

## Unit 5

# Budgeting

### Lesson 5B:

## Budget Trade-Offs—A Penny Here and a Penny There

### Rule 5: Live within your means.

People work to earn income to purchase goods and services now (spending), later (saving), or for someone else (sharing). Because income is limited, the amount of goods and services people can buy is limited. These lessons look at how to allocate, or budget, your income without exceeding the income you earn.

### Lesson Description

Students participate in an activity that illustrates that budgeting is really an allocation problem. They must decide how to allocate limited income among many alternatives, which requires trade-offs. For the activity, students are given pennies representing monthly personal income to allocate for their living expenses—to purchase goods and services for housing, food, transportation, and so on.

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### Standards and Benchmarks (see page 118)

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### Grade Level

9-12

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### Concepts

Budget

Trade-off

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### Compelling Question

Why must consumers make trade-offs when allocating their income among different spending options?

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### Making Personal Finance Decisions

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## Objectives

Students will be able to

- describe the trade-offs involved in making a budget and
  - create a budget and adjust it based on different income levels.
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## Materials

- 24 pennies for each student
  - Handout 5B.1: Allocating Monthly Income, one copy for each student (or pairs of students) with the two pages copied onto separate sheets (so the students can lay the two pages side by side)
  - Handout 5B.2: Assessment, one copy for each student
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## Time Required

30 minutes

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## Procedure

1. Remind students that decisionmaking involves trade-offs. Define a **trade-off** as giving up some of one thing to gain some of something else. Explain this is especially true when making a **budget**, which is a plan for managing income, spending, and saving during a given period.
2. Distribute *Handout 5B.1: Allocating Monthly Income* and 24 pennies to each student. (Option: Have the students work in pairs and share the 24 pennies.)
3. Explain that each penny represents about \$100 in monthly gross income.
4. Have each student (or pair) set four pennies aside. Explain that these four pennies represent the taxes they must pay on their income. Therefore, each of them has \$2,000 to spend after taxes. This is their net income.

*(Teacher note: \$2,000 per month, or \$24,000 per year, may sound like a lot of money to most students. The expenditure amounts listed in each category of Handout 5B.1, however, are based on reasonably realistic real-world figures. Student will quickly discover that they cannot live as well as they might think.)*

5. Explain that Handout 5B.1 shows various categories of spending common to most consumers. For each category, as you spend more, you generally get more or better-quality items.
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### Making Personal Finance Decisions

6. Instruct the students to use the grid on Handout 5B.1 to allocate their remaining 20 pennies to these various categories to satisfy as many wants as they can given their limited income. Allow 5 to 10 minutes for the students to make their allocations.
7. Explain that the students (or pairs) have each created a budget, or a plan, for how to spend net income each month.
8. Ask a few students (or pairs) to share how they allocated their pennies and why.  
*(Teacher note: There are many possible choices and the “right” allocation depends on how valuable each of these items is to the individual [or pair].)*
9. Tell the students that due to a loss of income, inflation, or an unexpected expense, they now have only 18 pennies to spend. They must now decide where to make cuts but must keep the number of pennies devoted to housing the same because housing is difficult and often costly to change in the short run. Allow a few minutes for the students to make their decisions.
10. Ask several students (or pairs) to explain what they gave up and why.

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## Closure

11. Explain the following:
  - Because income is limited, you can’t have everything you want.
  - You must make decisions and consider the trade-offs.
  - Spending more in one category requires a trade-off—that is, giving up spending in another category. For example, you may want a cable package that includes many more channels. To spend additional dollars on cable, however, you have to give up spending dollars somewhere else. Or you might want a nicer house, but that will require spending less money on something else.
  - Making a budget is really deciding what is most important to you given that your income does not allow you to have everything you would like.

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## Assessment

12. Distribute a copy of *Handout 5B.2: Assessment* to each student and allow time for students to work (or assign as homework).

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**Handout 5B.2: Assessment—Answer Key**

Directions: Using examples from the penny activity, write a paragraph to answer the following questions to explain how a budget is a spending plan that considers trade-offs.

- What were the most difficult choices you had to make when allocating your pennies?
- Which categories did you value the most? How did that affect your spending in that category?
- When you spent more in one category, what did you give up in another category? Provide examples from your budget.
- How did you reallocate your spending when you had less income?

Answers may be something like the following:

*I found it hard choosing between \_\_\_\_\_ and \_\_\_\_\_ and \_\_\_\_\_ and \_\_\_\_\_. The category I valued the most was \_\_\_\_\_, so I spent the most money in that category. I gave up \_\_\_\_\_ to spend more money elsewhere. To reduce spending, I spent less in the categories I valued the least. (Alternatively, students might list the specific categories in which they reduced spending.)*

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**Making Personal Finance Decisions**

**Handout 5B.1: Allocating Monthly Income (page 1 of 2)**

Name: \_\_\_\_\_

Directions: Use the grid below to allocate your income (pennies) among the spending categories below according to the guidelines given by your teacher. Each penny represents \$100 in monthly gross income. For each category, as you spend more, you generally get more or better-quality items.

<p><b>Income Taxes</b></p> <p>4 (This amount must be allocated.)</p>	<p>Round 1 <u>4</u> pennies</p> <p>Round 2 <u>4</u> pennies</p>
<p><b>Housing (Including Utilities and Insurance)</b></p> <p>20 \$300,000, newer, 3-4 bedrooms, 2+ baths house</p> <p>15 \$225,000, 10-yr-old, 3-4 bedrooms, 2+ baths house</p> <p>10 \$150,000, 20-yr-old, 2-bedroom, 2-bath house</p> <p>7 \$100,000, 30-yr-old, 2-bedroom, 1-bath house</p> <p>5 \$75,000, 30-yr-old+, 1-bedroom house or nice apartment</p> <p>4 3-room apartment</p> <p>3 2-room apartment</p> <p>2 1-room, older apartment</p> <p>1 Share a room with others or live in a car</p> <p>0 No shelter</p>	<p>Round 1</p> <p>_____ pennies</p> <p>Round 2</p> <p>_____ pennies</p>
<p><b>Transportation (Including Fuel, Oil, and Insurance)</b></p> <p>10 Luxury SUV or two late-model vehicles</p> <p>7 Luxury vehicle or two older vehicles</p> <p>5 Late-model, larger vehicle</p> <p>4 Late-model, smaller vehicle</p> <p>3 Older-model, dependable vehicle</p> <p>2 Older-model, questionable vehicle</p> <p>1 Unreliable vehicle or mass transit</p> <p>0 No vehicle</p>	<p>Round 1</p> <p>_____ pennies</p> <p>Round 2</p> <p>_____ pennies</p>
<p><b>Food (Eating In and Dining Out)</b></p> <p>10 Gourmet and specialty foods, upscale restaurants</p> <p>7 Good assortment of grocery foods, chain restaurants</p> <p>5 Grocery foods, fast-food restaurants</p> <p>4 Basic grocery foods, very limited dining out</p> <p>3 Staples plus some processed foods</p> <p>2 Staples only (minimum nutritional requirements met)</p> <p>1 Staples only (minimum nutritional requirements not met)</p> <p>0 No food</p>	<p>Round 1</p> <p>_____ pennies</p> <p>Round 2</p> <p>_____ pennies</p>

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**Handout 5B.1: Allocating Monthly Income (page 2 of 2)**

<p><b>Clothing and Personal Care Goods and Services</b></p> <p>10 New wardrobe every year, complete selection of personal care items            7 Up-to-date wardrobe, many trendy items, most personal care items            5 Mostly up-to-date wardrobe, some trendy items, several personal care items            4 Good wardrobe turnover, limited trendy items, complete toiletries            3 Some wardrobe turnover, mostly department-store quality, most toiletries            2 Limited wardrobe turnover, mostly outdated items, some toiletries            1 No real wardrobe turnover, “new” clothes are secondhand, basic toiletries            0 Clothes on your back, no toiletries</p>	<p><b>Round 1</b></p> <p>_____ pennies</p> <p><b>Round 2</b></p> <p>_____ pennies</p>
<p><b>Health/Dental Insurance</b></p> <p>10 Complete coverage            7 Low deductible, low co-pays, good prescription coverage            5 Medium deductible, low co-pays, some prescription coverage            4 Medium deductible, medium co-pays, limited prescription coverage            3 High deductible, medium co-pays, no prescription coverage            2 High deductible, high co-pays, no prescription coverage            1 Very high deductible, need to use free clinics, no prescription coverage            0 No coverage</p>	<p><b>Round 1</b></p> <p>_____ pennies</p> <p><b>Round 2</b></p> <p>_____ pennies</p>
<p><b>Entertainment (Including Technology, Hobbies, and Vacations)</b></p> <p>5 Full-service technology, non-local/2-week vacation, \$100/week “fun” money            4 Good-service technology, non-local/1-week vacation, \$75/week “fun” money            3 Some-service technology, local/2-week vacation, \$50/week “fun” money            2 Very limited technology services, local/1-week vacation, \$25/week “fun” money            1 No technology services, \$25/week “fun” money            0 No entertainment</p>	<p><b>Round 1</b></p> <p>_____ pennies</p> <p><b>Round 2</b></p> <p>_____ pennies</p>
<p><b>Contributions (Charity, Non-Profit Organizations)</b></p> <p>4 \$400/month in contributions            3 \$300/month in contributions            2 \$200/month in contributions            1 \$100/month in contributions            0 No contributions</p>	<p><b>Round 1</b></p> <p>_____ pennies</p> <p><b>Round 2</b></p> <p>_____ pennies</p>
<p><b>Savings</b></p> <p>5 \$500/month savings            4 \$400/month savings            3 \$300/month savings            2 \$200/month savings            1 \$100/month savings            0 No savings</p>	<p><b>Round 1</b></p> <p>_____ pennies</p> <p><b>Round 2</b></p> <p>_____ pennies</p>

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**Handout 5B.2: Assessment**

Name: \_\_\_\_\_

Directions: Using examples from the penny activity, write a paragraph to answer the following questions to explain how a budget is a spending plan that considers trade-offs.

- What were the most difficult choices you had to make when allocating your pennies?
- Which categories did you value the most? How did that affect your spending in that category?
- When you spent more in one category, what did you give up in another category? Provide examples from your budget.
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## Standards and Benchmarks

### National Standards for Financial Literacy

**Standard 2: Buying Goods and Services.** People cannot buy or make all the goods and services they want; as a result, people choose to buy some goods and services but not others. People can improve their economic well-being by making informed spending decisions, which entails collecting information, planning, and budgeting.

- **Benchmarks: Grade 8**
  5. A budget includes fixed and variable expenses, as well as income, savings, and taxes.
  6. People may revise their budget based on unplanned expenses and changes in income.
- **Benchmark: Grade 12**
  6. People may choose to donate money to charitable organizations and other not-for-profits because they gain satisfaction from donating.

**Standard 3: Saving.** Saving is the part of income that people choose to set aside for future uses. People save for different reasons during the course of their lives. People make different choices about how they save and how much they save. Time, interest rates, and inflation affect the value of savings.

- **Benchmark: Grade 8**
  8. Different people save money for different reasons, including large purchases (such as higher education, autos, and homes), retirement, and unexpected events. People's choices about how much to save and for what to save are based on their tastes and preferences.
- **Benchmark: Grade 12**
  1. People choose between immediate spending and saving for future consumption. Some people have a tendency to be impatient, choosing immediate spending over saving for the future.

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