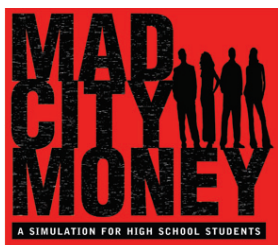


# CAN I MAKE IT ON MY OWN?™

# Teacher's Guide

Adolescence is a transitional period in many ways. "Economic adulthood" promises independence, which for many teenagers is a frightening attraction. *Can I Make It on My Own?* (CIMI) is a set of lessons designed to prepare teenagers for the basic budgeting challenges of the near future.



## Relation to *Mad City Money*

Although CIMI lessons can stand alone, they are designed to use with students who have had their eyes opened by the shock of playing the budgeting simulation *Mad City Money*. See *it in action here*

<http://www.ecb.org/finance/A912Kennedy.html>

This real-world game throws teenagers into an imaginary future with no preparation beyond a quick introduction to writing a check. By struggling to support a fictitious family, students realize on their own the answer to the perennial classroom question: *Why do we have to learn this?*

As a result of participating in *Mad City Money*, teenagers become much more receptive to learning how to budget for the financial challenges of looming adulthood.

## Relation to the HSFPP

*Mad City Money* and *Can I Make It on My Own?* are ideal complements to the NEFE® High School Financial Planning Program® (HSFPP). CIMI's lessons expand on and support HSFPP Unit Two, "Budgeting: Making the Most of Your Money."

<http://hsfpp.nefe.org/>



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# Can I Make It on My Own? Outline

CIMI consists of everything you need to teach students why and how to construct a personal budget that will work for them as newly emancipated young adults. Like *Mad City Money*, the lessons below encourage students to teach themselves and each other through the experience of mutual discovery and discussion rather than lecture.

## The CIMI Student Guide (SG) consists of:

### **Lesson 1: What Does Stuff Really Cost? (SG p. 3)**

Using Consumer Price Index data, students examine recent average prices for basic goods in the real world.

### **Lesson 2: In the Hunt for Consumer Goods (SG p. 8)**

Using contemporary local print ads, students search for the prices of objects that satisfy scavenger hunt criteria, and then find cheaper alternatives, also locally.

### **Lesson 3: Buying Power in Time, and Space (SG p. 10)**

Using Consumer Price Index data and an online calculator, students model the effect of inflation on prices and the value of a dollar. Using Cost-of-Living Index data, students compare the cost of maintaining the same standard of living in different U.S. cities.

### **Lesson 4: Building a Budget (SG p. 14)**

Students learn the components of a budget and practice creating one for a typical young, single adult with financial goals.

## Unit and Lesson Plan Organization

The following features make CIMI lessons as effective and easy to use as possible:

- Prep time estimate and classroom time estimate for each lesson
- Supplemental materials
- Learning objectives, key terms and concepts, instructions, and practice questions
- Downloadable Budget & Expense Record spreadsheet  
[http://buy.cuna.org/download/29469\\_budg\\_sprdsht.xls](http://buy.cuna.org/download/29469_budg_sprdsht.xls)
- Icebreaker: Money Relay Race (p. 23)
- Icebreaker: The George Challenge (p. 25)
- List of national curriculum standards that the unit covers (p. 27)
- Test of comprehension (p. 28, Unit Test answers below)

### **Unit Test Answers**

1-c; 2-a; 3-a; 4-b; 5-d; 6-b; 7-c; 8-a; 9-c; 10-b; 11-d; 12-d; 13-b; 14-c; 15-a.

- Glossary of personal finance and economic terms (Student Guide [SG], p. 19)

# 1 LESSON 1: What Does Stuff *Really* Cost?

## Estimated prep time

15-20 min.

## Estimated classroom time for activities

The Cost of Feeding Your Car: 20-25 min.

The Cost of a Bellyful: 10-25 min.

## Required classroom materials

- SG pp. 3-7
- General purpose calculator
- Internet access through a computer lab or single laptop with projector

## Learning Objectives

After completing Lesson 1, students will be able to:

- Explain how the economic principle of supply and demand affects consumer prices.
- Use government data to compare consumer prices over time and by region.
- Given an hourly rate of take-home pay and a price, calculate the work hours needed to make a given purchase.

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## Key Terms and Concepts

Explain and discuss these terms and definitions as needed, listed in the order in which they might arise or be most easily made clear.

**Law of supply and demand**—the tendency for prices to increase when supply declines or demand increases.

### Discussion

- Would you expect ticket prices for a popular band or an unknown band to be higher? Why? (*More people demanding tickets for the popular band would probably make its tickets more expensive.*)
- How do you think the decision to move a popular band's concert from a large arena to a small nightclub would affect ticket prices? (*Reducing the supply of seats would probably raise those prices.*)

**Gross pay**—rate of pay multiplied by time worked.

**Take-home pay**—gross pay minus deductions such as for taxes and insurance.

## Homework Assignment

Talk to your parents or other relatives about the types [NOT amounts] of deductions from their paychecks.

### Discussion

- List at least four types of deductions with your explanation of each. (*Withholding for federal and state income, FICA [Social Security], and Medicare taxes; savings and pension plan contributions; health insurance premiums; union dues.*)
- How did they feel about these taxes and deductions? (*See Social Security, Medicare definitions. [Discuss as needed.]*)

**Medicare**—a hospital insurance plan, administered by federal and state governments, which pays for certain health care expenses for people age 65 and older. Some younger people with disabilities also qualify.

### Discussion

- Employees and employers both pay a Medicare tax of 1.45% on all of the employees' annual gross income. Unlike FICA (Social Security) tax, there is no limit to the amount of earnings subject to Medicare tax. Why does the government require employers to remove this amount from workers' paychecks, no matter how young they are? (*Presumably every worker hopes to live long enough to reap Medicare benefits. The more workers who are contributing to cover these expenses, the less the burden on any one individual.*)

**Social Security**—a program of the federal government that provides workers and their dependents with retirement, disability, and other payments.

### Discussion

- The money for Social Security payments comes from a tax, usually labeled "FICA" on your paycheck, which employees and employers pay equally. Why is this program sometimes called "social insurance?" (*The pooled contributions of many people fund assistance for eligible people in need.*) Why does the government require employers to remove this amount from workers' paychecks? (*To ensure that adequate funds are on hand to cover promised benefits.*)
- What have you heard in the news about a Social Security crisis? (*Many people fear that promised benefits will exceed funds in the foreseeable future.*)

**U.S. Bureau of Labor Statistics (BLS)**—the office of the federal government that collects, analyzes, and reports employment activity.

*www.bls.gov*

### Discussion

- Why do you think the government collects information about jobs and workers? (*To track how many workers have jobs or lost jobs, to evaluate government programs that support worker training and hiring, to help plan for future spending to encourage business growth and to properly educate the future workforce, etc.*)

# The Cost of Feeding Your Car (SG p. 4)

You can cover both activities of this lesson entirely in class or assign the reading and practice questions as homework, followed by classroom review and discussion.

Point out to students that few prices in our economy fluctuate as much as the price of gasoline.

## Answers to Practice Questions (SG p. 5)

**Question 1-A:** What was the average cost per gallon in the city where *regular gasoline* was most expensive and the least expensive in September?

Most expensive: **\$3.09** (San Francisco Oakland San Jose, CA)

Least expensive: **\$2.31** (Dallas Fort Worth TX)

**Question 1-B:** Assume that your car's gas tank holds 15-gallons. What would it cost to fill your tank in the city where regular gasoline was *least expensive* that month?

Cost to fill tank: **\$34.65** ( $2.31 \times 15$ )

**Question 1-C:** Assume that your take-home pay is \$7.45 an hour. How long would you have to work to earn enough money to fill your tank in Question 1-B?

Work needed to fill tank: **4.65** hours—more than half a workday! ( $34.65 \div 7.45$ )

After students have completed this activity, discuss the answers and the contents of the table as needed.

## Discussion

- What are some examples of how the law of supply and demand can explain an increase in the price of gasoline? (*Increased demand because of vacation season travel, decreased supply because of war or weather damage to production facilities and transportation vehicles, etc.*)
- What are some examples of how the law of supply and demand can explain a decrease in the price of gasoline? (*Decreased demand during a severe winter, increased supply because of increased production, etc.*)
- How does the cost of gasoline in our area compare to the national average in this table? What is the current cost of regular unleaded gasoline in our area?
- Suppose your family car gets 25 miles to the gallon on the highway. How much would a \$1 per gallon increase in the price of gasoline increase the fuel cost of a 1,000-mile vacation trip? ( $\$40 [1,000 \div 25]$ .) How much would the price of a gallon of gasoline have to rise to cause you to cancel a 1,000-mile vacation trip?
- [For the drivers and/or workers in your class, if any:] Do you pay for your own gasoline? Roughly how much do you buy per month? How much would the unit cost of gasoline have to increase to force you to change your driving behavior?

Explain that companies often reimburse employees for the use of their personal cars for business travel. The reimbursement rate they use comes from several sources. The IRS set a reimbursement rate of 50 cents per mile for business travel in 2010.

## Discussion

- ❑ If gasoline costs \$2.50 a gallon, and your car gets 25 miles to the gallon, what is your cost of gasoline per mile? (*10 cents.*)
- ❑ So the business reimbursement rate is meant to cover more than gasoline expense. What are some other things that car owners must spend money on to keep driving? (*Insurance, repairs and maintenance, tires, license fees, etc.*)
- ❑ Mileage reimbursement rates also reflect the fact of a car’s depreciation. What is depreciation and why might an employer be willing to pay for it? (*Depreciation is the loss of value through the “wear and tear” of use. Using your personal car for company business shortens its life, and your employer’s mileage reimbursement is meant to help pay for that.*)
- ❑ What might be a smart way to use mileage reimbursement payments to prepare for the future? (*Save the reimbursement money to help pay for your next car.*)

## Oh Yeah? (SG p. 5)

### Discussion

- ❑ Who would save the most gasoline and money—the Prius owner who improved his regular gas mileage by 10 miles per gallon or the Lamborghini owner who improved his premium gas mileage by 5 miles per gallon? (*The Lamborghini owner.*) In fact, even if the Prius owner stopped driving altogether he wouldn’t save as much gasoline or money as the Lamborghini owner would save by improving his gas mileage from 11 to 16 miles per gallon, which he would accomplish simply by trading in his luxury sports car for a 2010 Ford F-150 4WD Pickup.

Gas Price/ Mileage	Change	1st Car	2nd Car	Savings
Prius	\$2.67; 50 to 60	240 gal. @ \$641	200 gal. @ \$534	40 gal. and \$107
Lamborghini	\$2.91; 11 to 16	1,091 gal. @ \$3,175	750 gal. @ \$2,183	341 gal. and \$992

## The Cost of a Bellyful (SG p. 6)

Assign each student to one of the four regions in the “Average Retail Food Prices” table on page 6 for the purpose of answering Practice Questions 1-D and 1-E.

### Answers to Practice Questions (SG p. 7)

**Question 1-D:** Consider the *higher* of the two average monthly prices for the region your teacher assigns to you from the table on page 6. Then calculate the *most* you would pay for *all* the groceries listed below.

**Total cost of groceries:**

Northeast **\$29.69**      Midwest **\$26.30**      South **\$27.94**      West **\$28.29**

**Question 1-E:** Assume that your take-home pay is \$7.45 an hour. How long would you have to work to earn enough money to buy the groceries listed on page 6?

**Work needed to buy groceries:**

Northeast **3.98 hrs**      Midwest **3.53 hrs**      South **3.75 hrs**      West **3.79 hrs**

After students have completed this activity, discuss the answers and the contents of the table as needed.

## Discussion

- Which region paid the most for the groceries on this list? (*Northeast.*) Which region paid the least? (*Midwest.*)
- The national average maximum cost of these groceries for that two-month period is \$27.64. Was the region where we live above or below the national average at that time?
- What do you notice about the prices of potatoes and potato chips? (*The price of one pound of potatoes is roughly one-seventh of the price of one pound of potato chips.*) Why do you think this is? (*Food processing, packaging, and advertising add a lot to the raw material cost.*)
- How might this affect you as a food shopper? (*You can save a lot of money by avoiding highly processed foods in favor of do-it-yourself cooking with raw materials.*) Has anyone in class ever made or eaten pizza made from scratch? How did it compare in price and taste to frozen or restaurant pizza?

## Oh Yeah? (SG p. 7)

The 2008 average annual cost to raise a 17-year-old only child in the example (SG p. 7) is:

- \$11,180 (single-parent household with annual before-tax income < \$56,870)
- \$16,850 (two-parent household with annual before-tax income of \$56,870 to \$98,470).

The U.S. Dept. of Agriculture's (USDA) online Cost of Raising a Child Calculator computes the one-year cost for a child depending on age and household income at

[www.cnpp.usda.gov/calculatorintro.htm](http://www.cnpp.usda.gov/calculatorintro.htm)

Time permitting, have students use the calculator to compare different family configurations and figure out the costs for their own families.

## Discussion

- The USDA's figures show that older children are more expensive than younger children. What are some child-rearing costs that might increase with age, and why? (*Older children eat more, wear more-expensive clothes, take part in more activities, etc.*)
- People who teach personal finance often focus on the idea of how "needs vs. wants" influence consumer choice and spending for essential items [needs] and desired items [wants]. Assigning specific goods and services to these categories can be tricky, however. Which of the following do you consider needs and which wants? Food for breakfast? Snack foods? Movie ticket? Cell phone? Car? [Ask students for examples of other consumer goods. Allow students to discuss whether they represent needs or wants, and to vote by a show of hands.]

Explain that the term "standard of living" and some of the factors that affect quality of life, such as goods and services, are more controllable than others, such as a local crime rate.

## Discussion

- The USDA estimates that the total cost of raising a child born in 2008 to age 18 will range from \$210,340 to \$483,750, depending on the parents' household income. What does this say to you about needs vs. wants? (*When people have more money to spend they might define more wants as needs and choose more-expensive versions of what they buy.*)
- How do you think budgeting might help improve a person's standard of living? (*By cutting back on wasteful or unsatisfying spending to free up money for more rewarding purchases.*)

Mention that you'll be returning to the idea of standard of living later in the unit.

# 2 LESSON 2: In the Hunt for Consumer Goods

## Estimated prep time

15-20 min.

## Estimated classroom time

Shopping Scavenger Hunt: 25-30 min.

Scavenging for Bargains: 25-30 min.

## Required classroom materials

- SG pp. 8-9
- Enough advertising circulars to give students ample variety—collect from your local Sunday newspaper, giant retail stores, and/or online sources such as [www.bellaonline.com/articles/art4990.asp](http://www.bellaonline.com/articles/art4990.asp) or [www.sundaysaver.com](http://www.sundaysaver.com)
- General purpose calculator
- Internet access through a computer lab or single laptop with projector

## Learning Objectives

After completing Lesson 2, students will be able to:

- Use local advertising to determine and compare prices for consumer goods.

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## Key Terms and Concepts

Explain and discuss these terms and definitions as needed.

**Unit cost**—total price divided by the number of units of measurement (e.g. ounces, milliliters, etc.)

## Shopping Scavenger Hunt (SG p.8)

You can complete both activities of this lesson entirely in class or assign them as homework, followed by classroom review and discussion. If assigned as homework, students can work on both activities individually or in teams.

Students work from advertising circulars, such as those inserted in the local newspaper or set out for shoppers in stores, to hunt for items that fulfill the scavenger hunt criteria. Students must find a product that fits the description in each row, list it in column A, and enter its price in column B.

Students can work singly or in teams, competing against each other and/or the clock to hunt down as many of the scavenger targets as possible. Students should share the ad circulars.

### Provide the following hints or instructions, as needed:

- “Something sold in quantities equal to a fortnight minus an arachnid’s limbs” means that students must find “Something sold in quantities of 6 [14 – 8].”
- “Something QWERTY” means that students must find “Something that includes a standard keyboard.”
- “Something with a XXXBXXXUXXTXXOXNXS” means that students must ignore the Xs and find “Something with BUTTONS.”
- “Something with a c\_l\_br\_t\_ \_nd\_rs\_m\_nt” means that students must add vowels and find “Something with a celebrity endorsement.”
- “Something with “mandibular appurtenances” means that students must translate the fancy words and find “Something with teeth.”
- “A kitchen appliance with built-in chronometer” means that students must find “A kitchen appliance that includes a clock.”
- “Something with 943357 (consult your phone)” means that students must convert each numeral to a letter on a standard telephone keypad to find “Something with wheels.”
- “[lit bomb fuse] – f + d + [carpet] – [hand rubbing dog’s head]” means students must solve the rebus picture puzzle to find a “used car.”

After completing the Shopping Scavenger Hunt, allow students to share their answers. Students should be able to defend their solutions if challenged.

## Scavenging for Bargains (SG p. 9)

Instruct students that they are to select *any ten items* from the completed Shopping Scavenger Hunt list. Then, using local advertising or by visiting local stores, they must identify one cheaper brand of each of the ten items. Use unit costs to compare similar items in different sized containers.

### Discussion

- Who can explain how to calculate the unit cost of a food measured in ounces? (*The food’s total price divided by the number of ounces it is.*) What’s the unit cost of a pound of coffee that sells for \$9.75? [Write on the board  $\$9.75 \div 16 \text{ oz.} = \$0.61 \text{ per oz.}$ ]
- What’s the unit cost of a quart of milk that sells for \$1.29? [Write on the board  $\$1.29 \div 32 \text{ fluid oz.} = \$0.04 \text{ per oz.}$ ]

## Answers to Practice Questions (SG p. 9)

Note: You might prefer to solve these two problems as a class.

**Question 2-A:** Which has a lower unit cost—one six-pack of 24-oz. bottles of soda that sells for \$3 or four liters of soda that sell for \$2.50 as a group? [One liter = 33.8 fluid oz.]

The unit cost of six 24-oz. bottles that sell for \$3  
=  $3 \div (6 \times 24)$   
= **\$0.0208** per fluid oz.

The unit cost of four liters of soda that sell for \$2.50  
=  $2.5 \div (4 \times 33.8)$   
= **\$0.0185** per fluid oz., which is less than the unit cost of the soda six-pack

**Question 2-B:** In February 2009, the average price of gasoline in the U.S. was \$2.23 per gallon. How did that compare to the Netherlands, where it sold for \$1.65 per liter? [One gallon = 3.79 liters]

The per gallon price of gasoline at \$1.65 per liter  
=  $1.65 \times 3.79$   
= **\$6.25** per gallon, which was the highest retail price in the world at the time

Students must list the ten alternative items in the appropriate rows in column C and their prices in column D. After students have completed the Scavenging for Bargains activity, discuss the answers as needed.

### Discussion

- How difficult was it to find cheaper alternatives? Where did you look? What was the most you would have saved on a single item you chose by buying its cheaper alternative?

## Oh Yeah? (SG p. 9)

Allow students to share their guesses about the major spending categories before revealing them.

<b>Housing and utilities</b>	<b>31.9%</b>
Other	18.4%
<b>Transportation</b>	<b>15.4%</b>
<b>Food</b>	<b>13.3%</b>
Education	7.7%
Entertainment	5.0%
Clothing	3.3%
Travel	2.9%
Health care	2.1%

### Discussion

- Which of the categories listed contain expenses that would be the most difficult to reduce? Which would be the easiest?

## Homework Assignment

Share the young single adult spending chart with your parents to see how the distribution of expense percentages compares to their experience in your home.

### Discussion

- Are housing, transportation, and food the largest spending categories for your family? In the same order? If the order is different, consider your family's size to suggest reasons for the difference.

# 3 LESSON 3: Buying Power in Time and Space

## Estimated prep time

25-30 min.

## Estimated classroom time

When What Goes Up, Keeps Going Up: 20-30 min.

Some Moves Are Better Than Others: 20-30 min.

## Required classroom materials

- SG pp. 10-13
- General purpose calculator
- Internet access through a computer lab or single laptop with projector

## Learning objectives

After completing Lesson 3, students will be able to:

- Explain the concept of inflation and use an online calculator to determine its effect on consumers' buying power over time.
- Explain the difference between standard of living and cost of living and use an online calculator to compare consumers' buying power in different regions of the country.

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## Key Terms and Concepts

Explain and discuss these terms and definitions as needed.

**Inflation**—the general overall increase in prices over time; the opposite of deflation. Inflation is a force that's the result of a kind of chicken-and-the-egg cycle. In a simplified model, rising production costs (including for raw materials, energy, labor, transportation, etc.) lead producers to raise prices which lead workers to demand higher wages, which add to rising production costs, and so on.

### Discussion

- The federal government's Bureau of Labor Statistics calculates the inflation rate, the percentage by which prices overall rose during a given period. If the annual inflation rate was 3% for last year, how much money would you need this year to buy what cost \$100 last year? (\$103.)

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**Consumer Price Index (CPI)**—a measure of the change in average prices of a set of goods and services compared to a base period. A positive change in the CPI from one year to the next is the rate of inflation.

[www.bls.gov/CPI](http://www.bls.gov/CPI)

After students solve the practice questions on paper, they'll be able use the online inflation calculator at

[http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm)

For an explanation of the mathematics of CPI comparisons, see

[www.bls.gov/cpi/cpimathfs.pdf](http://www.bls.gov/cpi/cpimathfs.pdf)

**Buying power**—the amount of goods and services that a given amount of money will buy.

### Discussion

- What is the effect of inflation on buying power? (*Buying power drops as rising prices mean that each dollar can buy less and less.*)

**Cost of living**—the value of goods and services needed to achieve a certain level of comfort.

**Standard of living**—the value of what an individual considers it takes for a certain quality of life; it includes a wide range of factors, from the crime rate in a certain locale to the ability to acquire goods and services.

**Cost-of-Living Index (COLI)**—a measure of the relative expense of maintaining the same standard of living in two different cities.

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## Say What? (SG p.11)

Albert Einstein, the original time and space guy, once said, "Sometimes one pays most for the things one gets for nothing."

### Discussion

- What does Einstein's statement mean to you? Can you think of an example? (*A "free" offer can come with "strings attached" that turn out to be very expensive, such as accepting a free T-shirt for signing up for a high-interest rate credit card.*) [If appropriate for your class, point out that this also is what happens when drug dealers build long-term demand by offering "free" samples of addictive drugs to non-users.]

## When What Goes Up, Keeps Going Up (SG p.10)

You can complete both activities of this lesson entirely in class or assign them as homework, followed by classroom review and discussion. Because the concepts might be less familiar, consider pairing weaker students with stronger students.

Introduce the concepts of standard of living and cost of living and how they help us estimate our future financial needs. Emphasize that standard of living depends on individual preferences and resources that are not always measurable. Emphasize that cost of living indices are tied to a set of goods and services that individuals might or might not buy.

### Discussion

- How many of you consider having a cell phone essential to your life? What would happen to your standard of living if you had to give up your cell phone? (*Standard of living would decrease.*)
- What are some other things that are important to your standard of living? Which ones have out-of-pocket costs and which ones have costs borne by the community?

Introduce the concept of inflation. Explain to students that while prices for individual items can move up or down for many reasons—for example, competition between stores, faddish popularity—prices in general usually keep rising. Therefore, the cost of living—the cost of maintaining your standard of living—will in general keep going up, forcing you to adjust your budget regularly.

### Discussion

- How many of you are responsible for paying for your cell phone service? How much of an increase in cell phone bill service could you handle before it began to hurt?

Each month, the Bureau of Labor Statistics gathers average prices for a set of goods and services. It picks a time to act as a reference against which to compare other years and sets the Consumer Price Index (CPI) number for that base period at 100. Comparing average annual CPI numbers for different years shows the relative buying power of the dollar over time.

Direct students to in the “Average Annual CPI Figures” table (SG p. 10 ). Explain that the index numbers show how prices in general change over time compared to other years and to the base period of 1982-84, for which the CPI is 100. Indices above 100 reflect periods of higher prices in relation to the base period, while indices below 100 indicate the opposite.

The CPI for 1990 is 130.7. This means that overall average prices in 1990 were 30.7% higher than they were in 1982-84 [ $130.7 \div 100$ , then  $- 1$ ]. In the same way, overall average prices in 1991 were 4.2% higher than 1990 prices [ $136.2 \div 130.7$ , then  $- 1$ ].

### Discussion

- What is different about the average annual CPI number 2009? (*It's the only year shown in which the CPI was lower than the year before.*)
- What might that indicate? (*A CPI number that's higher than the year before indicates a rise in overall prices. A CPI number that's lower than the year before indicates a fall in overall prices.*)

Remind students that an overall increase in prices is called inflation. Tell them that the word for an overall decrease in prices is deflation.

### Discussion

- What might have caused deflation in these years? (*High unemployment and fear of job loss led many consumers to cut back on spending. The reduced demand caused prices to fall.*)

Explain that economists don't like high inflation rates any more than consumers do, but what they fear more than mild inflation is deflation.

### Discussion

- With mild inflation, consumers have an incentive to keep buying because things will probably be more expensive if they wait. Why do you think deflation could be worse for businesses than mild inflation? (*With deflation, consumers have an incentive to wait to buy if they expect prices to keep falling. The reduced demand that comes with deflation makes it harder for companies to cover costs and stay in business.*)

Point out that deflation is uncommon and that inflation will be a fact of life for most of the rest of their lives.

### Discussion

- How will you have to adjust to inflation when you're living on your own? (*By trying to earn more each year to stay ahead of price increases, by finding investments that beat the rate of inflation, by regularly looking for ways to save money while shopping, etc.*)

## Answers to Practice Questions (SG p. 11)

**Question 3-A:** The novelist F. Scott Fitzgerald earned as much as \$4,000 for a short story in 1930. Big deal, you say? Use a buying power calculation to see what \$4,000 in 1930 (average annual CPI 16.7) would be worth in 2009 [CPI from table on SG p. 10].

$$\begin{aligned} & 2009 \text{ CPI} \div 1930 \text{ CPI} \times 1930 \text{ earnings} \\ & = 214.5 \div 16.7 \times \$4,000 \\ & = \text{Fitzgerald's } \$4,000 \text{ had the same buying power in 1930 as } \mathbf{\$51,377} \text{ in 2009.} \end{aligned}$$

**Question 3-B:** First weekend earnings for the 2009 movie "Harry Potter and the Half-Blood Prince" were \$77,835,727 and for the 2002 movie "Spider-Man" were \$71,417,527. Did the wizard beat the arachnid, or not? Calculate Harry's 2009 first-weekend income in 2002 dollars to see which movie earned more [CPIs in table on SG p. 10].

$$\begin{aligned} & 2002 \text{ CPI} \div 2009 \text{ CPI} \times 2009 \text{ earnings} \\ & = 179.9 \div 214.5 \times \$77,835,727 \\ & = \text{Harry's } \$77,835,727 \text{ in 2009 had the same buying power as } \mathbf{\$65,280,403} \text{ in 2002, less} \\ & \text{than Spider-Man's } \$71 \text{ million at the time.} \end{aligned}$$

**Question 3-C:** Use the BLS online calculator

[http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm)

to find a match in buying power for each given amount.

Given Year	Given Amount	Has the same buying power as	Comparison Year	Comparison Amount
1969	\$25,000		1998	<b>\$111,035</b>
1941	\$111,045		1986	<b>\$827,927</b>
2005	\$80,000		1953	<b>\$10,937</b>
1998	\$43,815		1922	<b>\$3,769</b>
2009	\$1,000		Year you were born	<b>1992 — \$654</b> <b>1993 — \$674</b> <b>1994 — \$691</b> <b>1995 — \$710</b> <b>1996 — \$731</b> <b>1997 — \$748</b> <b>1998 — \$760</b> <b>1999 — \$777</b>

# Some Moves are Better Than Others

(SG p.12)

Explain that the U.S. Census Bureau figures show that 35.2 million people moved in 2008. Although the total number of people who moved in 2008 was the smallest in 46 years, it still represents more than *one of eight residents!*

## Discussion

- ❑ Given what you've seen about grocery prices across different regions of the country, how do you think your standard of living might change if your income didn't change when you moved? (*It might get better or worse, depending what the move did to change the buying power of your money.*)
- ❑ How might using COLI numbers help you decide whether to take a job in a distant city? (*Show you whether the new job would pay enough in the new city to allow you to match your current standard of living where you now are.*)

Show students that they can use the numbers in the “Cost-of-Living Comparisons” table (SG p. 12) to compare buying power in two different cities the same way that they used CPI numbers in the “Average Annual CPI Figures” table (SG p. 10) to compare buying power in two different years.

Remind students that the numbers that CPI and COLI calculators generate are estimates. They will not necessarily apply to prices for individual goods and services or costs associated with living in individual neighborhoods. But as estimates, they can help consumers prepare for change and make better decisions about spending behavior.

## Answers to Practice Questions (SG p.13)

### Question 3-D

Brooklyn COLI ÷ Manhattan COLI x Manhattan income =  $177.2 \div 214.7 \times \$125,000$

A street mime living in downtown Manhattan on \$125,000 a year would need to earn only **\$103,167** to have the same standard of living in Brooklyn.

### Question 3-E

Use either the CNNMoney COLI calculator at

<http://cgi.money.cnn.com/tools/costofliving/costofliving.html>

or the Bankrate calculator at

<http://www.bankrate.com/calculators/savings/moving-cost-of-living-calculator.aspx>

to make the comparisons in the table (SG p.13). Answers will vary depending on the calculator and when it was used.

## Oh Yeah? (SG p. 13)

According to the U.S. Census Bureau (2008), about 1 in 6 Americans moves each year, with young adults in their twenties moving most frequently. The average American moves 11.7 times in a lifetime.

## Homework Assignment

Ask a relative or friend in another state to give you unit prices for the following items—regular unleaded gasoline, basic cable television service, and your favorite breakfast food—and compare them to local prices.

# 4 LESSON 4: Building a Budget

## Estimated prep time

20-30 min.

## Estimated classroom time

Keeping Your Balance: 30-45 min.

Help Clare Make It on Her Own: 30-40 min.

## Required classroom materials

- CIMI Student Guide, pp 14-18.

## Learning objectives

After completing Lesson 3, students will be able to:

- Identify major personal spending categories and classify family expenses as examples of fixed, variable, or periodic spending.
- Explain the concept of “pay yourself first” and the reason to treat income saved each month as a (future) expense.
- Given a set of income and expense figures, correctly construct a balanced budget.
- Use a spreadsheet to create a personal budget.

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## Lesson 4: Key Terms and Concepts

Explain and discuss these terms and definitions as needed.

**Budget**—a plan for using income to pay expenses and save for the future; also called a spending plan.

**Fixed expenses**—costs that usually don’t change from month to month.

### Discussion

- What are some fixed expenses that families have? (*Rent or mortgage, car loan, Internet and TV, health insurance, etc.*)

**Variable expenses**—costs that change from month to month, often under the budgeter’s control to some degree.

### Discussion

- What are some variable expenses that families have? (*Food, clothing, utilities [unless on a “utility budget plan”], gasoline, movie rentals, etc.*)

.....

**Periodic expenses**—costs that occur less often than monthly.

**Discussion**

- What are some periodic expenses that families have? (*Car and homeowner's insurance; school tuition, books, and supplies; vacation, etc.*)

**Emergency expenses**—costs that are unpredictable, but could be serious and often must be paid on short notice.

**Discussion**

- What are some emergency expenses that families have? (*Car repairs, uninsured illness, uninsured property damage, furnace and appliance repairs, etc.*)

**Emergency fund**—three to six months' expenses set aside in case of job loss or unexpected expenses.

**Discretionary spending**—costs that are purely a matter of choice and the budgeter's control.

**Surplus**—income remaining after all expenses for a given period are paid.

**Discussion**

- What are some things you can do with a budget surplus? (*Reward yourself with extra spending, paying off debt early, investing it to make more money.*)

**Deficit**—an income shortage.

**Discussion**

- What are some ways consumers respond to a monthly budget deficit? (*Cut unnecessary spending, pay bills with a credit card, bounce checks, ignore bills.*)
- What are some negative consequences of paying bills with a credit card? (*Charging more than the card agreement allows and paying over-the-limit fees, paying more for purchases if you don't pay in full when the bill comes due each month, taking on more debt than you can afford.*)
- What are some negative consequences of bouncing checks to pay bills or ignoring bills? (*Paying overdraft penalties, being unwelcome in local stores, harming your credit rating, hearing from collection agencies.*)

**Balanced budget**—a spending plan in which total income and total expenses are equal.

# Keeping Your Balance (SG p. 14)

For best results, have the entire class work through Keeping Your Balance (SG p.14) together to ensure that all students thoroughly understand the components of a balanced budget. Similarly, have students work in teams of two or three to complete Help Clare Make It on Her Own (SG p. 15) for full-group review and discussion.

Discuss the key terms and concepts as they pertain to Components of a Balanced Budget (SG p. 14).” Students should note examples of the different kinds of expense items as they arise during the class discussion.

## Discussion

- What is a windfall? (*Money that comes to you unexpectedly, such as found money or a gift.*)
- Raise your hand if you receive a weekly or monthly allowance from your parents? Why do you think an allowance should be included in your personal budget while a windfall such as gift money should not? (*An allowance is a regular payment that you can count on; gifts are uncertain and unpredictable amounts that you can't count on.*)
- Why is saving windfall money a good idea? (*Because you weren't expecting it, you won't miss it if you set it aside; windfalls can help you reach a savings goal faster.*)
- How many of you have monthly investment income? Even if you're only earning interest from a savings or checking account, then you have investment income. If you don't need it to help cover expenses, what is a good thing to do with it? (*Let it accumulate in the account to earn more interest until you need it.*)
- Experts recommend that you have an amount equal to three to six months' worth of expenses in an emergency savings fund. Why can you think of this as “self-insurance for a rainy day?” (*In case of bad luck such as a car accident or job layoff, you would draw on the emergency fund temporarily just as if it were an insurance policy.*)
- Suppose that your annual take-home pay is \$22,000. How would you budget to build a six-month emergency fund over the course of five years? (*Set aside \$183 as a monthly expense [ $\$22,000 \div 2 \div (5 \times 12)$ ].*)
- Suppose you have to pay \$720 twice a year for car insurance. How would you deal with that obligation in a monthly budget? (*Set aside \$120 as a monthly expense [ $720 \div 6$ ].*)
- Why do you think savings appears on the expense side of the budget? (*Money saved is set aside for future spending. Considering it an expense now means the dollars will be there when you need them.*)
- Budgeting experts advise consumers to “pay yourself first.” What does this mean? (*Set aside the amount you've budgeted to save from your paycheck before any discretionary spending to make sure that you stick to your financial goals.*)
- How can the financial services known as “direct deposit” and “automatic transfer” help you pay yourself first? (*Direct deposit automatically sends your take-home pay directly to your financial institution. Automatic transfer allows you to instruct your financial institution to routinely move part of your paycheck into one or more saving accounts for your goals.*)
- Suppose you want to save \$5,000 to use as a down payment to buy a used car in two-and-a-half years. How would you deal with that financial goal in a monthly budget? (*Set aside \$167 as a monthly expense [ $\$5,000 \div 30$ ].*)

- ❑ Suppose your cell phone bill increased by \$25 a month, creating a budget deficit. What are two things you could do to rebalance your budget? (*Increase income by \$25 a month; cut other expenses by \$25 a month and use the money saved to pay the new phone bill; shop for a better phone deal.*)
- ❑ Suppose you make your last \$250 monthly car payment, creating a \$250 budget surplus the following month. What's a better way to rebalance your budget than increasing your monthly spending by \$250? (*Apply the extra money to other financial saving goals.*)
- ❑ What's the connection between variable expenses and discretionary spending? (*Variable expenses change from month to month and include both essential [e.g. utilities] and non-essential spending [e.g. entertainment]. Discretionary spending refers to all non-essential purchases, which may or may not be variable.*)

## Oh Yeah? (SG p.16)

### Discussion

- ❑ The Sports Illustrated article included these examples: Hall of Fame linebacker Derrick Thomas earned an estimated \$30 million playing football for the Kansas City Chiefs and had only \$1 million in assets when he died in a car crash at age 33; former basketball guard Kenny Anderson filed for bankruptcy in 2005 after earning an estimated \$60 million; former baseball slugger Jack Clark filed for bankruptcy in 1992, listing debts of \$6.7 million. How do you think these athletes get in such bad financial shape? (*Wild spending, poor financial recordkeeping, bad investments, fraud, expensive divorce settlements, etc.*) P.S. When Clark declared bankruptcy, he owed money on 17 of 18 cars. Anderson admitted spending \$41,000 a month at one point, including child support, mortgage payments on his and his mother's houses, and \$10,000 of what he called "hanging-out money." Anderson also regularly gave up to \$5,000 at a time to friends and relatives.
- ❑ Why do you think athletes are so prone to financial ruin? (*With a single-minded focus on sports, athletes gain little knowledge of personal finance and are dependent on "experts" to manage their money; wealth makes athletes favorite targets of scam artists; athletes are competitive and more likely to "swing for the fences" with investments, especially because their careers are so short compared to other celebrities; they attract "hangers on," who act as financial parasites, etc.*)

## Help Clare Make it on Her Own (SG p. 15)

Set up the activity by explaining that budgeting by the month is most common. A monthly budget is manageable and easily accommodates income and expenses that occur daily, weekly, semi-monthly, and monthly.

To prepare students for this activity, call their attention to the “Income per Period” column in the “Clare’s Budget Spreadsheet” (SG p. 16). As the exercise demonstrates, a consumer can enter in each income row an hourly pay rate or a single lump sum payment in the “Income per Period” column. The number of hours or payments goes in the “Periods per Month” column. The product of the two numbers in each row is the “Income per Month” from that income source.

### Answers to Practice Questions (SG pp. 15 and 17)

**Question 4-A:** Suppose your take-home pay as a translator of crossword puzzles into Greek is \$104 per week. How would you fill in an income row of “Clare’s Budget Spreadsheet?”

$$\begin{aligned} \text{Amount per Period} \times \text{Periods per Month} &= \text{Income per Month} \\ &= \$104 \times 4 \\ &= \mathbf{\$416} \text{ income per month as a translator} \end{aligned}$$

**Question 4-B:** Suppose you earn \$11 an hour after taxes by giving cats pedicures. If you work 10 hours a week, what would you put in an income row of “Clare’s Budget Spreadsheet?”

$$\begin{aligned} \text{Amount per Period} \times \text{Periods per Month} &= \text{Income per Month} \\ &= \$11 \times 4 \times 40 \\ &= \mathbf{\$440} \text{ income per month as a cat pedicurist} \end{aligned}$$

As “Clare’s Budget Spreadsheet” demonstrates, a consumer can enter in each expense row the cost of a single item or purchase total in the “Amount per Purchase” column. The number of times that expense occurs goes in “Purchases per Month” column. The product of the two numbers in each row is the “Expense per Month” in that category.

Before students fill in “Clare’s Budget Spreadsheet,” you might want to make the following points about how her situation might apply to them.

### Discussion

- Remember the term for pay before taxes and other deductions? (*Gross pay.*) And the term for pay minus taxes and other deductions? (*Take-home pay.*) Which is represented by the amount on a paycheck from an employer? (*Take-home pay.*)

Point out that for simplicity this budget exercise assumes that taxes and other deductions have already been subtracted from all of Clare’s income amounts.

### Discussion

- Suppose you’re self-employed, like Clare in this exercise. Then which term applies to the amount on the check a self-employed person receives for services rendered? (*Gross pay.*) Self-employed people are required to pay estimated income taxes quarterly. What term applies to a regular expense that occurs less often than monthly? (*Periodic expense.*) Then how should a self-employed person budget to pay estimated quarterly income taxes? (*Set aside enough each month to cover the expected tax when it comes due.*)

**Question 4-C:** Suppose you buy two new songs for \$1.25 each to help get you through each tedious working day at the Chewing Gum Recycling Plant. If you work an average of 15 days a month, how would you fill in an expense row of “Clare’s Budget Spreadsheet?”

Amount per Purchase x Purchases per Month = Expense per Month  
 = \$1.25 x 2 x 15  
 = **\$37.50** cost per month for recycling tedious-relief songs

**Question 4-D:** Suppose it costs you \$48 every eight months to replace the wheels on your tandem skateboard. What would you put in an expense row of “Clare’s Budget Spreadsheet?”

Amount per Purchase x Purchases per Month = Expense per Month  
 = \$48 x 1/8  
 = **\$6** set aside per month for wheel replacement

Have students complete “Clare’s Budget Spreadsheet” (SG p. 16) as a class or allow students to work individually or in teams of two or three. Explain that students should fill out all income and expense lines, then put the remaining income in the Savings line to make total expenses balance total income.

**Question 4-E:** Now let’s look at how Clare manages her money. Check each item as you enter it in “Clare’s Budget Spreadsheet.”

**Discussion**

- What is Clare’s total monthly income? (\$1,302.60) What is Clare’s total monthly expense, including her apartment savings, but before filling in the “Saving for a car” line? (\$1,154.90) When Clare has covered her expenses, how much will she be able to save for a car each month? (\$147.70)
- What expenses do you think Clare can most easily cut to increase the amount she saves each month? [Answers will differ, but should center on variable spending, such as for lunch.]

## Clare’s Budget Spreadsheet

Source of Income	Amount per Period	Periods per Month	Income per Month	Type of Expense per Month	Amount per Month	Purchases per Month	Expense
Greenhouse	\$8.30	22	\$182.60	Parking	\$1.50	12	\$18.00
Plant service	\$350.00	1	\$350.00	Gasoline	\$28.00	3	\$84.00
Plant service	\$320.00	1	\$320.00	Movies	\$12.00	4	\$48.00
Plant service	\$225.00	2	\$450.00	Food	\$3.50	30	\$105.00
				Volleyball expense	\$15.00	2	\$30.00
				Plant service expense	\$211.79	1	\$211.79
				Rent	\$50.00	4	\$200.00
				Auto insurance	\$1,299.00	1/12	\$108.25
				College tuition	\$450.00	1/6	\$75.00
				Textbooks	\$120.00	1/6	\$20.00
				Computer loan	\$72.36	1	\$72.36
				Emergency fund	\$35.00	2	\$70.00
				Saving for apartment	\$1,350.00	1/12	\$112.50
				Saving for car	\$147.70	1	\$147.70
<b>Total income</b>			\$1,302.60	<b>Total expense</b>			\$1,302.60

### Oh, Yeah? (SG p. 18)

**Answers:**

1-32%; 2-75%; 3-34% (22%, if the line jumper knows the old lady); 4-30%; 5-60%; 6-58%; 7-21%; 8-20%; 9-67%; 10-48%.

## Conclusion

Give students the Unit Test, and discuss the answers.

The Student Guide includes a blank budget form for students to create their own spending and saving plans. “Budget & Expense-Record Spreadsheet,” a downloadable Excel file, contains a personal budget like the one Clare uses, plus worksheets that allow weekly expense tracking. Download it at [http://buy.cuna.org/download/29469\\_budg\\_sprdsht.xls](http://buy.cuna.org/download/29469_budg_sprdsht.xls)

**Note:** Each page of the “Budget & Expense-Record Spreadsheet” is protected to prevent accidental erasure of formulas. There is no password, however. To make changes, click Tools, Protection, Unprotect Sheet.

You also may download this Teacher’s Guide at [http://buy.cuna.or/download/29469\\_tchr\\_guide.pdf](http://buy.cuna.or/download/29469_tchr_guide.pdf)

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## Credits

**Philip Heckman**, CUNA’s director of youth programs, is solely responsible for any errors or omissions, which you can report to him at [pheckman@cuna.coop](mailto:pheckman@cuna.coop).

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# Money Relay Race

## Purpose

Demonstrate in a playful way how our many terms and synonyms for money reflect its importance in society, preparing students to discuss costs and budgeting.

## Estimated prep time

10-20 min.

## Estimated classroom time

10-20 min.

## Required classroom materials

- Large sheets of blank paper (flip chart size)
- Colored markers
- Masking tape

## Preparation

1. Write the alphabet in two columns on one sheet for each student team; circle the X each time.
2. Tape the sheets to one wall at least 5 feet apart.
3. Place a piece of tape on the floor in front of each sheet an equal distance (at least 5 feet) from the wall. Make sure there's enough space to allow a line of students to form behind the tape.

## Instructions

1. Divide the class into teams of about six each (teams do not need the same number of students).
2. Have each team line up perpendicular to the wall in front of a sheet, with the first person standing behind the tape on the floor.
3. Pass out one colored marker to the first person on each team.
4. Explain that teams will race to complete a list—in any order—according to your instructions (to be revealed in step #9). Each list must have one and only one item per letter of the alphabet, starting with that letter, *except that*:
  - 4a. For items consisting of more than one word, the first word must start with that letter.
  - 4b. For the letter "X," an item may have that letter in any position.
5. Spelling and handwriting are important only when items are unreadable.
6. When you say "Go," the first student in each line will hurry to his team's sheet and writes one item next to one letter, according to the topic you provide (to be revealed in step #9).
7. The first student then hurries back to the end of his team's line, handing the marker to the second student in line as he goes.
  - 7a. In turn, one by one, each student on the team takes the marker *before* crossing the tape on the floor and adds an item for a different letter. Students continue to rotate to the head of the line and take turns expanding the list until you say "Time." (Allow the flow of the game to determine when to give a 15-second warning before time is up.)
  - 7b. A student who can't think of a word that begins with any of the remaining letters can say "Pass," but *only after* receiving the marker and touching the sheet.

8. The team that lists the most items is the winner, provided that its items are reasonably legible (see #5) and appropriate to the topic (see #9). You are the sole arbiter and your rulings are final.
9. Only after making sure that everyone understands how the game works, announce the topic: *Names for money*. NOTE: Allow slang (e.g. 5-Spot, buck, dead presidents), denominations (e.g. quarter), and foreign currency (e.g. peso, Euro, rial).

### **Discussion**

- What did you learn from the race? (*We have a lot of names for money; some names have been in use for a long time, some are new, some were popular for a while until they went out of style.*) Why do you think we ran the race? (*To get us thinking about how much we talk about money and how important it is in our lives.*)

### **Bonus Round**

If desired, you can re-run the race on the same sheets, with teams using different colored markers than they used the first time. Teams must create a second list, supplying a *different* money term for each letter.

### **Alternative for Limited Space**

If there is no room for students to line up, they can do this activity at their seats. Pair students with a single sheet of paper and one pencil. Have one student in each pair list the alphabet on the paper.

Give instructions #4 and #5. Explain that the students in each pair will take turns completing their list on a topic that you will provide in a minute. Teammates will pass the pencil and paper back and forth to write one item at a time.

A student who can't think of a word that begins with any of the remaining letters can say "Pass," but only after receiving the pencil and paper and placing them both on the desk or tabletop.

Give instructions #8 and #9.

# The George Challenge

## Purpose

Demonstrate in a fun way how much we take money for granted.

## Estimated prep time

5-10 min.

## Estimated classroom time

20-30 min.

## Required classroom materials

- One 8-1/2 inch sheet of blank, unlined paper per student
- One pencil or pen per student

## Optional classroom materials

- Overhead black-and-white transparency of a \$1

## Preparation

1. If desired, enlarge the front and back of a \$1 bill with a photocopy machine
2. If possible, prepare an overhead transparency of the enlarged \$1 bill.

## Instructions

1. Tell students that you're going to challenge their powers of observation and memory. Instruct them to take out a blank, unlined piece of paper and a pencil or pen.
2. *Caution students* not to reach into their pockets, wallets, or purses when they hear the next instruction. Tell the students that the challenge has two parts.
3. First, instruct students to draw *from memory* as accurately as they can the *face of a \$1 bill*. Tell them that if they can't recall specific details to include general representations of the bill's features. Give them two minutes to complete the task.
4. Second, tell students to *write down* the answers to the following questions:
  - 4a. What color ink is used to print a \$1 bill? (NOTE: Do not give away the fact that this is a trick question with two answers.)
  - 4b. What appears in each corner on the back of a \$1 bill?
  - 4c. What appears in the center on the back of a \$1 bill?
  - 4d. What appears in the center of a circle on the left side of the back of a \$1 bill?
  - 4e. What animal appears inside a circle on the right side of the back of a \$1 bill?
5. Allow students a few minutes to compare drawings. Point out how widely the drawings vary. Ask a few students to describe features they've included.
6. Score the challenge. (Display the overhead transparency if you have one.) Tell students to give themselves one point for each of the following features:
  - 6a. Overall height roughly equal to the length of one's little finger (1 point).
  - 6b. Overall length roughly equal to the span of one's hand from tip of the little finger to the tip of the index finger (1 pt.).

- 6c. Numeral ones at all four corners. (1 pt.)
- 6d. The words THE UNITED STATES OF AMERICA across the top. (1 pt.)
- 6e. A circular to the left and to the right of Washington's portrait (representing the Federal Reserve Bank and Dept. of the Treasury seals; *no detail necessary*—1 pt.)
- 6f. An approximate serial number to the left and to the right of Washington's portrait. (*no detail necessary*—1 pt.)
- 6g. An approximate signature to the left and to the right of Washington's portrait (representing the Treasurer of the United States and Secretary of the Treasury; *no detail necessary*—1 pt.)
- 6h. The words ONE DOLLAR across the bottom. (1 pt.)
- 6i. Rough portrait of George Washington. (1 pt.)
- 6j. Washington's last name under his portrait. (1 pt.)
- 6k. Correct answer to Question 4a: \$1 bill is printed in black *and* green inks. (1 pt.)
- 6l. Correct answer to 4b: Numeral 1 *and* the word ONE. (1 pt.)
- 6m. Correct answer to 4c: Word ONE. (1 pt.)
- 6n. Correct answer to 4d: Pyramid with an eye. (1 pt.)
- 6o. Correct answer to 4e: Eagle. (1 pt.)

7. Have students tally their scores—maximum score 15 pts. Recognize and/or reward the class standouts.

### Discussion

- What did you learn from the challenge? [Students will mention various features of the \$1 bill.] Why do you think I gave you this challenge? (*To show how much or little we pay attention to our most common currency.*)
- Point out that the students probably have handled hundreds of \$1 bills. How might people act if they take their money for granted? (*Spend without thinking, buy things on impulse, buy things they don't really need, don't save.*)
- On the other hand, how might people act if they don't take money for granted? (*Appreciate having it more, not lose it, not waste it, and think twice before spending it.*)
- What popular sayings about money do you hear from adults? (*Money doesn't grow on trees; a penny saved is a penny earned, etc.*) What value do these sayings have? [Answers will vary.] How would you change these sayings? [Answers will vary.]

# Curriculum Standards

The budgeting lessons in Can I Make It on My Own contribute to the acquisition of knowledge related to the following national standards.

## Council for Economic Education

**Standard 7:** Markets - Price and Quantity Determination—Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

**Standard 8:** Role of Price in Market System—Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

*[www.councilforeconed.org/ea/program.php?pid=19](http://www.councilforeconed.org/ea/program.php?pid=19)*

## Jumpstart Coalition for Personal Financial Literacy

**Planning and Money Management Standard 1:** Organize and plan personal finances and use a budget to manage cash flow. Develop a plan for spending and saving.

*[www.jumpstart.org/guide.html](http://www.jumpstart.org/guide.html)*

## National Council for the Social Studies

**Standard VII: Production, Distribution, and Consumption--**Social studies programs should include experiences that provide for the study of how people organize for the production, distribution, and consumption of goods and services.

*[www.socialstudies.org/standards/strands](http://www.socialstudies.org/standards/strands)*

## National Council of Teachers of English

**Standard 7:** Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

**Standard 8:** Students use a variety of technological and informational resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

*[www.ncte.org/standards](http://www.ncte.org/standards)*

## National Council of Teachers of Mathematics

**Number and Operations Standard:** Compute fluently and make reasonable estimates.

**Algebra Standard:** Analyze change in various contexts.

**Measurement Standard:** Apply appropriate techniques, tools, and formulas to determine measurements.

**Data Analysis and Probability Standard:** Develop and evaluate inferences and predictions that are based on data.

**Process Standards:** Communicate their mathematical thinking coherently and clearly to peers, teachers, and others. Recognize and apply mathematics in contexts outside of mathematics.

*<http://standards.nctm.org/document/appendix/numb.htm>*

1. Improving a car's gas mileage from 18 miles per gallon to 23 miles per gallon will save how many gallons of gasoline over 15,000 miles of driving?
  - a. 414
  - b. 83
  - c. 181
  - d. 302
  
2. Improving a car's gas mileage from 21 miles per gallon to 27 miles per gallon will save how much money over 15,000 miles of driving if gasoline costs \$2.69 a gallon?
  - a. \$427
  - b. \$73
  - c. \$323
  - d. \$396
  
3. What is the unit cost of a 15 oz. can of ready-to-eat soup at \$1.36?
  - a. \$0.0907 per oz.
  - b. 9.7 cents per oz.
  - c. \$0.0709 per oz.
  - d. 7.09 cents per oz.
  
4. Based on price alone, which is the best deal?
  - a. One 16 oz. container of frozen orange juice concentrate that makes 48 oz. of liquid juice for \$1.89
  - b. One 12 oz. container of frozen orange juice concentrate that makes 36 oz. of liquid juice for \$1.23
  - c. One 64 oz. container of liquid orange juice for \$2.50
  
5. Calculate the overall percentage increase in prices from 2005 (CPI 195.3) to 2009 CPI 214.5). Suppose prices were to rise by the same percentage between 2009 and 2014. If it cost you \$20,000 a year to live on your own in 2009, what would the same standard of living cost five years later?
  - a. \$20,107
  - b. \$21,107
  - c. \$21,222
  - d. \$21,966
  
6. Liz's first job in 2008 (CPI 215.3) as a computer programmer paid an annual salary of \$45,486. Her father's first job as a middle-school teacher paid \$12,009 a year in 1975 (CPI 53.8). Who has bragging rights at the family dinner table?
  - a. Liz because her 2008 salary in 1975 dollars is greater than her father's.
  - b. Liz's dad because his 1975 salary in 2008 dollars is greater than his daughter's.
  
7. If you were thinking of moving from San Jose, Calif, (2009 COLI 153.1) to Cookeville, Tenn. (2009 COLI 84.5), which of the following statements would be true?
  - a. A dollar buys way more where you are now than where you're going.
  - b. You'll need a lot more money to maintain your standard of living after the move.
  - c. The cost of living will be lower where you're going.
  - d. The cost of living will be higher where you're going.
  
8. If it cost you \$86,177 to live comfortably in Brooklyn (2009 COLI 177.2), what would the same standard of living cost in Queens (2009 COLI 156.3)?
  - a. \$76,013
  - b. \$79,488
  - c. \$82,357
  - d. \$97,700
  
9. Which of the following is most likely considered a periodic expense?
  - a. Cab fare
  - b. Groceries
  - c. Vacation
  - d. Electricity

10. Which of the following is most likely considered a fixed expense?

- a. Vending machine snacks
- b. Monthly bus pass
- c. Pet toys and accessories
- d. Gasoline

11. Which of the following is most likely considered a variable expense?

- a. Cable TV
- b. Car loan
- c. Apartment parking space
- d. Music downloads

12. Which of the following is most likely considered discretionary spending?

- a. Speeding ticket
- b. Income tax
- c. Uninsured medical services
- d. Travel souvenirs

13. If you had to pay a \$125 gym membership fee every quarter of the year, how much should you set aside in your monthly budget?

- a. \$25.00
- b. \$41.67
- c. \$30.00
- d. \$31.25

14. Which of the following is a true statement?

- a. Take-home pay is more than gross pay
- b. Take-home pay is before taxes and other deductions
- c. Take-home pay is gross pay minus taxes and other deductions
- d. Gross pay is take-home pay after taxes and other deductions

15. Which of the following is a true statement?

- a. Inflation makes it more expensive to maintain your standard of living each year.
- b. Inflation causes incomes to rise.
- c. As long as your income stays the same, your cost of living will, too.
- d. A budget is balanced when your cost of living equals your standard of living.