# The Story of Monetary Policy High School Lesson Plan

#### **Standards**

#### **New York**

- 12.G5b. On various issues, certain governmental branches and agencies are responsible for determining policy. Those who create public policies attempt to balance regional and national needs, existing political positions and loyalties, and sources of political power.
- 12.E4c. The Federal Reserve is the government institution responsible for managing the nation's monetary policy, including regulating the amount of money in circulation and interest rates.

#### **New Jersey**

 9.1.12.A.8 Analyze different forms of currency and how currency is used to exchange goods and services.

#### Connecticut

- CIV 9–12.5 Evaluate citizens' and institutions' effectiveness in addressing social and political problems at the local, state, tribal, national, and/or international level.
- ECO 9–12.2 Generate possible explanations for a government role in markets when market inefficiencies exist.

#### NCSS

- Production, Distribution, and Consumption
  - o Knowledge: Learners will understand:
    - The roles of institutions that are designed to support and regulate the economy (e.g., the Federal Reserve, and the World Bank)
    - How interest rates rise and fall in order to maintain a balance between loans and amounts saved

#### C3 Framework

 D2.Eco.6.9-12. Generate possible explanations for a government role in markets when market inefficiencies exist.

#### **Grade Level**

9-12

## **Time Required**

120 minutes



### **Compelling Question**

Why is financial stability important?

## **Supporting Questions**

Why do prices matter?

How does the Fed use interest rates to keep prices stable?

What is a consequence of unstable prices?

### **Objectives**

- State the function of prices
- Explain the role of prices in the economy
- Describe interest rates
- Identify characteristics of financial instability
- Create a doctor's note to diagnose and fix an economy in recession

#### **Materials**

- The Story of Monetary Policy comic book
- Handout 1: Prices: The Marketplace's Communication System
- Reading 1: Prices: The Marketplace's Communication System
- Handout 2: Prices in the Galaxy
- Handout 3: A Class Basket
- Handout 4: The Interest Rate Lever
- Handout 5: Monetary Policy Review
- Handout 6: The Price of Price Instability
- Handout 7: Economic Med School

#### **Procedures**

#### Supporting Question 1: Why do prices matter?

1. Ask students why they decide to buy something. (Students will likely answer that they want something, that it will make them happy, etc.) Ask students if they are able to get everything that they want all the time. (Answers will vary; some students may be content, while others will likely want more than they are able to get.) Ask the students who expressed that they want more things why they are not able to get them. (Some students might say they don't have the time or the money. Focus students on the idea of prices being a major reason that they cannot get everything they want.)



- 2. Distribute <u>Handout 1: Prices: The Marketplace's Communication System</u>. Ask students to look at the question on the top of the page ("What is the purpose of a price?") to predict the role of prices in the market.
- 3. Distribute Reading 1: Prices: The Marketplace's Communication System.

  [https://www.stlouisfed.org/education/page-one-economics-classroom-edition/prices-the-marketplaces-communication-system] Explain that students will be reading to learn about the role of prices in the economy.
- 4. Debrief with students, emphasizing the role that prices play in communicating basic ideas about the availability of resources.
- 5. Explain to students that changes in prices are an important indicator of economic health. Distribute <u>Handout 2: Prices in the Galaxy</u> to students. Divide the class into halves. Explain that one half of the class will read pages 6-9 of the comic book. The other half will read page 6, and 13-15. As students read, they should answer the focus questions on the half of the page that corresponds to their reading.
- 6. Using a think/pair/share activity, pair up students who read different sections. Encourage the students to teach the other group about the pricing situation on their individual planet, and how prices reflect underlying economic conditions.
- 7. Debrief as a class the focus questions on <u>Handout 2: Prices in the Galaxy.</u>
- 8. Distribute <u>Handout 3: A Class Basket</u>. Remind students that they have seen how prices are an important signaling mechanism for the health of the economy. Explain that students will be creating a basket of goods they will track throughout the year to see how prices change.
- 9. Ask each student to choose one item that they regularly purchase. It will be added to the classroom basket of goods. Ask the students for the rest of the academic term to check the price of the item once per week. (If necessary, duplicate the handout to provide more spaces.) The data from this activity will be used in the extension activity for this unit.
- 10. Assess student knowledge by asking students to answer the question at the bottom of Handout 3. (Expected student response: prices are important because they indicate the supply and demand of goods.)



#### Supporting Question 2: How does the Fed use interest rates to keep prices stable?

- 11. Begin this portion of the lesson by reviewing what students learned in Step 10. Review with students the compelling question: Why is financial stability important?
- 12. Review with students how prices communicate the economic health of an economy.
- 13. Assign students to read pages 10-12 of the comic book. Distribute <u>Handout 4: The Interest Rate Lever</u>. Allow students time to read and answer the questions.
- 14. Debrief with students about the impact of interest rates, focusing on the reason the Federal Reserve System changes interest rates to conduct monetary policy.
- 15. Conclude the lesson by asking students to complete <u>Handout 5: Monetary Policy Review</u>. Students should be able to define interest rates and to explain how changes in the interest rate help the Federal Reserve System meet its objectives. The key question is at the bottom of <u>Handout 5</u>, linking what they have learned to the compelling question. (Students should respond that by keeping prices stable and as many people as possible employed, the economy is healthier and people are more likely to have trust in the money.) Debrief with students, collecting answers to each question and putting several on the board to see how similar or different the answers are. Explain to students that they will be returning to these answers to evaluate their predictions.
- 16. Conclude the activity by reminding students that today they were answering the question: **How does the Fed use interest rates to keep prices stable?** Review student reasons about why to raise or lower interest rates. (Expected student response: raise interest rates when inflation is a threat, and lower interest rates during periods when prices are falling and the economy is in a recession.)



#### Supporting Question 3: What is a consequence of unstable prices?

- 17. Review with students that the Federal Reserve System is the central bank of the United States and that as a result the Federal Reserve System is responsible for maintaining price stability. Explain that today students will be answering the supporting question: What is a consequence of unstable prices?
- 18. Distribute <u>Handout 6: The Price of Price Instability</u>. Ask students to read pages 7-8 and 13-14 of the comic. As they read, students make a list of the various problems encountered by citizens during periods of price instability. (Students should note the following: citizens struggle to buy what they need, businesses can't plan for the future, governments can't get funding.)
- 19. Remind students that they previously listed monetary policy solutions on <u>Handout</u> 5. Debrief by asking students to match the list of citizen problems on <u>Handout</u> 6 with the monetary policy solution (raising or lowering interest rates) on <u>Handout</u> 5 that best solves the problem.
- 20. Explain to students that problems in an economy need to be diagnosed and solved quickly and efficiently. Tell students that they will all be attending Economic Medical School in order to learn how to diagnose a sick economy.
- 21. Distribute <u>Handout 7: Economic Med School</u>. Using the list of monetary policy tools in Step 15, ask students to diagnose each of the situations and to provide a solution:
  - a. Patient 1: High inflation and high unemployment. (Expected student response: increase interest rates to decrease inflation and allow unemployment to return to equilibrium.)
  - b. Patient 2: Low inflation and high unemployment. (Expected student response: decrease interest rates to spur investment and boost spending.)
  - c. Patient 3: Stable inflation and low unemployment. (This patient is healthy and does not need treatment.)
- 22. Debrief the students when all have had time to finish. Students should be able to discuss the ways in which monetary policy can help reduce periods of economic sickness.



#### Assessment

- 23. Remind students of the initial compelling question for the lesson: Why is financial stability important?
- 24. Ask students to re-read pages 18 to 21 of the comic book about the explorers as they travel the galaxy. Students should imagine that they are now economic doctors who are planning to diagnose other planets' economic sickness.
- 25. Students work in groups to create a "doctor's note" about signs and symptoms experienced by planets that are sick. Some possible signs and symptoms:
  - a. Inflation and unemployment
  - b. Production and Gross Domestic Product
  - c. Financial services and the financial sector
- 26. After diagnosing the symptoms, students write a "prescription" for the problem by diagnosing the correct monetary policy response.

#### **Extension**

- 27. At the end of the quarter or term, ask students to review the prices of the basket of goods they have been tracking. Ask students to answer the two questions at the bottom of <u>Handout 3: A Class Basket</u>.
- 28. Compare all of the student goods in the economy. Note which goods had larger price increases than others, or note any goods where the price stayed the same or fell. Ask students to generate a hypothesis as to why certain goods change in price.
- 29. Looking at all of the goods tracked in the classroom, students should reflect on how this is similar to tracking inflation throughout the economy. Ask them to consider what are some key differences between their experiment and the real economy.





## Prices: The Marketplace's Communication System

### WHAT IS THE PURPOSE OF A PRICE?

What is meant by "the dual role of prices"?
How is the equilibrium price of a good or service determined?
What happens if there is too much or too little of a good?

4. Why might government get involved in setting prices?





## **Prices in the Galaxy**

#### Pages 6-9

WHAT IS HAPPENING ON YOUR PLANET?	
HOW ARE THE CITIZENS SUFFERING?	
WHAT MIGHT BE ONE WAY YOU SET OUT TO SOLVE THE PROBLEM?	
WHAT IS INFLATION? WHY IS IT A PROBLEM?	

## Pages 6, 13-15

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HOW ARE THE CITIZENS SUFFERING?

WHAT MIGHT BE ONE WAY YOU SET OUT TO SOLVE THE PROBLEM?

WHAT IS INFLATION? WHY IS IT A PROBLEM?





## A Class Basket

As you have seen, the prices of goods can change over time. These price changes can be influenced by a wide variety of factors (supply and demand, input prices, etc.) but no matter what the cause, price changes are a vital economic indicator.

You and your classmates will be creating your own economic indicator. Your task is to choose one item that you purchase or see the price of with some regularity. You will be tracking the price of this item by checking once per week to see how it is changing.

Over time, and when compared to the items your classmates choose, you will be creating a classroom "basket" of goods that we can use to see how the economy in your community has changed over time.

NAME OF GOOD:											
DAY											
PRICE											

Has the price of your item changed so far? If so, why do you think it changed? If not, why not?

Overall, how did the price of your good change during the time you tracked it?



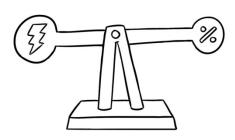


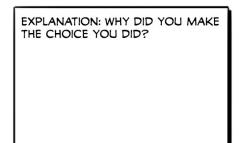
### The Interest Rate Lever

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

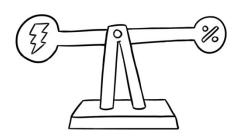
Using your knowledge of economics and pages 10-12 of the comic book, read each scenario below. Draw an up or down arrow on the correct side of the interest rate lever to indicate what should happen to interest rates and the amount of lending and borrowing.

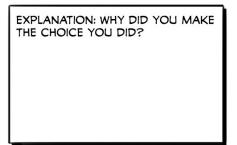
Flora: "Inflation seems to be a real concern. Prices are going up and businesses can't predict the future. What should I do?"





Flora: "Folks still can't seem to afford things even though prices are going down because money is extremely scarce. What should I do?"





Overall, what is the relationship between changing interest rates and the expansion of money and credit in the economy?





## **Monetary Policy Review**

What are interest rates?

What happens when the Federal Reserve System raises interest rates?

What happens when the Federal Reserve System lowers interest rates?

How does the Fed use interest rates to keep prices stable?

What is the relationship between monetary policy and financial stability?

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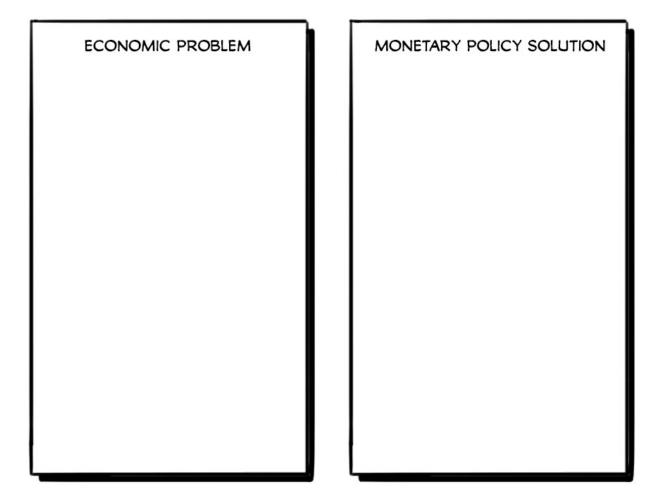
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## The Price of Price Instability

Prices are extremely important to consumers, and communicate key ideas about the health of the economy.

In the space below, list the problems encountered by citizens due to price instability. Then, draw an arrow to the second box and suggest a monetary policy solution to the problem.







## **Economic Med School**

#### Patient 1



"Looking at what's happened, I seem to have extremely high inflation and unemployment keeps creeping up and up to dangerous levels. What do you diagnose? What's the cure?"

#### Patient 2



"I just woke up feeling like inflation was really low. But when I checked my unemployment rate it was sky high. It was really concerning so I went and got checked in right away. What do you diagnose? What's the cure?"

#### Patient 3



"Well, my prices seem really stable, at least from what I can see.

Unemployment is pretty low. I guess it could be better but all around I'd say it's in the good range. What do you diagnose? What's the cure?"





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