

THE STORY OF THE FEDERAL RESERVE SYSTEM

Middle School Lesson Plan

Standards

New York

- 8.2e Progressive reformers sought to address political and social issues at the local, state, and federal levels of government between 1890 and 1920.

New Jersey

- 6.1.8.A.2.b Explain how and why early government structures developed, and determine the impact of these early structures on the evolution of American politics and institutions.
- 6.1.8.C.4.a Analyze the debates involving the National Bank, uniform currency, and tariffs, and determine the extent to which each of these economic tools met the economic challenges facing the new nation.

Connecticut

- CIV 8.1 Explain the origins, functions, and structure of government with reference to the U.S. Constitution, state constitutions, and selected other systems of government.
- CIV 8.2 Analyze ideas and principles contained in the founding documents of the United States, and explain how they influence the social and political system.

NCSS

- Production, Distribution, and Consumption
 - Knowledge: Learners will understand
 - That banks and other financial institutions channel funds from savers to borrowers and investors

C3 Framework

- D2.Eco.10.6-8. Explain the influence of changes in interest rates on borrowing and investing.



Grade Level

6-8

Time Required

90 minutes

Compelling Question

What does it mean to be a bank?

Supporting Questions

Why do banks charge interest?

What services do banks provide?

What are financial services?

Objectives

- Define **interest rate**
- Explain how changes in **interest rates** change behavior.
- Identify the functions of banks
- Evaluate why banks may require supervision
- Summarize the different **financial services** provided by the **Federal Reserve System**
- Connect these **financial services** to everyday life

Materials

- *Banking Basics* (<https://www.bostonfed.org/publications/economic-education/banking-basics.aspx>)
- Handout 1: Interested in Interest
- Handout 2: The Interest Rate Lever
- Handout 3: Why Does a Bank Charge Interest?
- Handout 4: Be a Bank
- Handout 5: Bank Reflection
- Handout 6: The Federal Reserve System as a Bank
- Handout 7: The Federal Reserve System and You



Procedures

Supporting Question 1: Why do banks charge interest?

1. Begin the lesson by asking students if they would lend money to a friend and not charge anything extra. *(Students' answers will vary. Some are likely to be willing to lend money to a friend, while others may not be.)* Ask students if they would lend money to a stranger and not charge anything extra. *(Some students may still be willing, but it is likely that more students may be skeptical.)* Ask students why they would charge extra to lend money to a person, whether it is to a friend or not. *(Students' answers may vary, with possible reasons including wanting to make sure they get repaid or wanting to be paid for their time or effort.)*
2. Explain to students that an **interest rate**¹ is the price paid for using borrowed money. The **interest rate** is expressed as a percentage of the amount borrowed. As an example, explain to students that if they borrow \$100 for one year at 6% interest, at the end of the year they will pay back \$106. \$100 is the amount borrowed, and \$6 is the interest owed.
3. Ask students why someone who is lending money would charge interest. *(Students will likely answer that because they loaned their money to another person, it is not available for them to spend now. Interest reflects the compensation for not being able to spend your money now.)* Explain that just as they would not be likely to lend money without charging interest, banks operate in the same way.
4. Distribute Handout 1: Interested in Interest. Explain that students will be using math and graphing skills to understand how **interest rates** change behavior. Allow students time to complete the assignment.
5. Debrief students, replicating their graphs on the board to show the similarities and differences in the students' graphs. *(While there may be slight variations in the students' graphs, the law of supply and demand should mean that the supply of money slopes down and the demand for money slopes up.)* Use the following focus questions to gauge students' understanding:

¹ <http://lei.councilforeconed.org/glossary.php>



- a. As the **interest rate** increased, what happened to the number of people willing to borrow?
The number of people willing to borrow decreased.
 - b. As the **interest rate** increased, what happened to the number of people willing to lend?
The number of people willing to lend increased.
 - c. Overall, how do **interest rates** change behavior?
Interest rates change the willingness of consumers to borrow and banks to lend. As the interest rate goes up, fewer consumers are willing to borrow money because they have to pay more back in interest. Banks are willing to supply more funds because they get more money paid back in interest.
6. Remind students from the opening panels of the comic book that the citizens of Novus are trying to create a central bank with the responsibilities found on page 6 of the comic book. Explain that the Federal Reserve is a central bank and performs many of the same functions as a regular bank.
 7. Assign students to read pages 9-11 of the comic book. Distribute Handout 2: The Interest Rate Lever. Allow students time to read and answer the questions.
 8. Debrief students about the impact of **interest rates**, focusing on the reason the **Federal Reserve System** changes **interest rates** to conduct monetary policy. Use the following focus questions to gauge students' understanding:
 - a. "Too little lending and spending"
Interest rates would go down and the amount of lending and borrowing would go up. This choice is made because there is too little lending and spending in the economy at the moment.
 - b. "Prices seem to be going up quickly"
Interest rates would go up and the amount of lending and borrowing would go down. This choice is made because there is a risk of inflation.
 - c. "Households aren't feeling confident"
Interest rates would go down and the amount of lending and borrowing would go up. This choice is made because households need to have the confidence and ability to spend again.



9. Conclude the lesson by asking students to complete Handout 3: Why Does a Bank Charge Interest? as an assessment for the lesson. Use the following focus questions to gauge students' understanding:
- Why does a bank charge interest?
A bank charges interest because it is losing access to the money it is lending and is compensated for the fact that it cannot use the money in another way.
 - Why does a central bank change **interest rates**?
A central bank changes interest rates in order to affect the amount of money and credit that flows through the economy.
 - How are these reasons similar?
Both use the power of human behavior. When interest rates are low, people are more likely to borrow and spend, while if interest rates are high, they tend to borrow and spend less. Thus, both banks and central banks understand how people respond to interest rates.
 - How are these reasons different?
Banks are using interest rates as a tool for profit. Central banks are using interest rates to conduct monetary policy.
 - What does it mean to be a bank?
Banks use interest rates to compensate themselves for risk. Central banks use interest rates to conduct monetary policy. Both are types of banks, but the manner in which they use interest is slightly different.

Supporting Question 2: What services do banks provide?

10. Begin this portion of the lesson by reviewing what students learned in Step 8. Review with students the compelling question: **What does it mean to be a bank?** Remind students of how changes in **interest rates** influence behavior. Guiding the conversation about banks, ask students where they go to get money. (*Answers will vary, such as “jobs” and “allowance from parents.” Guide students to the eventual realization that regardless of where they get their money, it will, at some point, end up in a bank.*) Explain to students that banks play an important role in the public's trust in money, and that in order to answer the compelling question, students should understand the role of banks.
11. Explain to students that today they will be answering the supporting question:
What services do banks provide?



12. Distribute Handout 4: Be a Bank. Also distribute *Banking Basics* (publication by the Federal Reserve Bank of Boston). Divide students into three groups. Each group will look at the various services provided by banks.
 - a. Group 1: What is a bank? (Pages 6-7)
 - b. Group 2: What types of accounts do banks offer? (Pages 14-16)
 - c. Group 3: What are checks and what is electronic banking? (Pages 23-26)
13. Debrief students, collecting answers to each question and putting them on the board to document the services provided by banks. Direct students to list all of these bank functions on the left side of the t-chart in Handout 4.
14. Explain to students that they have just documented the list of services provided by banks. Ask students why these functions of banks are important. (*Answers may vary, but will likely include things such as "because it involves people's money," "because it is important for the economy," etc.*) Explain to students that because of these important functions, banks are supervised to make sure they are safe.
15. Explain to students that there can always be problems with bank services and that bank supervision is one way to make sure these problems do not occur. Reference the right column of the t-chart in Handout 4 and ask students to think of possible problems that could happen. (*Sample: Banks hold customer accounts for withdrawal → Banks might not have enough money onsite to handle all withdrawals.*)
16. Using the question at the bottom of Handout 4, ask students to make a prediction about what could happen to the economy if the problems in the right column all occurred. (*Possible answers include "the economy will collapse," "citizens or businesses will not have money," etc.*)
17. Explain to students that there are protocols in place to prevent the prediction they made in Step 16 from coming true. Reference the box in Handout 4 labeled "Supervision." Assign students to read pages 12-15 of the comic book. Explain that as students read, they should list three examples of supervision conducted by the **Federal Reserve System**. (*Sample responses include: "Supervisors make sure banks are not taking too much risk." "Supervisors make sure that rules are*



being followed.” “Supervisors focus on banks as well as the entire financial system.” and “Supervisors perform stress tests.”)

18. Distribute Handout 5: Bank Reflection. Allow students time to complete the script explaining the importance of bank supervision for the economy.

Supporting Question 3: What are financial services?

19. Review with students that the **Federal Reserve System** is the central bank of the United States and that like a “regular” bank, the **Federal Reserve System** provides **financial services**. Explain that today students will be answering the supporting question: **What are financial services?**
20. Distribute Handout 6: The Federal Reserve System as a Bank. Ask students to read pages 16-19 of the comic book. As they read, students should make a list of the different financial services provided by the **Federal Reserve System**. *(Students should note the following: distributing paper currency and coins; collecting checks; transferring bank funds; meeting cash demands in Federal Reserve Districts; issuing and shredding currency; storing gold at the Federal Reserve Bank of New York.)*
21. Remind students that they previously listed banking services in Handout 4. Debrief by asking students to compare the list of bank services provided by “regular” banks with the list generated in Step 20. *(While students’ answers may vary, they should recognize that many of the services are similar, but the customer is the key difference. Commercial banks provide financial services for individuals, while the Federal Reserve System provides similar services but for the banks themselves.)*
22. Explain to students that their actions are very important in the economy. Distribute Handout 7: The Federal Reserve System and You. Direct students to focus on the left column of the t-chart. Ask students to make a list of every economic activity they have engaged in over the past week. *(Answers will vary, but are likely to include things such as purchasing goods and services, withdrawing cash from an ATM, working, etc. Remind students of things they may forget, such as paying sales tax on their purchases or accumulating human capital by attending school.)* Compile students’ responses to generate a master list of classroom economic activity.



23. Ask students to use the list generated in Step 22 to categorize each economic action they engaged in with the financial service provided by the **Federal Reserve System**. (For example, if students had listed “withdrew money from an ATM,” they would match that with “Federal Reserve System manages currency.”)
24. Debrief the students when all have had time to finish. Students should be able to discuss the ways in which the **financial services** provided by the **Federal Reserve System** affect their daily lives. Ask students to reflect on the importance of **financial services** using the question at the bottom of Handout 7. (Students should respond that Federal Reserve System financial services help banks perform their functions, which provides economic stability and helps citizens trust the money in their pockets.)

Assessment

25. Remind students of the initial compelling question for the lesson: What does it mean to be a bank?
26. Ask students to re-read pages 20 and 21, focusing on the trip back to Novus. Students should imagine that they were part of the original expedition to Earth and are now returning to Novus to put what they learned into action.
27. Students work in groups to create a presentation for their class that compares and contrasts the functions of banks with the functions of central banks. These similarities and differences include:
- Providing **financial services**
 - Making loans
 - Handling customer accounts
 - Charging interest
28. Remind students that these are the supporting questions they answered while they read the comic book and that the concepts learned are guides to help them create their presentation. The key for students is to understand how central banks have similarities and differences.



Extension

29. Students should examine the historical reasons the **Federal Reserve System** was created the way it was. Topics of research include:

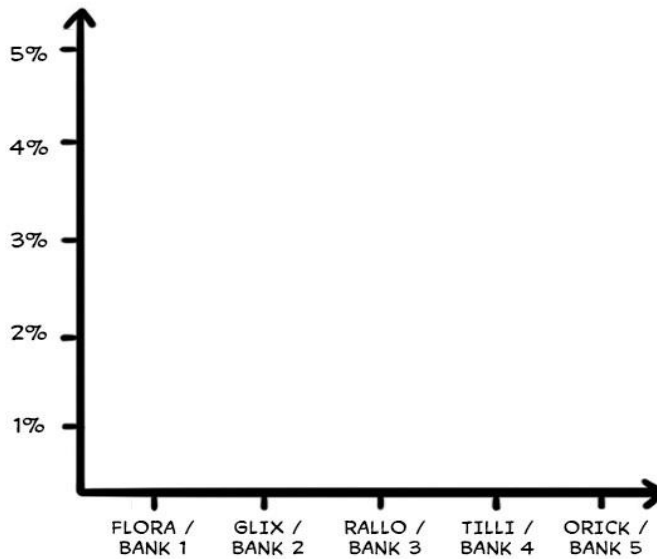
- a. History of the First and Second Banks of the United States
- b. Principles of federalism
- c. Separation of powers
- d. Checks and balances
- e. Regional representation



THE STORY OF THE
FEDERAL RESERVE SYSTEM
HANDOUT 1

Interested in Interest

Interest rate:



FOCUS QUESTIONS

1. As the interest rate increased, what happened to the number of people willing to borrow?
2. As the interest rate increased, what happened to the number of people willing to lend?
3. Overall, how do interest rates change behavior?

BORROWERS

Flora: "I'm willing to borrow if interest is 5% or lower."

Glix: "I need a loan, but I won't borrow if interest is higher than 4%."

Rallo: "My limit is 3% interest. I'll borrow at that rate or lower."

President Tilli: "I won't pay more than 2% interest on any loan I take out."

Orick: "If the interest rate is 1%, I'll take out the loan I need."

LENDERS

Bank 1: "I'm willing to start lending money at an interest rate greater than 1%."

Bank 2: "I'll definitely loan money for 2% interest or higher."

Bank 3: "If the interest rate is 3% or more, I can make some loans."

Bank 4: "At a rate of 4% interest, I'll start loaning money."

Bank 5: "I'll only loan money for at least 5% interest."



FEDERAL RESERVE BANK of NEW YORK

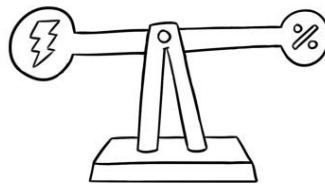
THE STORY OF THE
FEDERAL RESERVE SYSTEM
HANDOUT **2**

The Interest Rate Lever

As you have seen, changes in the interest rate can change consumer behavior. Flora needs your help!

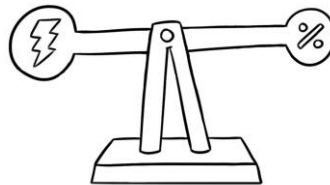
Using your knowledge of economics and pages 9-11 of the comic book, read each scenario below. Draw an up or down arrow on the correct side of the interest rate lever to indicate what should happen to interest rates and the amount of lending and borrowing.

Flora: "Oh no! There's too little lending and spending in the economy at the moment. I'm worried about a recession on Planet Novus. What should I do?"



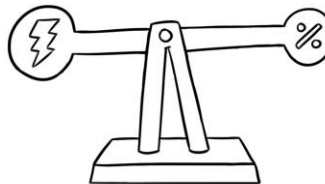
**EXPLANATION:
WHY DID YOU MAKE
THE CHOICE YOU DID?**

Flora: "Prices seem to be going up pretty quickly. I'm worried about the economy overheating and causing some inflation. What should I do?"



**EXPLANATION:
WHY DID YOU MAKE
THE CHOICE YOU DID?**

Flora: "All of the data seem to suggest that households aren't feeling confident about the economy and losing jobs. What should I do?"



**EXPLANATION:
WHY DID YOU MAKE
THE CHOICE YOU DID?**



THE STORY OF THE
FEDERAL RESERVE SYSTEM
HANDOUT ③

Why Does a Bank Charge Interest?

Flora is busy at the library putting the finishing touches on her presentation about monetary policy and the role of interest rates in the economy. Using what you have learned, help her complete her poster by answering the questions below.

1. Why does a bank charge interest?
2. Why does a central bank (like the Federal Reserve System) charge interest?
3. How are these reasons similar?
4. How are these reasons different?
5. Overall, how is charging interest important to "being a bank"?



FEDERAL RESERVE BANK *of* NEW YORK

12 of 16

THE STORY OF THE
FEDERAL RESERVE SYSTEM
HANDOUT 4

Be a Bank

WHAT IS A BANK?

WHAT TYPES OF ACCOUNTS DO BANKS OFFER?

WHAT ARE CHECKS AND ELECTRONIC BANKING?

FUNCTIONS AND SERVICES OF A BANK	POTENTIAL PROBLEMS

SUPERVISION



THE STORY OF THE
FEDERAL RESERVE SYSTEM
HANDOUT 5

Bank Reflection

Rallo's production about bank supervision is going to be quite the smash, but he needs to finish the script before the curtain can be raised. Using your knowledge of bank supervision, complete the script below.

Character 1: "Banks are an important part of the economy. Some of the functions banks provide are _____, _____, and _____."

Character 2: "Those things do seem important!"

Character 1: "But here's the problem: sometimes things can go wrong! For example, a bank may _____. It could also _____."

Character 2: "That sounds bad!"

Character 1: "It is! And so, as a result, the Federal Reserve System supervises banks."

Character 2: "What does that mean?"

Character 1: "The Federal Reserve System examines banks regularly. Some of the things the Fed does include _____, _____, and even _____. The goal is to keep the financial system as secure as possible."

Character 2: "And why does that matter?"

Character 1: "Let's face it, the financial system is important because _____."

Character 2: "And so, overall, what does it mean to be a bank?"

Character 1: "Well, I guess you could say that being a bank means that you _____."

END SCENE



FEDERAL RESERVE BANK of NEW YORK

14 of 16

THE STORY OF THE
FEDERAL RESERVE SYSTEM
HANDOUT 6

The Federal Reserve System as a Bank

LIST OF FINANCIAL SERVICES

WHAT ROLE DO THESE FINANCIAL SERVICES
PLAY IN THE ECONOMY?



THE STORY OF THE
FEDERAL RESERVE SYSTEM
HANDOUT 7

The Federal Reserve System and You

ECONOMIC ACTIVITIES YOU'VE BEEN INVOLVED IN DURING THE PAST WEEK	FINANCIAL SERVICE THAT HELPED YOU

WHAT IS THE IMPACT OF FINANCIAL SERVICES ON THE ECONOMY?

HOW ARE FINANCIAL SERVICES RELATED TO THE IDEA OF "BEING A BANK"?

