

# Inflation

**SUBMITTED BY:** Nina Hoe, University of Pennsylvania

**SUBJECT(S):** Computation

**GRADE LEVEL(S):** 9, 10, 11, 12

## ≡ OVERVIEW:

In this lesson, students learn about the concept of inflation — its meaning, causes and implications, as well as the strategies for mitigating negative outcomes. Students read the WGYP article “Inflation: What It Is, Where It Comes From and How It Can Bite You” to frame the issue and to get a better sense of how inflation affects youth. In groups, students then complete a series of computation problems as they examine changes in the Consumer Price Index (CPI) over the last five years. Finally, in groups, students take a deeper look at three of the causes of inflation described in the article and prepare mini-presentations to the class, focusing on explanations, examples, effects and responses to these various causes.

## ≡ NBEA STANDARD(S):

- Computation, I. Mathematical Foundations
- Computation, II. Number Relationships and Operations
- Computation, V. Statistics and Probability

## ≡ RELATED ARTICLES:

- [“Why It Pays to Save: Knowing the Time Value of Money”](#)
- [“Venezuela’s Eugenia Carmona on the ‘Complete Chaos’ Afflicting Her Country”](#)
- [“The Fed Revealed: The Dangers of Monetary Policy”](#)
- [“Jeremy Siegel: Why Investors Shouldn’t Panic Over Stock Market Volatility”](#)
- [“Inflation: What It Is, Where It Comes From and How It Can Bite You”](#)

- “GDP: The Rock Star of Economic Indicators”

### Common Core Standard(s):

- S-IC.6. Evaluate reports based on data.
- RI.9-10.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- SL.9-10.1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.

### Objectives/Purposes:

- Students learn the meaning, causes and implications of inflation, and discuss government strategies for mitigating negative consequences.
- Students compute percentage change in the Consumer Price Index (CPI) in 1-year intervals over the last five years.
- Students practice teamwork and presentation skills.
- Students examine the implications of inflation on individual budgets.

### Other Resources/Materials:

- Computer with Internet
- Calculators
- [Handout](#)

### Activity

#### Whole Class Discussion

#### Introduction to Inflation (**5 mins**)

1. Has anyone heard the term “inflation?” What does it mean?
2. Is it a good or a bad thing?
3. In what countries has inflation been particularly prevalent?

4. What evidence of inflation have you seen in your lifetime?
5. Thinking about conversations with parents or grandparents, what might be other examples of inflation taking place in the US?

### Guided Reading (10 -15 mins)

Have the students read the Wharton Global Youth Program article “[Inflation: What It Is, Where It Comes From and How It Can Bite You.](#)” While reading, have them jot down notes on the following questions:

- What does inflation mean?
- What are the causes of inflation?
- What can a government do to help curb the negative effects of inflation?
- How does inflation affect everyday people?

Once students have finished the article and thinking about the questions, have them turn to a partner to discuss and compare their answers.

### Whole Class Discussion: (5 mins)

1. Have students share some of their responses.
2. Discuss what effect changing interest rates would have on consumer borrowing and saving? Play the WGYP Glossary [Interest Rate](#).
  - a. If interest rates are low, what are people more inclined to do?
  - b. If interest rates are high, what are people more inclined to do?

Small Group/Pair Work: **Depending on the time available, choose a combination of the activities below. The first section is 3 computation- and analysis-based problems, and the second section is a presentation activity.**

### **Computations and Analysis (15 mins)**

*Investigation – What does inflation look like?*

1. Below is a table that shows the Consumer Price Index (CPI) – described in the article – in the US over the past 5 years taken from the [U.S. Department of Labor – Bureau of](#)

Labor Statistics Website. Compute the percentage change in the CPI for each year over the past 5 years.

Remember that percentage change is calculated:

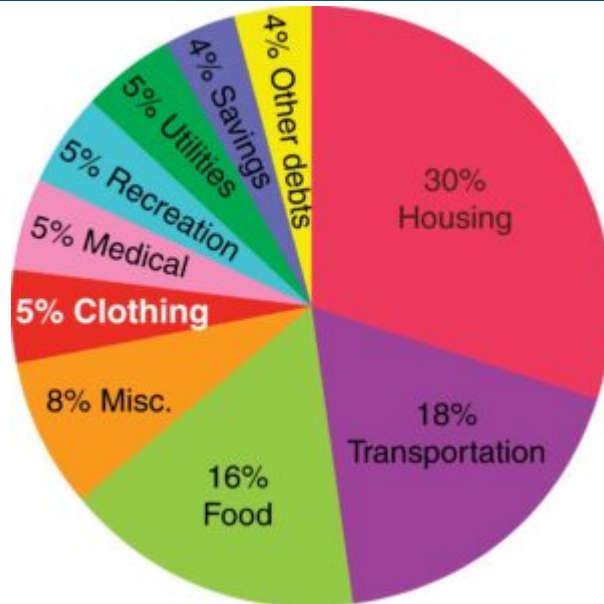
$$\text{Percentage Change} = \frac{B - A}{A} * 100$$

Year	Average CPI	Percentage Change
2006	201.6	—
2007	207.342	
2008	215.303	
2009	214.537	
2010	218.056	

- For what year was inflation the highest as measured by the highest percentage change in average CPI?
- For what year was inflation the lowest as measured by the lowest percentage change in average CPI?
- How has the CPI changed over the past 5 years? What is the percentage change?
- What do you think about this? Is this all okay?

*Investigation – How does inflation affect you?*

- Below is a pie chart that suggests what percentage of a typical adult income should be allocated to different aspects of life and expenses.



- a. What if, due to inflation, food prices approximately doubled? How would you respond to this? What changes might you make to your overall budget? How would you deal with this?
- b. If an individual had a fixed income, but because of inflation, all food, clothing, recreation, utilities, and transportation costs doubled as well. How might this individual respond?

3. A teenager has a job making about \$50 a week. Weekly, he spends his money in the following way:

Weekly Expense	Cost	Percentage of Total Weekly Income
½ tank of gas (6 gallons @ \$3.33) needed to get to and from school, movies, and over to friends' houses a few times per week.	\$20	
Snacks/food/drinks, recreation, movies, etc.	\$10	
Cell Phone (added line on parent's plan) – \$20/month – roughly \$5/week	\$5	
Savings for college fund	\$15	

- a. In the right-hand column, compute the percentage of this teen's weekly income allocated to the different expenses.
- b. If the price of gasoline were to rise to \$3.95 per gallon, how would that affect the budget?
  - i. How much money would he need to spend on gas per week?
  - ii. What percentage of his total income would this represent?
  - iii. What adjustments would need to be made?

*Investigation – What can be done?*

**Presentations (15 mins)**

Break the class into three groups. The article describes three main causes for inflation. Have each group take one cause for inflation and prepare a short presentation focusing on the following key points.

- Describe the cause.
- Give at least one example.
- How would this particular event affect everyday citizens and consumers?
- What could governments do to respond to this?
- What could individuals do to respond to this?

**Tying It All Together:**

Whole Class Discussion: **(5 mins)**

1. Have students share answers from computations and analysis and/or deliver their mini-presentations.
2. How might U.S. inflation be caused by interactions with other countries?
3. How might U.S. inflation influence interactions with other countries?

**Practice Outside of the Classroom:**

Notice rate at which prices around you change. The article states that a healthy rate of inflation might be 1 – 2% a year. Is this what you observe?

☺