



| | |
|-----------------------|-----------------------------|
| Lesson Title | How Much Is a Dollar Worth? |
| Grade Level(s) | 6-9 |
| Timeline | 30 minutes |

ESSENTIAL QUESTION

What is the value of money?

OBJECTIVES

Students will use the formula estimating the Consumer Price Index to calculate how much prices during the antebellum period would be in today's dollars.

STANDARDS

MGSE6.RP.3d. Given a conversion factor, use ratio reasoning to convert measurement units within one system of measurement and between two systems of measurements (customary and metric); manipulate and transform units appropriately when multiplying or dividing quantities.

MGSE7.RP.3. Use proportional relationships to solve multistep ratio and percent problems.

MGSE7.NS.2c. Apply properties of operations as strategies to multiply and divide rational numbers.

SSEMA1c. Define unemployment rate, Consumer Price Index (CPI), inflation, real GDP, aggregate supply and aggregate demand and explain how each is used to evaluate the macroeconomic goals from SSEMA1a.

BACKGROUND

Wealthy members of Savannah's elite social class often spent large sums of money on outward appearances (such as clothing and home decorations). Due to inflation, the amount of money spent on such items during the antebellum period are not equivalent to today's dollar value.

MATERIALS

- Internet connection
- Computer or smart device
- Calculator

VOCABULARY

Consumer Price Index (CPI): a measure of the average change overtime in the prices paid by urban consumers for a market basket of consumer goods and services

Inflation: a general increase in prices and fall in the purchasing value of money

PROCEDURES

Part One:

1. Introduce the activity by asking students, "What is money?"
2. Explain to students that money is anything widely accepted in exchange for goods and services. More precisely, U.S. currency is fiat money, which means it has no intrinsic value (no value of its own) or representational value (not representing anything of value, such as gold).
3. Discuss the following and why people value U.S. dollars:
 - a. How would you feel if you received money in your birthday card?
 - b. Why do people work to receive U.S. dollars?
 - c. Why do employers and businesses accept U.S. dollars in exchange for goods and services?
4. Explain that money facilitates economic activity, but too much or too little money can cause problems. Discuss the following:
 - a. How would your spending likely change if you had more money? (They would likely spend more money.)
 - b. In general, is spending good for the economy? (Yes, more spending can lead to more production of goods and services. More production can lead to more jobs and income for people. This chain of events results in an expanding economy.)
 - c. If more money results in more spending, and more spending can cause economic growth, why shouldn't the government continuously add money to the economy? (Answers will vary.)

Part Two:

1. The following list provides examples of items used for the CPI.
 - FOOD AND BEVERAGES (breakfast cereal, milk, coffee, chicken, wine, full-service meals, snacks)
 - HOUSING (rent of primary residence, owners' equivalent rent, fuel oil, bedroom furniture)
 - APPAREL (men's shirts and sweaters, women's dresses, jewelry)
 - TRANSPORTATION (new vehicles, airline fares, gasoline, motor vehicle insurance)
 - MEDICAL CARE (prescription drugs and medical supplies, physicians' services, eyeglasses and eye care, hospital services)
 - RECREATION (televisions, toys, pets and pet products, sports equipment, admissions)
 - EDUCATION AND COMMUNICATION (college tuition, postage, telephone services, computer software and accessories)
 - OTHER GOODS AND SERVICES (tobacco and smoking products, haircuts and other personal services, funeral expenses)

One important factor to consider about inflation and the CPI is that the value of money changes over time. This change directly affects prices. For example, the CPI in 1831 was 32; in 2018, the CPI was 752.9. The 2018 CPI is about 23.5 times the 1831 CPI. Reflecting on that inflation rate, in 1831 a pound of chocolate cost \$0.20; in 2018 that same pound of chocolate would cost \$4.70 ($\$0.20 \times 23.5 = \4.70).

[You can look up exact CPIs here.](#)

2. Scenarios:
Using [this website](#) to determine the CPI for a certain year, calculate how much the following items are worth in today's dollars.
 - a. In **1820**, a pound of coffee cost \$0.32. How much would that cost today?
 - b. In **1830**, a dozen crackers cost \$0.06. How much would that cost today?
 - c. In **1835**, a dozen lemons cost \$.25. How much would that cost today?
 - d. In **1814**, a 4-foot wooden table cost \$14. How much would that cost today?
 - e. In **1843**, a pound of bacon cost \$0.091. How much would that cost today?
 - f. In **1834**, a hat cost approximately \$2.84. How much would that cost today?

ASSESSMENT/CLOSING

To wrap up this activity, have students respond to the following questions as their ticket-out-the-door. Responses can be submitted electronically or on paper.

- a. Summarize the definition of "inflation."
- b. How does inflation impact how we view money today versus the past?

EXTENSION/INQUIRY

Find a recipe online and plan a meal to cook for a family of four. Go online or to the store to determine the cost of each item you will need for your meal. Convert the cost of those items to 1830 dollars. Use the following formula: cost of item today / (2018 CPI / 1830 CPI) = cost of item in 1830.

After converting the costs, are any products today that are much more expensive or cheaper than the same products in 1830? What factors contribute to lowering or increasing a product's cost?

For in-depth inquiry examples, visit c3teachers.org.

MODIFICATIONS

1. Provide students with the accurate CPI for each year and the formula needed to estimate the cost of each product.
2. Rather than have students answer all six of the questions, reduce the number of questions to three.
3. Provide students with extra time to complete this activity, if needed.
4. Allow students to deliver their responses orally to the assessment questions.

RESOURCES

[Federal Reserve Bank of Minneapolis](http://www.federalreserve.org)
[Comparative Wages, Prices, and Cost of Living](http://www.bls.gov)