you've paid for it with a loan, you could end up paying the bill—and the interest—for a long time.

The Ugly Side of Lending & Borrowing

The ugly side of borrowing comes when people start to depend on credit. This can happen because of too much spending, expensive emergencies, or other financial problems. Very often, people in this situation already have a limited income. That makes it difficult to pay back their loans and credit cards. When you don't make a loan or credit card payment on time, there are severe penalties. First, the bank may raise your **interest rate**, which determines how much interest you pay on the loan. Starting with your next payment, you'll be paying more. *A lot* more. The bank also reports you to the three **credit reporting bureaus**—companies that keep track of your credit history. A bad credit history can make it hard to get any credit at all. Any credit you do get will be very expensive because the lender will be afraid you won't pay it back.



Sometimes people have a reasonable income, but they've let their spending get out of control. They're buying way more stuff than they can pay for, and they're buying it all with credit. Even if they're making all their payments on time, they're wasting tons of money on interest. This lifestyle can make it hard to save money for the future, which can mean disaster when there's an emergency. Taking out even more loans to meet the crisis may be difficult or make the problem worse. People in these situations often turn to a trustworthy **credit counseling** service to help them make a plan to pay off their loans and learn to live within their means instead of relying on credit.



Banks, Credit & the Economy

Name: _____

A. Vocabulary. Match each word with its definition. Some words are not in bold in the reading.

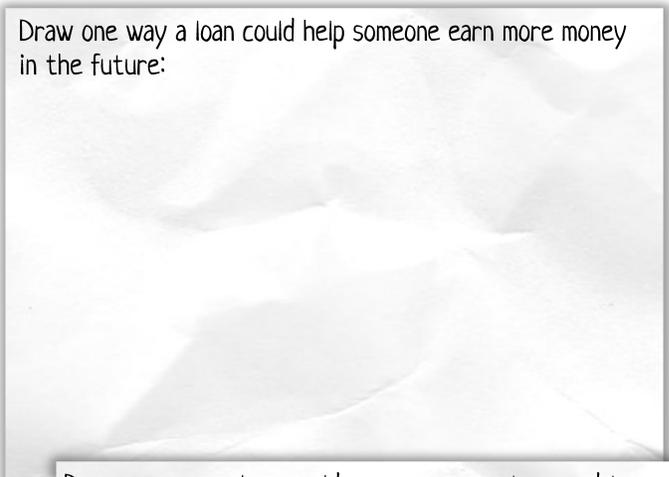
- | | |
|--------------------------------|--|
| ___1. Money | A. Helps people control their finances and use credit wisely |
| ___2. Currency | B. The fee charged for the right to borrow money |
| ___3. Deposit | C. The rise of prices over time |
| ___4. Withdraw | D. A medium of exchange that sets a common standard of value |
| ___5. Loan | E. Put money into a bank account |
| ___6. Interest | F. People who take risks to start a new business |
| ___7. Federal Reserve | G. Coins and paper money printed by the government |
| ___8. Inflation | H. Paying a bank to let you borrow money |
| ___9. Income | I. A person's source of money, dependent on the ability to produce |
| ___10. Reserve | J. The central bank of the United States |
| ___11. Investment | K. Take money out of a bank account |
| ___12. Entrepreneur | L. Money that a bank keeps and does not lend out |
| ___13. Credit reporting bureau | M. Company that keeps track of your credit history |
| ___14. Credit counseling | N. Money spent in order to make more money |

B. The Fed. Put an X by each statement that is TRUE about the Federal Reserve.

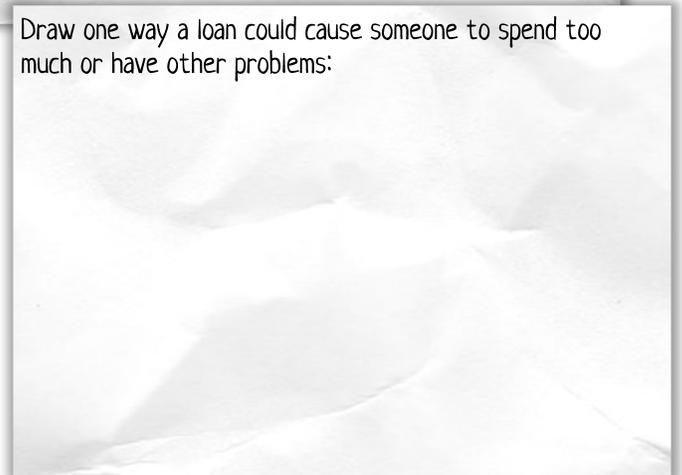
- ___1. The Fed sets rules that banks must follow.
- ___2. The Fed can affect the interest rates that banks charge for loans.
- ___3. The Fed creates money out of thin air, so there's always enough.
- ___4. The Fed's goal is to keep the economy healthy.
- ___5. People can set up checking and savings accounts at the Fed.
- ___6. The Fed tries to keep employment high and prices stable.
- ___7. The Fed processes checks and electronic money transfers.
- ___8. The Fed supervises the banking industry.
- ___9. Coins and paper money are made by the Fed.
- ___10. There is a Federal Reserve bank in every state.

C. Loans. Follow the directions in each box.

Draw one way a loan could help someone earn more money in the future:



Draw one way a loan could cause someone to spend too much or have other problems:



Banks, Credit & the Economy

Name: _____

D. It's Called Money, Honey. Below is a list of everything Sam has and how much it's worth. Mark the things that are considered money. Then add to find out how much money Sam has.

- Home: Trailer and land worth \$100,000; owes \$83,000
- Coins in old jar on desk: \$15.62
- Chicken coop: 1 dozen eggs per day, worth \$2/dozen
- Savings account balance: \$4,023.77
- Paper bills inside wallet: \$47
- Personal items: Household stuff worth about \$2,500
- Vehicle: 2002 pickup truck worth \$2,200
- Checking account balance: \$567.90
- Act of kindness: Brother owes him \$175



Sam has this much money: \$ _____

E. Banking Blunders. Each of these people has made a banking mistake. Read what they're saying and tell them where they're going wrong.



I don't want two bank accounts. I'll just get a savings account, and each month I'll have my bills electronically deducted. Let's see... rent, phone, electric, water, cable, insurance, internet, gym...

Problem: _____



This awesome sound system is on sale for \$1,543! I've only got \$800 in my checking account, but that's okay—I'll pay for it with my debit card.

Problem: _____



My girlfriend wrote a love poem on a \$5 bill and I accidentally deposited it into my savings account! I'll go make a \$5 withdrawal. They'll get it from the vault and give it back.

Problem: _____



My grandma gave me \$500 for my birthday and helped me open a savings account. Tomorrow I'm quitting my pizza delivery job, because now the bank's going to pay me!

Problem: _____

F. An Interesting Situation. People can end up paying a lot extra for a car because they only pay attention to the monthly payment they're being offered. Which of these loans will cost you MORE?

Hey! You can drive away in this brand new car TODAY for only \$342.05 a month. Too much? Does \$219.13 a month sound better? All RIGHT!



342.05/month

This is a 4-year loan. You'll make this monthly payment for 48 months. Do the math:

$$\begin{array}{r} 342.05 \\ \times 48 \\ \hline \end{array}$$

You'll end up paying this much: \$ _____

(Shorter loans usually have lower interest rates. This rate was 4.5%)

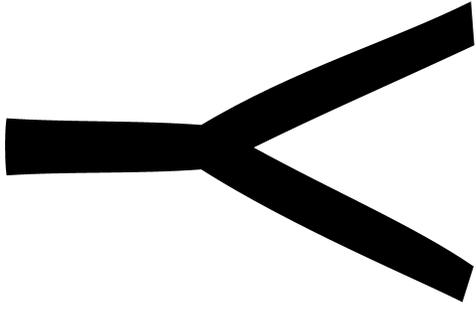
219.13/month

This is a 7-year loan. You'll make this monthly payment for 84 months. Do the math:

$$\begin{array}{r} 213.13 \\ \times 84 \\ \hline \end{array}$$

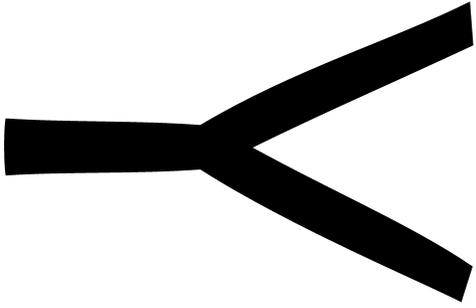
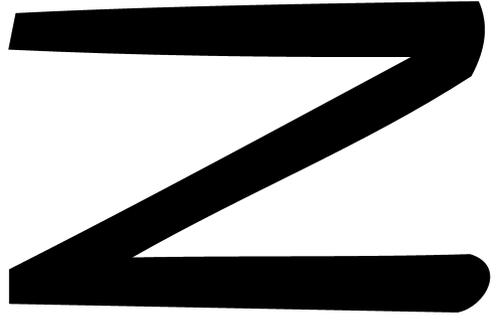
You'll end up paying this much: \$ _____

(Longer loans usually have higher interest rates. This rate was 6%)



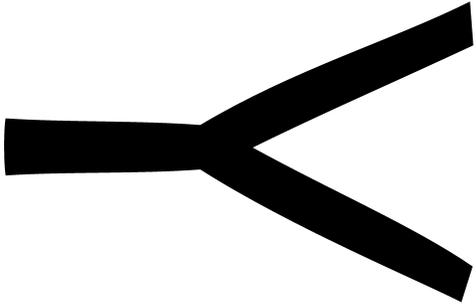
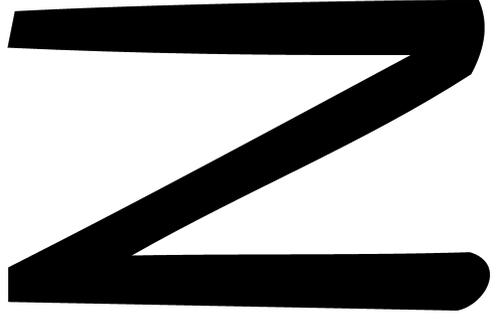
CUT

FOLD



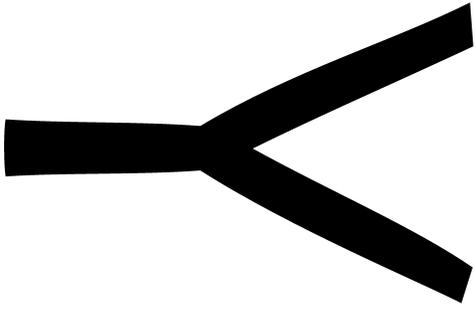
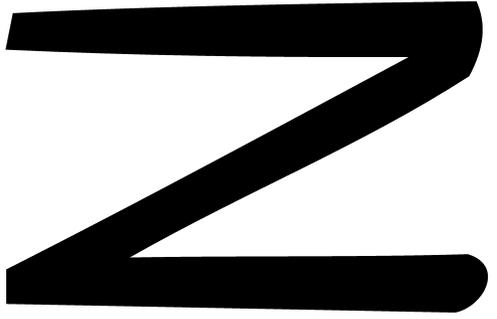
CUT

FOLD

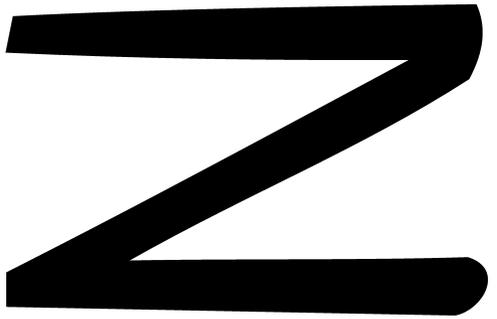


CUT

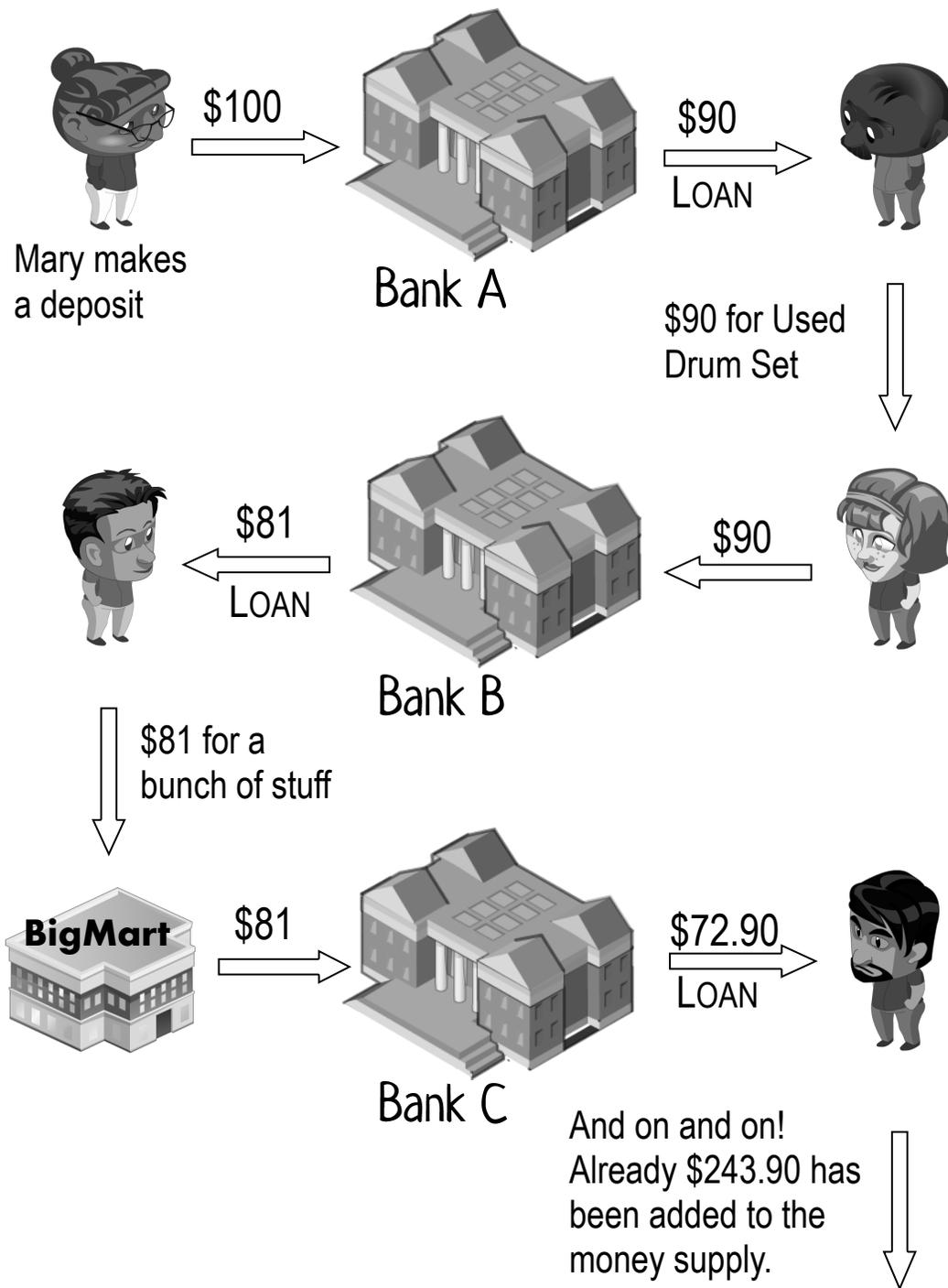
FOLD



FOLD



LOANS AND THE MONEY SUPPLY



(Eventually 10 times the original amount would be added — here, \$1,000.)

MINI QUIZ

Directions: Read each statement aloud. Have the class show you the Y or N side of their cards, OR have students say "yes" or "no" out loud as a chorus. Briefly discuss the correct answer before moving on.

(Y) **1. Can you exchange money for goods and services?**

Money is the "medium of exchange" people use to pay for things.

(N) **2. Does "money" ONLY refer to currency?**

Money includes currency and bank account balances, which can be turned into currency.

(N) **3. Can you make unlimited withdrawals from a savings account?**

Federal law limits the number of certain kinds of withdrawals you can make each month.

(Y) **4. Is it safe to keep your money in the bank?**

The federal government insures bank deposits up to a certain amount of money.

(N) **5. Do banks pay people more for savings accounts than they charge for loans?**

Savings accounts pay a TINY amount of interest. Interest you pay on loans is much higher.

(N) **6. Could most people start a business without a loan?**

Starting a business can be expensive. Loans provide money for equipment and startup costs.

(Y) **7. Does lending make more money available to spend?**

Lending actually multiplies the amount of money out in the community.

(Y) **8. Are banks required to keep some money in reserve?**

Banks must keep a certain percent of deposits in reserve.

(Y) **9. Does anyone supervise the banking industry?**

The Federal Reserve and other federal agencies supervise the banking industry.

(N) **10. Does the Fed want the economy to swing wildly up and down?**

The Fed's goal is to keep the economy in balance.

(N) **11. Does increased lending make the economy slow down?**

More lending = more spending, which helps fire up the economy.

(Y) **12. Do some loans help you increase your ability to produce?**

A loan to start or expand a business, or a loan to get an education, can help you earn more.

(Y) **13. Would an entrepreneur be likely to start his or her own business?**

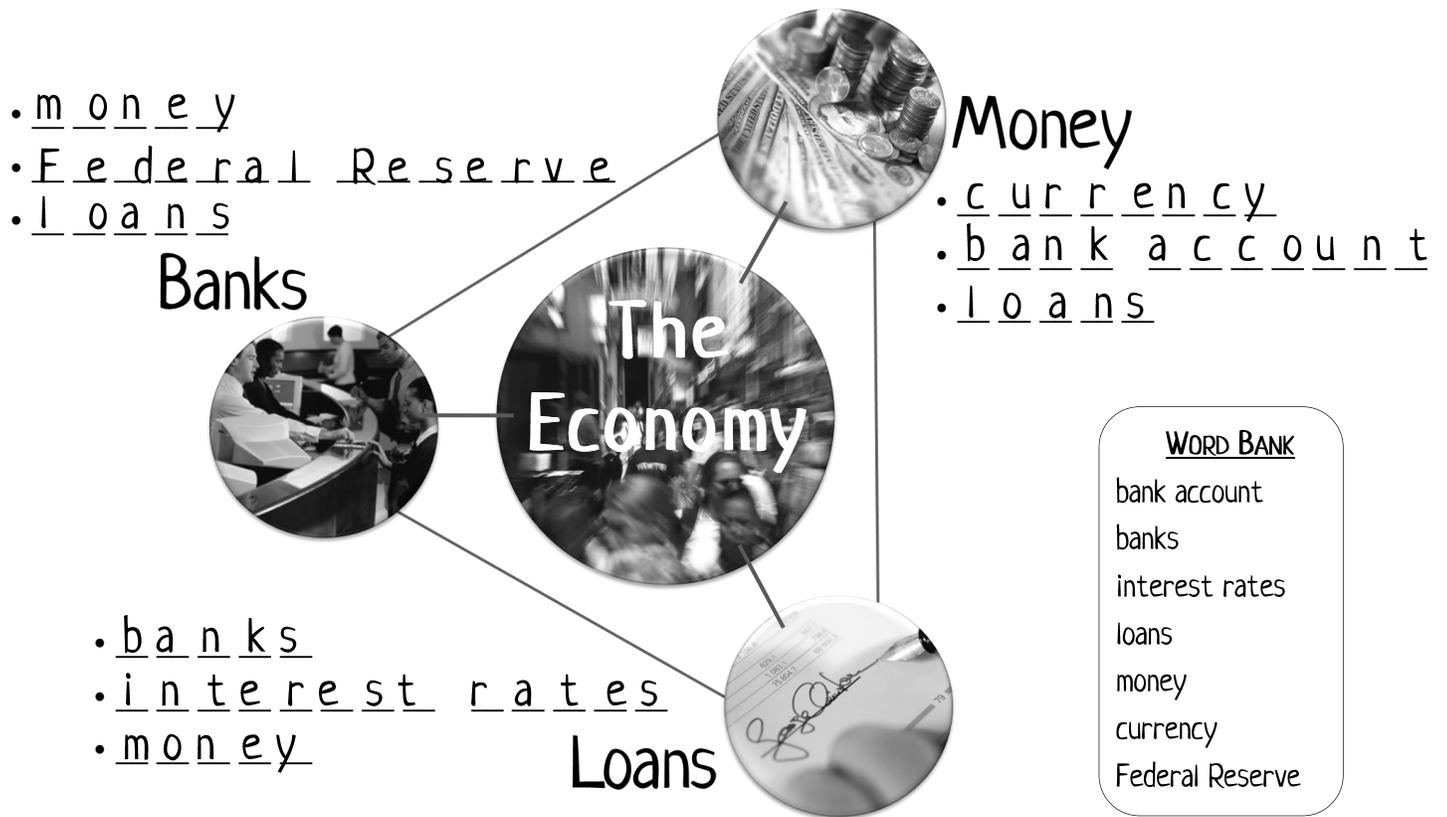
"Entrepreneurs" take risks to start new businesses.

(N) **14. Does paying for something with a loan cost less than paying for it outright?**

Paying with a loan always costs MORE than paying for something outright!

(Y) **15. Does anyone keep track of your credit history?**

Lenders report your credit history to the three credit reporting bureaus.



A. Vocabulary. Match each word with its definition. Some words are not in bold in the reading.

- | | |
|--------------------------------------|--|
| <u>D</u> 1. Money | A. Helps people control their finances and use credit wisely |
| <u>G</u> 2. Currency | B. The fee charged for the right to borrow money |
| <u>E</u> 3. Deposit | C. The rise of prices over time |
| <u>K</u> 4. Withdraw | D. A medium of exchange that sets a common standard of value |
| <u>H</u> 5. Loan | E. Put money into a bank account |
| <u>B</u> 6. Interest | F. People who take risks to start a new business |
| <u>J</u> 7. Federal Reserve | G. Coins and paper money printed by the government |
| <u>C</u> 8. Inflation | H. Paying a bank to let you borrow money |
| <u>I</u> 9. Income | I. A person's source of money, dependent on the ability to produce |
| <u>L</u> 10. Reserve | J. The central bank of the United States |
| <u>N</u> 11. Investment | K. Take money out of a bank account |
| <u>F</u> 12. Entrepreneur | L. Money that a bank keeps and does not lend out |
| <u>M</u> 13. Credit reporting bureau | M. Company that keeps track of your credit history |
| <u>A</u> 14. Credit counseling | N. Money spent in order to make more money |

B. The Fed. Put an X by each statement that is TRUE about the Federal Reserve.

- 1. The Fed sets rules that banks must follow.
- 2. The Fed can affect the interest rates that banks charge for loans.
- 3. The Fed creates money out of thin air, so there's always enough.
- 4. The Fed's goal is to keep the economy healthy.
- 5. People can set up checking and savings accounts at the Fed.
- 6. The Fed tries to keep employment high and prices stable.
- 7. The Fed processes checks and electronic money transfers.
- 8. The Fed supervises the banking industry.
- 9. Coins and paper money are made by the Fed.
- 10. There is a Federal Reserve bank in every state.

C. Loans. Follow the directions in each box.

Draw one way a loan could help someone earn more money in the future:

Drawings might show someone starting a business, going to college, buying a home, or buying something to build a business.

Draw one way a loan could cause someone to spend too much or have other problems:

Drawings might show someone buying a lot of stuff, paying for a vacation, buying something really expensive that's just for fun, etc.

D. It's Called Money, Honey. Below is a list of everything Sam has and how much it's worth. Mark the things that are considered money. Then add to find out how much money Sam has.

- Home: Trailer and land worth \$100,000; owes \$83,000
- Coins in old jar on desk: \$15.62
- Chicken coop: 1 dozen eggs per day, worth \$2/dozen
- Savings account balance: \$4,023.77
- Paper bills inside wallet: \$47
- Personal items: Household stuff worth about \$2,500
- Vehicle: 2002 pickup truck worth \$2,200
- Checking account balance: \$567.90
- Act of kindness: Brother owes him \$175



\$ 15.62
 \$4,023.77
 \$ 47.00
\$ 567.90
 \$4,654.29

Sam has this much money: \$ 4,654.29

E. Banking Blunders. Each of these people has made a banking mistake. Read what they're saying and tell them where they're going wrong.



I don't want two bank accounts. I'll just get a savings account, and each month I'll have my bills electronically deducted. Let's see... rent, phone, electric, water, cable, insurance, internet, gym...

Problem: You can only make 6 withdrawals per month from a savings account.



This awesome sound system is on sale for \$1,543! I've only got \$800 in my checking account, but that's okay—I'll pay for it with my debit card.

Problem: A debit card just takes money out of your checking account.



My girlfriend wrote a love poem on a \$5 bill and I accidentally deposited it into my savings account! I'll go make a \$5 withdrawal. They'll get it from the vault and give it back.

Problem: Banks don't store your money in the vault.



My grandma gave me \$500 for my birthday and helped me open a savings account. Tomorrow I'm quitting my pizza delivery job, because now the bank's going to pay me!

Problem: Savings accounts only pay a very small amount of interest.

F. An Interesting Situation. People can end up paying a lot extra for a car because they only pay attention to the monthly payment they're being offered. Which of these loans will cost you MORE?

Hey! You can drive away in this brand new car TODAY for only \$342.05 a month. Too much? Does \$219.13 a month sound better? All RIGHT!



\$342.05/month

This is a 4-year loan. You'll make this monthly payment for 48 months. Do the math:

$$\begin{array}{r} 342.05 \\ \times \quad 48 \\ \hline 273640 \\ 136820 \\ \hline 1641840 \end{array}$$

You'll end up paying this much:
 \$ 16,418.40

(Shorter loans usually have lower interest rates. This rate was 4.5%)

\$219.13/month

This is a 7-year loan. You'll make this monthly payment for 84 months. Do the math:

$$\begin{array}{r} 213.13 \\ \times \quad 84 \\ \hline 85252 \\ 170504 \\ \hline 1790292 \end{array}$$

You'll end up paying this much:
 \$ 17,902.92

(Longer loans usually have higher interest rates. This rate was 6%.)