



## MIDDLE SCHOOL | UNIT 1

### Being Financially Responsible

## Title

# Puzzling Budgets

## LEARNING OBJECTIVES

Students will:

- **identify common** individual and household expenses.
- **classify** expenses as fixed or variable.
- **analyze** budgets.
- **draw conclusions** about the use of budgets to track personal finances.

## Content Area

Financial Literacy: Family and Consumer Sciences and Business

## Grades

6–8

## Overview

*What is a budget, and why should you use one?* The lesson begins with students discussing common expenses and learning the difference between fixed and variable expenses. Students then participate in a hands-on activity in which they receive pieces of several budgets and work together to compile them into ones that balance. Once the budgets are together, they will review the components and answer questions about them.

## Themes

**Personal Finance:** Budgeting

**Family and Consumer Sciences:** Consumer and Family Resources

**Business:** Personal Finance

## National Standards for Personal Financial Literacy

**Council for Economic Education and Jump\$tart Coalition for Personal Financial Literacy, 2021**

II. Spending 8-1. Creating a budget can help people make informed choices about spending, saving, and managing money in order to achieve financial goals.

## Pathway to Financial Success

In Schools

# National Standards for Family and Consumer Sciences Education

National Association of State Administrators of Family and Consumer Sciences, 2018

- 2.5.1 Analyze the use of resources in making choices that satisfy needs and wants of individuals, families, and communities.
- 2.5.4 Analyze practices that allow families to maintain economic self-sufficiency.
- 2.6.1 Evaluate the need for personal and family financial planning.
- 2.6.2 Apply financial management principles to individual and family financial practices.
- 2.7.1 Demonstrate management of individual and family finances by applying reliable information and systematic decision making.
- 2.7.3 Manage money effectively by developing financial goals and budgets.

# National Standards for Business Education

National Business Education Association, 2023

- Personal Finance III.1.4 Define fixed and variable expenses.
- Personal Finance III.1.5 Categorize expenses as fixed or variable.
- Personal Finance III.1.6 Classify periodic expenses as fixed or variable.
- Personal Finance III.1.7 Determine discretionary income in a spending plan.

## Connect

### How does this connect to the student?

Budgeting is often discussed in the context of adults spending money. This activity encourages students to explore how adolescents spend money and compare that with spending at other ages.

### How does this connect to careers?

**Budget Analyst:** Individuals and families are not the only ones that use budgets. Budget analysts help public and private institutions organize their finances. They prepare budget reports and monitor spending.

### How does this connect to technology?

There are many apps and programs people can use to track their expenses and create a budget. Before selecting one, students should understand what budgets are and how they are used.

## Key Terms

Budget, income, expense, gross pay, net or take-home pay, fixed expenses, variable expenses

## Pathway to Financial Success

In Schools

### Prepare

**Background:** People use **budgets** to track their **income** and **expenses**. Most budgets put expenses into common categories such as food, entertainment, and housing. By using a budget, people are able to reflect on their spending and determine changes they might need to make in order to avoid debt or increase their savings.

In this activity, students will be given “puzzle” pieces of example budgets in order to locate working groups. Six sample budgets are provided in the **Budget Puzzles Handout** to allow for various class and group sizes. In advance of the lesson, you should consider how many students you have, the number of budgets you will use, and how many students you want in each group. The more students are in a group, the more pieces you will cut that budget into when preparing. You will also decide how you want to cut the pieces. You may choose to cut them into rectangles, L-shaped pieces, or other shapes. How you cut them will determine how much work students will need to do in order to put the pieces together. If you cut the pieces in advance of class and students are absent, let the class know where they can find the extra pieces in order to make a complete budget (i.e., on a table or desk).

### Materials

- **Budget Puzzles Handout**—two copies of each (Cut one into pieces as described above. Reserve the second copy for reference.)
- **Budget Analysis Student Capture Sheet**—one copy per group of students
- **Budgeting:** [What Is It and How Does It Work? Unit 1 Student Video](#)
- **Tape (optional)**
- **Calculators (optional)**

### Engage

- Ask students what they or their families spent money on in the past month. Challenge students to brainstorm at least 20 unique expenses. Document their responses on the board or in a shared document.
- Review several of the expenses and prompt students to consider if they occur on a regular basis or not. Explain that regularly occurring expenses are called **fixed expenses** while the rest are **variable expenses**.
- Identify each of the expenses on the list as fixed or variable as a class or in smaller groups.
- Tell students that one way to track expenses is to create a **budget**.
- Play the video, [Budgeting: What Is It and How Does It Work?](#) (3:17). Discuss the components of a budget, including **income** and **expenses**.
- Ask students what categories they would include on a budget and if they would match up with the ones for the average teen as shown in the video (food 24%; clothing 19%; video games and electronics 15%; transportation 9%; makeup and accessories 9%; shoes 8%; and miscellaneous 16%).<sup>1</sup>

<sup>1</sup> Source: [Taking Stock with Teens](#), Spring 2018, Piper Jaffrey

## Pathway to Financial Success

In Schools

### Teach

- Let students know they will be divided into groups to examine a budget. To determine the groups, each student will receive a “puzzle” piece of a person’s or family’s budget. They will need to move around the room comparing their pieces to those of their classmates and put them together like a puzzle.
- Distribute one budget piece to each student from the **Budget Puzzles Handout** and allow time for students to locate their group members. See the Background section for additional information on cutting the budgets and allocating the pieces.
- Make calculators available to students, if needed, for them to total income or expenses.
- As students locate their group members, check their puzzle pieces against the originals. If correct, give students tape to put their pieces together or hand them an original copy to reference.
- Provide each group with a copy of the **Budget Analysis Student Capture Sheet**. Direct students to review the information on their budget and answer the questions. Let students know that they should be prepared to share their findings with the class.
- Call on groups to share and discuss their budgets.

### Conclude

- Challenge students to consider the benefits of using a budget. Ask students what purpose they serve and what might happen if people do not use a budget.
- Remind students that the video mentioned a variety of ways to keep a budget, including apps, spreadsheets, and by hand. Ask students which method, if any, they can imagine themselves using in the future.
- Direct students to submit an exit ticket answering the question: How will I keep a budget for myself in the future?

### Extend

- **Math:** Expand upon your discussions of budgets with materials from the [Recommendations versus Reality: Budgeting in the Real World](#) activity which has students consider the percent allocated to each expense category in a budget.
- **Technology:** Invite students to create a budget using a spreadsheet. They should develop categories and use formulas to calculate the budgeted amounts and totals.
- **Writing:** Direct students to write about budgeting. They can write an informative piece that explains how a budget is developed, a persuasive essay encouraging a person to budget, or a narrative in which a character decides to budget.
- **Family:** Encourage students to discuss budgeting with their family. What categories of expenses does the family have?

# Budget Puzzles

**Directions:** Cut the budgets into as many pieces as needed for each student to have one piece. See the Background section for additional information.

Budget 1	Monthly Amount
<b>INCOME</b>	
Part-time job	\$336
<b>TOTAL INCOME</b>	<b>\$336</b>
<b>EXPENSES</b>	
Eating out	\$85
Clothes	\$40
Makeup and accessories	\$25
Hair cut	\$30
Music streaming service	\$10
Entertainment	\$30
Saving	\$80
Miscellaneous	\$20
<b>TOTAL EXPENSES</b>	<b>\$320</b>

Budget 2	Monthly Amount
<b>INCOME (after taxes)</b>	
Part-time job	\$400
Tutoring	\$120
<b>TOTAL INCOME</b>	<b>\$520</b>
<b>EXPENSES</b>	
Car insurance, gas, and maintenance	\$260
Gym membership	\$40
Eating out	\$80
Video games	\$20
Clothes and shoes	\$40
Cell service	\$50
Dates	\$20
Saving	\$10
<b>TOTAL</b>	<b>\$520</b>

# Budget Puzzles

**Directions:** Cut the budgets into as many pieces as needed for each student to have one piece. See the Background section for additional information.

Budget 3	Monthly Amount
<b>INCOME (after taxes)</b>	
Part-time job	\$300
<b>TOTAL INCOME</b>	<b>\$300</b>
<b>EXPENSES</b>	
Cell phone plan	\$125
Eating out	\$50
Fraternity dues	\$50
Books and supplies	\$40
Miscellaneous	\$30
<b>TOTAL</b>	<b>\$300</b>

Budget 4	Monthly Amount
<b>INCOME (after taxes)</b>	
Job as a veterinary technician	\$1,895
<b>TOTAL INCOME</b>	<b>\$1,895</b>
<b>EXPENSES</b>	
Housing (rent and insurance)	\$855
Utilities	\$150
Health insurance	\$500
Cell phone	\$125
Food	\$200
Social and entertainment	\$120
<b>TOTAL</b>	<b>\$1,895</b>

# Budget Puzzles

**Directions:** Cut the budgets into as many pieces as needed for each student to have one piece. See the Background section for additional information.

Budget 5	Monthly Amount
<b>INCOME (after taxes)</b>	
Full-time job	\$2,500
Side hustle	\$225
<b>TOTAL INCOME</b>	<b>\$2,725</b>
<b>EXPENSES</b>	
Housing (rent and renters insurance)	\$800
Utilities	\$75
Car expenses	\$200
Medical expenses (insurance, prescriptions, copays)	\$300
Cell phone and internet	\$125
Food	\$250
Personal care (hair, clothes)	\$75
Entertainment	\$150
Charity	\$100
Savings—house down payment	\$400
Savings—general	\$150
<b>TOTAL</b>	<b>\$2,725</b>

Budget 6	Monthly Amount
<b>INCOME (after taxes)</b>	
Full-time job	\$1,585
Full-time job	\$1,400
<b>TOTAL INCOME</b>	<b>\$2,985</b>
<b>EXPENSES</b>	
Housing expenses	\$875
Utilities	\$280
Life insurance	\$50
Health insurance	\$600
Childcare	\$500
Transportation	\$200
Food	\$300
Entertainment	\$150
Child care expenses	\$400
<b>TOTAL</b>	<b>\$3,355</b>

# Budget Puzzles

**Directions:** Cut the budgets into as many pieces as needed for each student to have one piece. See the Background section for additional information.

Budget 7	Monthly Amount
<b>INCOME (after taxes)</b>	
Full time job	\$1,600
Full time job	\$1,400
<b>TOTAL INCOME</b>	<b>\$3,000</b>
<b>EXPENSES</b>	
Mortgage payment and homeowners insurance	\$1,050
Utilities	\$300
Pet care	\$120
Health insurance	\$550
Cable and streaming services	\$115
Cell phones with data plans	\$250
Food	\$220
Gym memberships	\$80
Charitable giving	\$50
Saving	\$265
<b>TOTAL</b>	<b>\$3,000</b>

Budget 8	Monthly Amount
<b>INCOME (after taxes)</b>	
Retirement income	\$2,500
<b>TOTAL INCOME</b>	<b>\$2,500</b>
<b>EXPENSES</b>	
Housing (insurance and taxes)	\$250
Utilities	\$175
Pet supplies and insurance	\$100
Medical expenses (insurance, prescriptions, copays)	\$400
Internet	\$85
Cell phones	\$150
Gifts	\$100
Food (groceries and eating out)	\$400
Travel expenses	\$600
Charity	\$40
<b>TOTAL</b>	<b>\$2,500</b>



## Budget 1

- Sample answer for who might have this budget: Teenager who works part-time and does not drive
- Items to note: expenses are less than income, includes savings

## Budget 2

- Sample answer for who might have this budget: Teenager who works two part-time jobs and drives
- Items to note: includes car expenses, budget is balanced, budget for dating (Is this realistic?)

## Budget 3

- Sample answer for who might have this budget: College student who works part-time and pays for things like books/supplies, club dues, etc.
- Items to note: balanced budget, no savings

## Budget 4

- Sample answer for who might have this budget: Young adult who works full time and lives on his/her own
- Items to note: budget is balanced, no savings, no transportation expenses

## Budget 5

- Sample answer for who might have this budget: Young adult who works full time plus has a side-gig, lives on his/her own, and is saving for a down payment on a house
- Items to note: budget is balanced, includes two savings goals, includes charity

## Budget 6

- Sample answer for who might have this budget: Young family with childcare expenses
- Items to note: budget is not balanced, includes expenses for children, no money for savings

## Budget 7

- Sample answer for who might have this budget: A couple with no children
- Items to note: budget is balanced, shows expenses for pets, includes money for savings

## Budget 8

- Sample answer for who might have this budget: Retired individual or couple
- Items to note: lower budget is balanced, housing expense assumes home is paid for; no savings, includes categories for gifts and travel

# Budget Analysis

**Directions:** Review your group's budget and answer the questions below.

1. **Budget Owner**

- a. Do you think this is a budget for an individual or a family? Why?
  
  
  
  
  
- b. What person or people do you think have this budget?

2. **Budget Amounts**

- a. What is the total income?
  
  
  
  
  
- b. What is the total of the expenses?
  
  
  
  
  
- c. Which is greater, the income or the expenses? Is this a good or bad thing? Why?
  
  
  
  
  
- d. Are there more fixed or variable expenses on the budget? What is the total of the fixed expenses?

3. **Grade the Budget**

- a. What—if any—budget categories do you think are missing?
  
  
  
  
  
- b. Do you think the budget is realistic? Why?
  
  
  
  
  
- c. Does the budget include savings? If so, is the amount enough? If not, how much do you think they should be saving?
  
  
  
  
  
- d. If you were giving a grade to the person or family that created this budget, what would you give and why?