

# Explaining how inflation works

Students learn about inflation and buying power by using the Consumer Price Index (CPI) Calculator to compare prices for goods and services in 1960, 1990, and 2019.

## Learning goals

### Big idea

Inflation occurs when the prices of goods and services increase over time.

### Essential questions

- What is inflation?
- What is buying power and how is it related to inflation?

### Objectives


- Analyze how prices and buying power have changed over time
- Learn how inflation might impact you in the future

### NOTE

Please remember to consider your students' accommodations and special needs to ensure that all students are able to participate in a meaningful way.

#### KEY INFORMATION

Building block:

 Executive function

Grade level: Middle school (6–8)

Age range: 11–14

Topic: Spend (Buying things)

School subject: CTE (Career and technical education), Math, Social studies or history

Teaching strategy: Direct instruction

Bloom's Taxonomy level: Understand, Apply

Activity duration: 75–90 minutes

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#### National Standards for Personal Financial Education, 2021

Spending: 4-4, 8-1, 8-4, 12-4

Saving: 8-2, 12-4

Investing: 12-4

Managing credit: 8-1

These standards are cumulative, and topics are not repeated in each grade level. This activity may include information students need to understand before exploring this topic in more detail.

## What students will do

- Watch a video that explains how inflation works.
- Use an online inflation calculator to track inflation over time.

## Preparing for this activity

- While it's not necessary, completing the "Exploring price changes" activity first may make this one more meaningful.
- Print copies of all student materials for each student, or prepare for students to access them electronically.
- Review the Federal Reserve System's "Fed FAQ: What is inflation?" video at <https://www.youtube.com/watch?v=cdx-0UBLnBA>.
  - If time permits, for background information, you can also review the article "What is inflation and how does the Federal Reserve evaluate changes in the rate of inflation?" at [https://www.federalreserve.gov/faqs/economy\\_14419.htm](https://www.federalreserve.gov/faqs/economy_14419.htm).
- Become familiar with the Consumer Price Index (CPI) Inflation Calculator at [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm).
- Become familiar with the U.S. Department of Labor's minimum wage webpage at <https://www.dol.gov/general/topic/wages/minimumwage>.
- Obtain a computer and projector or a smartboard to show the video and the Inflation Calculator to the class.
- Obtain computers or tablets with Internet access so students can access the Inflation Calculator.
- Find out what the current price of a gallon of milk in your area is so you can share it with students.

## What you'll need

### THIS TEACHER GUIDE

- Explaining how inflation works (guide)  
[cfpb\\_building\\_block\\_activities\\_explaining-how-inflation-works\\_guide.pdf](#)
- "Fed FAQ: What is inflation?" video at <https://www.youtube.com/watch?v=cdx-0UBLnBA>
- A computer and projector or a smartboard
- Current price of a gallon of milk in your area

### STUDENT MATERIALS

- Explaining how inflation works  
[cfpb\\_building\\_block\\_activities\\_explaining-how-inflation-works\\_worksheet.pdf](#)
- Consumer Price Index (CPI) Inflation Calculator at [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm)
- The U.S. Department of Labor's minimum wage webpage at <https://www.dol.gov/general/topic/wages/minimumwage>
- Computers or tablets with Internet access

## Exploring key financial concepts

Inflation happens when the prices of goods and services increase over time. Inflation can't be measured by an increase in the cost of one product or service, or even several products or services. Rather, inflation is a general increase in the overall price level of the goods and services in the entire U.S. economy. Inflation can affect buying power, which is the amount of goods and services that can be purchased by a given unit of currency.

The Federal Reserve monitors inflation by keeping a close eye on different price indexes. A price index measures changes in the price of a group of goods and services. It's important to consider more than one price index because different indexes track different products and services.

### TIP

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Because financial products, terms, and laws change, students should be encouraged to always look for the most up-to-date information.

# Teaching this activity

## Whole-class introduction

- Ask students if they've ever noticed that the price of something they want to buy has gone up over time.
  - You can also ask if they've ever heard an adult complain about how high the price of something is today compared to how much it cost in the past.
- Tell students that they'll learn about inflation.
- Explain that inflation occurs when the prices of goods and services increase over time.
- Explain that inflation can affect buying power, which is the amount of goods and services that can be purchased by a given unit of currency.
- Show the "Fed FAQ: What is inflation?" video at <https://www.youtube.com/watch?v=cdx-0UBLnBA>.
- To demonstrate how prices have changed over time, share the following scenario:
  - Explain that the median value of a single-family home in the United States in January 1960 was \$58,600.
    - Make sure that students understand that the median price is the middle point, with half the prices higher and half of the prices lower. It's not the average price.
  - Show students the Inflation Calculator at [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm). Explain that the Inflation Calculator compares buying power at two different points in time.
  - Use the Inflation Calculator to figure out how much buying power (also called purchasing power) \$58,600 translates to in January 2019.
    - Enter \$58,600 in the first field and select "January" and "1960" in the first two pull-down menus.
    - Select "January" and "2019" in the second two pull-down menus and click "Calculate."
    - Show students that \$58,600 in January 1960 has the same buying power as \$503,424 in January 2019.
  - Tell students that the median house price in the United States in 2019 was \$305,400.
  - Ask students to compare that price with the 1960 house's equivalent in buying power in 2019 (\$503,424).

- Given this comparison, ask students whether it's likely to be easier or harder for someone in the United States to be able to buy a house in 1960 than in 2019. Discuss reasons why or why not.
  - Have students reflect on what other things we should consider about how hard or easy buying a house might be in 1960 compared with 2019.
  - Some things they may consider include wages, unemployment rates, interest rates, other necessary monthly expenses, etc.
- Be sure students understand key vocabulary:
  - **Buying power:** Also called purchasing power, it is the amount of goods and services that can be purchased by a given unit of currency, taking into account the effect of inflation.
  - **Consumer Price Index (CPI):** A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Indexes are available for the U.S. and various geographic areas.
  - **Income:** Money earned or received such as wages or salaries, tips, commissions, contracted pay, government transfer payments, dividends on investments, tax refunds, gifts, and inheritances.
  - **Inflation:** Inflation occurs when the prices of goods and services increase over time.
  - **Median:** The middle value in a series of values arranged from smallest to largest.
  - **Wage:** Compensation received by employees for services performed. Usually, wages are computed by multiplying an hourly pay rate by the number of hours worked.

**TIP**

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Visit CFPB's financial education glossary at [consumerfinance.gov/financial-education-glossary/](https://consumerfinance.gov/financial-education-glossary/).

## Individual or group work

- Students can work individually or in groups to complete the worksheet.
- Students will use the line graph on the worksheet to answer questions 1-3.
- Write the current price a gallon of milk on the board. Students will use that information, the Consumer Price Index (CPI) Inflation Calculator, and the U.S. Department of Labor's minimum wage webpage to answer questions 4 and 5.
- Students will work individually to answer the reflection question.

## Wrap-up

- Bring students back together and ask for volunteers to share their answers.
- Ask students to share their answers to the reflection question.

## Suggested next steps

Consider searching for other CFPB activities that address the topics of spending, including buying things. Suggested activities include “Practicing comparison shopping” and “Teaming up to build a budget.”

## Measuring student learning

Students’ answers on their worksheets and during discussion can give you a sense of their understanding.

This answer guide provides answers for the “Explaining how inflation works” worksheet.

**Keep in mind that students’ answers may vary.** The important thing is for students to have reasonable justification for their answers.

## Answer guide

1.				
	How much did you make in one hour?	\$1.00	\$3.80	\$7.25
	Did you earn enough to go to the movies?	Yes	No	No
	How many gallons of milk could you buy?	2	1	2

2. Was the increase in the minimum wage higher or lower than the increase in the price of milk? **It was higher.**

3. Was the increase in the minimum wage higher or lower than the increase in the price of a movie ticket? **It was lower.**

**Answers for questions 4 and 5 will vary based on the current year. Answers to reflection questions will vary as well.**