

Money Mania Simulation

Objective:

I can identify the institutions that make up an economic system.

Big Ideas:

1. Various institutions – business firms, banks, government agencies, labor unions and corporations - play role in an economic system.
2. Banks lend money to businesses.
3. Government agencies regulate aspects of the economy to protect consumers and workers.
4. Labor unions work with business to protect the rights of workers.
5. Corporations are companies working as a single business.

Essential Questions:

1. What are some institutions in an economic system?
2. How do they work together?

This is an adaptation of a lesson by the Federal Reserve of Kansas City,

<https://www.kansascityfed.org/publicat/education/teachingresources/lessonplangr9-12.pdf>

Anticipatory Set: What do you think the bank does with your money after you deposit it?

Procedures:

1. TW introduce the idea that the money supply in our country is made up of currency, coin and checking accounts balances. The total of this money is referred to as M1 funds.
3. Class KN:

Why would customers want a bank loan? (Student responses will vary, but could include to buy a car, house, pay tuition, or pay bills.)

Why would banks be willing to loan to customers? (Student responses will vary, but could include to develop customer relationships or to receive interest on the loan payments. Both are correct statements.)

What is interest? (Interest is money paid regularly and at a set rate, for the use of borrowed money.)

How do banks make money? (Banks make money from the interest that borrowers pay on loans.)

When banks loan money to people and businesses, the overall money supply increases because there is more money in circulation. The borrowers, in turn, will spend their loans on goods and services. This flow of money helps to keep our economy running smoothly.

When borrowers pay off their loans to banks, the supply of money in circulation decreases and fewer goods and services are purchased overall. This helps to balance the flow of money.

Banks are required to keep a specific fraction of their deposits available for withdrawal by depositors. They are prohibited from lending this percentage of deposits out to customers. The percentage, currently 10% of banks' holdings, is referred to as the **reserve requirement**. The reserve requirement assures customers that banks will have money on hand to meet their withdrawal needs.

4. TW Introduce the banking simulation, Money Mania.

5. Each table group of 5 students takes a role: 1 banker and 4 customers, A, B, C, D.

6. Each customer gets a bundle of cash - \$600 – to deposit or spend – and a Task Card. Tally how much money each group has. (This should add to \$2400 – 4 customers of \$600 each.) Customers must follow specific actions, such as asking for a loan, depositing, purchasing something from another customer, or paying off loans, for each Round. There are 4 Rounds total.

7. The banker starts with a ledger, in which to record transactions for each customer. The banker starts with no money at all.

Guided Practice:

8. Tell Customer A to deposit \$200 in her checking account. Banker should use the ledger to record the deposit after taking the money. Ask students what the banker should record for the reserve requirement of ten percent of this deposit. (\$20) Banker then records that amount in column two. Ask students how much money from the deposit is left over to loan out to other customers. (\$180) Banker then records that amount in column three. Ask students how much money is still in Customer A's account. (\$200)

9. Highlight when Customer B visits the bank for a loan of \$180 to buy video game equipment. Banker should pay out the money and record on the ledger. Stop. Ask students how much money the bank has left for loans from Customer A's deposit? (0) Customer C then pays Customer B \$250 for repairs to his/her bike. Customer C deposits \$150 at the bank. The banker should take the money and record \$150 in column one for Customer C. Ask students what the banker should record for the reserve requirement of 10%. (\$15) Banker then records that amount. Ask students how much money from the deposit is left over to loan out to another customer? (\$135) Ask students how much money is still in Customer C's account. (\$150) Customer D then deposits \$300 in the bank and pays Customer A \$50 for a new computer keyboard. The banker should take the money and record \$300 in column one for Customer D. Ask students what the bank should record for the reserve requirement of 10%. (\$30) Banker then records that amount. Ask students how much money from the deposit is left over to loan out to another customer? (\$270) Ask students how much money is still in Customer D's account (\$300).

10. Ask the Banker to add the deposits in column one for a total. (\$650) Ask students if this is a correct amount. (Student responses will vary. Some will say "no" because part of the money has been lent out; some will say "yes" because the deposit balances still show the amounts in each customer's account.) Ask the Banker to count how much cash he/she actually has. (\$470) Explain that \$180 has been added to the money supply or "created" because some of the same dollars are being used twice. However, Customer A still has a total of \$200 available, and Customer C still has a total of \$150 available, etc.

Independent Practice:

11. Allow students to complete Rounds 2, 3 and 4 independently, recording deposits in the bank and on their checking slips. The Banker completes the Ledger for each customer, each round.
12. Ask students to then count their cash, and record it in the worksheet, "How Much Money Did the Bank Create?" Ask students to individually add up (sum) their deposits on the checking account worksheet, then on the "How Much Money Did the Bank Create" worksheet. Students then add both cash and deposits together, to get the total for all four Customers. They subtract the amount they started with - \$2400 – from the total.
13. Identify that amount as money the bank "created" by loaning out Customer's money.
14. On KN, introduce the money multiplier effect. Tell students that we can calculate the growth of the money supply by calculating how money can multiply. Show the formula and explain the formula for calculating the money multiplier: $\text{Potential Money Multiplier} = 1 / \text{divided by} / \text{Reserve Requirement}$. Discuss money multiplier examples using this formula.
15. Ask the bankers to use their ledgers to add up the amount of money they loaned to customers during the simulation. What was the potential money multiplier effect?

Closure:

16. On an exit slip, answer the following questions using RACE:

What makes up the money supply in the U.S. economy? *(The money supply is made up of currency and coin in circulation, along with checking account balances. This total is referred to as M1 funds.)*

Explain how the money supply can increase and decrease. *(When banks loan money to people and businesses, the overall money supply increases because there is more money in circulation. When these loans are paid back to the bank, the money supply decreases because there is less money in circulation. The Federal Reserve helps control the overall growth of the money supply.)*

This lesson is an adaptation, for groups of 5, of a lesson from the Federal Reserve of Kansas City, <https://www.kansascityfed.org/publicat/education/teachingresources/lessonplangr9-12.pdf>

Materials: 30 play cash bundles of \$600 each, in the following denominations: 10 each of \$5, \$10, \$20. 3 - \$50. 1 - \$100. Banker's Ledger worksheet, Customer Checking Account sheets, Customer Task Cards, and "How Much Money Did the Bank Make?" worksheet. KN on money multiplier effect.

Homework: None.

Instructional Techniques: Guided Practice, Independent practice, active participation, cooperative learning.

Assessment: Completed worksheets, Reflection Simulation Essay

Money Mania Reflection Simulation Essay

Anticipatory Set: 1 Minute Think Time: Reflect on the banking simulation yesterday.

What was one key thing you learned in the simulation. Write it on your desks. Stand and Share.

Procedures:

1. SW write a 250-word, 1-page Simulation Reflection Essay about the Money Mania Simulation.

Closure: BTA : What was your biggest take away from the Money Mania Simulation.

Homework: None, if finish in class.

Materials: Money Mania Simulation Reflection Essay assignment.

Instructional Techniques: Independent analysis, written reflection.