



TIME HORIZON LESSONS
Recommended for Grades 6–8

Inflation

LESSON 5

Explore how inflation erodes purchasing power over time and why you need to consider inflation when saving for long-term financial goals.

Objective

To help kids identify the effect that inflation has on someone's purchasing power and ability to reach financial goals.

1 Introduce the concept of Inflation as the increase in the price of goods and services over time, which means that long-term financial goals will likely cost more than they do today.

2 Explain that staying on track to reach long-term goals will require an understanding of how inflation works and the effect it has on saving for your financial goals over your time horizon.

3 Define key learnings and vocabulary, such as:

- Inflation is an economic force that reduces purchasing power, meaning that a dollar buys less over time than it does today.
- You must consider inflation when you're setting long-term financial goals.

4 Have your child play a game called "Guess My Price." Below are the 1999 prices for five common items.

INSTRUCTIONS: Draw a line to match it with the 1999 price of each item with the correct price of that item in 2019. Notice the effect of inflation on the price and how the price of some items has increased more than others.

GUESS MY PRICE



ITEM

1999 Price
(20 Years Ago)

2019 Price
(Price Today)

Home

\$191,800.00

\$9.01

Chocolate Bar (1.5-ounce)

\$.50

\$1.31



New Car

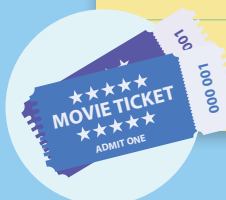
\$20,686.00

\$373,700.00

Milk (1 Gallon)

\$2.88

\$37,185.00



Movie

\$5.06

\$3.28

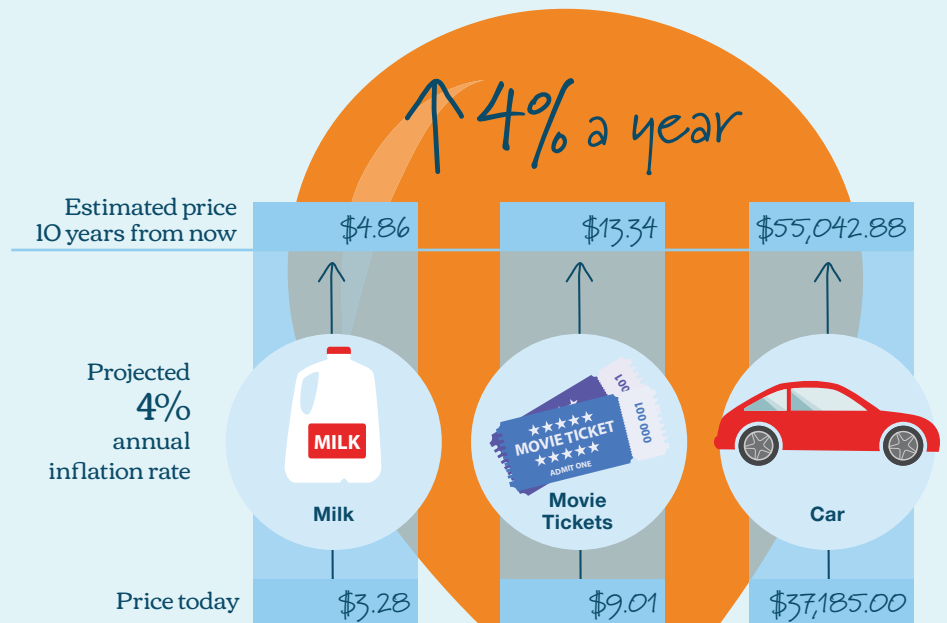


5 Then ask what they think the prices of these items will be 10 years from now. There is no one correct answer, but note that the items are much more expensive than they were 10 years ago. This increase in prices over time is called inflation. If students plan to buy a home in 10 years, it might end up costing a lot more when they're ready to buy.

6 Lead them through the scenario of Nikki's dream of owning a home and how inflation might impact her budget. Explain that owning a home is a long-term commitment and that most people have to save for a down payment and borrow

money to finance a home purchase by taking out a mortgage. Emphasize that you must consider the effects of inflation when you formulate longer-term goals like buying a home, since the cost goes up over time. Guide students in understanding how inflation is calculated.

7 Complete the "When Prices Rise" activity sheet. If your student hasn't learned how to calculate with percentages and decimals yet or need additional instructions, complete the activity sheet together and use calculators.



Name _____

Inflation

When Prices Rise



Nikki is still dreaming about one of her biggest goals—owning her own home—but the reality of inflation is really putting a wrench in things!

She wonders how she can plan for

rising housing prices, along with all the other expenses that come with homeownership, like property taxes, utilities (gas, electricity, and water), and insurance. Plus, as Grandma reminded her, there may be unexpected costs, like a roof repair. Although many mortgages have payments that stay the same for the life of the loan, all the other costs could increase due to inflation.

To calculate the effect of inflation over several years:

1. First, **add 100%** to the percentage increase.
(So, for a 2% inflation rate, use 1.02%.)
2. Then **convert the percentage** to a decimal.
(2% is equivalent to .02.)
3. Finally, **multiply the decimal** times the current cost.
4. For inflation over more than one year, **multiply the calculation for year 1** by the decimal. Repeat this operation—multiplying the result by the decimal once for each year.

Example: A \$200 item has a projected 2% inflation rate. After three years, the cost will be \$212.24 (rounded to the nearest cent). Year 1: $\$200 \times 1.02 = \204 ; Year 2: $\$204 \times 1.02 = \208.08 ; Year 3: $\$208.08 \times 1.02 = \212.24 .

Nikki planned to spend a total of \$1,150 per month for housing. If she takes inflation into account, will \$1,150 be enough for all her housing costs? If not, how much will she need to budget?

Hint: Inflation is an economic force that reduces purchasing power, meaning that a dollar buys less than it used to. Inflation is expressed as a percentage increase. If the price of an item was \$100 on January 1, 2019, and \$110 on January 1, 2020, the annual **inflation rate** for that item is 10%.

NIKKI'S MONTHLY HOUSE BUDGET

Expense Type	Current Year Cost	Projected Annual Inflation Rate	Cost Three Years From Now
Mortgage	\$600	None	_____
Property Tax	\$300	2%	_____
Gas	\$100	1%	_____
Electricity	\$50	2%	_____
Water	\$25	3%	_____
Insurance	\$50	5%	_____
TOTAL	\$1,125		

How does Nikki's budget compare with the final housing costs after inflation?

Answer Key (third column): Mortgage, \$600; Property Tax, \$318.36; Gas, \$103.03; Electricity, \$53.06; Water, \$27.32; Insurance, \$57.88; Total: \$1,159.65. Nikki's housing budget of \$1,150 is sufficient for the current year, but it will be less than her projected costs in the third year, when she will have to increase her housing budget to \$1,160 per month.