

Lesson Description

Students will distinguish between income and expenses to create a weekly budget by way of a teacher guided lesson. They will use their understanding of fixed and variable expenses to balance the budget. Students will then build on what they have learned from the teacher guided lesson to create and balance a budget for Ginger. Finally, students will develop a weekly budget for themselves working within given parameters.

Students should come to the understanding that expenses cannot exceed income and emergency savings is important for unexpected situations.

Texas Essential Knowledge and Skills (Target standards)

- **PFL Math 5.10E:** describe actions that might be taken to balance a budget when expenses exceed income
- **PFL Math 5.10F:** balance a simple budget

Texas Essential Knowledge and Skills (Prerequisite standards)

- **PFL Math 4.10A:** distinguish between fixed and variable expenses
- **PFL Math 4.10D:** describe how to allocate a weekly allowance among spending; saving, including for college; and sharing
- **Math 5.1:** mathematical process standards
- **Math 5.3G:** solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm
- **Math 5.3K:** add and subtract positive rational numbers fluently

National Standards (Supporting standards)

- **CEE Saving 4.2:** When people save money, they give up the opportunity to spend that money to buy things now in order to buy things later.

CEE - Council for Economic Education

- **CCSS Math:** Standards for Mathematical Practices
- **CCSS Math 5.NBT** Perform operations with multi-digit whole numbers and with decimals to hundredths.

CCSS - Common Core State Standards

PFL Terms

- Income
- Expenses
- Budget
- Variable expenses
- Fixed expenses

Time Required

Two 45-minute classes

Materials Required

- A copy of **Activity 5.4-1** for each student
- A copy of **Activity 5.4-2a** for each pair of students
- A copy of **Activity 5.4-2b** for each student
- A copy of **Activity 5.4-3** for each student
- A pair of scissors for every 2 students

Procedure

Engage

1. Ask students: *Do you know what today is? Well, at our house it's payday!!! What do you think happens on payday? (You get paid for doing work.) What do you call the money paid for work you do? (It's called income.)*
2. *How do I earn my income? (I earn my income for teaching and my spouse earns his/her income for his/her job.) We have two children at home. Jordan is twelve and Ginger is ten. How do you think they earn income?* Students should brainstorm jobs appropriate for children in that age bracket, jobs they can do at home and in the neighborhood. List these on the board.
3. Look at the list of suggested jobs and choose several that children can do. List a weekly amount for each job suggested. Consider amounts that students in your class might receive for similar chores when assigning the value of each chore.

Explore/Explain

4. Distribute **Activity 5.4-1** to each student. Display **Activity 5.4-1** as a visual. Tell students: *Jordan is saving to buy a pair of Air Jordans for basketball season which is in 5 weeks. You will create a budget for Jordan so that he can determine how much he can save every week for the basketball shoes.*
5. Continue reading each of Jordan's expenses or incomes. Have students fill out the budget as you model.
 - a. *Jordan gets \$10 allowance each week for doing his chores around the house. Is an allowance income or an expense? How do you know? (It is income because money is coming in.) Enter \$10 under Amount in Column A for Weekly Income. Write allowance for household chores for the Source. What kind of chores do you think a twelve year old might do to help around the house? (take out the trash, clear the dinner table, keep room neat, put clothes away, etc.)*
 - b. *Jordan also earns \$15.00 each week for mowing the lawn and \$5.00 each week for giving the dog a bath. Are these items income or expenses? How do you know? (It is income because money is coming in.) Where would you place the amounts \$15.00 and \$5.00 on the budget worksheet and how would you describe the sources? (The \$15.00 is entered under Amount in Column A for Weekly Income. Enter "mowing the lawn" for the Source. The \$5.00 is entered under Amount in Column A for Weekly Income. Enter "bathe dog" for the Source.)*
 - c. *What is Jordan's weekly income? How can you find out? (Add \$10.00 + \$15.00 + \$5.00. Jordan's weekly income is \$30.00.) Enter \$30.00 on Jordan's budget worksheet for the Total of the income.*
 - d. *Jordan pays \$2.00 dues for Scouts and he pays his parents \$5.00 for his cell phone bill. Do these items provide income or are they expenses? How do you know? (These are expenses because money is paid out for these services.) Where would you place the \$2.00 and the \$5.00 and how would you describe the items? (The \$2.00 is entered under Amount in Column B for Weekly Expenses. Enter "Scout dues" for the Item. The \$5.00 is entered under Amount in Column B for Weekly Expenses. Enter "cell phone" for the Item.)*

- e. Jordan's parents **require** that both he and Ginger save \$5.00 each week to put into their college savings. Where would you place the \$5.00 and how would you describe the items? **(The \$5.00 is entered under Amount in Column B for Weekly Expenses. Enter "college savings" for the Item.)**
- f. Jordan spends about \$10.00 a week on entertainment. Where would you place the \$10.00 and how would you describe the item? **(The \$10.00 is entered under Amount in Column B for Weekly Expenses. Enter "entertainment" for the Item.)**
- g. What is the total for the expenses listed on the budget? **(\$22.00)** How did you come up with this total? **(Add \$2.00 + \$5.00 + \$5.00 + \$10.00. Jordan's weekly expenses are \$22.00.)** Enter \$22.00 on Jordan's budget worksheet for the total of the expenses.
- h. Which of Jordan's expenses are fixed expenses? **(\$5.00 for his college savings, \$2.00 for Scouts, and \$5.00 towards his cell phone bill)** Why would his savings be classified as fixed? **(Since his parents require that he save \$5.00 every week, this becomes a fixed expense. This is not a voluntary decision.)** Explain that some people decide how much they can save weekly or monthly and adjust the amount based on how much they get paid or based on other expenses. If someone has the flexibility to change the amount saved for college, then it becomes a variable expense. Others have a set amount to save each week or each year. When it is a set amount, it is called a fixed expense. Write F next to each of the fixed expenses.
- i. Where should we include the entry for basketball shoes? **(Enter save for basketball shoes under Item in Column B for Weekly Expenses.)** How did you make your decision? **It represents money that will be used to purchase an item.)**
- j. Which of Jordan's expenses are variable expenses? **(Saving for basketball shoes and entertainment)** Write V next to each of the variable expenses.
- k. The basketball shoes cost \$80.00. If Jordan needs the basketball shoes in 5 weeks, how much will he need to save weekly? **(\$16.00)** Write \$16.00 under Amount in Column B for basketball shoes. Have students recalculate the total expenses including the \$16 to save for the shoes. What is the new total? **(\$38.00)** Cross out \$22.00 and change it to \$38.00.
- l. Does Jordan have enough income to save this amount? **(No, his income is \$30.00 and his expenses are now \$38.00.)**
- m. What can Jordan do to balance his budget? **(Sample response: He can reduce his entertainment to \$2.00.)** Why can't he reduce another expense? **(The other expenses are fixed. They cannot change.)**
- n. Tell students to cross out the \$10.00 for the Amount of the entertainment and change it to \$2.00. Have them recalculate the total expenses. What are Jordan's weekly expenses? **(\$30.00)** Does Jordan have a balanced budget? How do you know? **(Yes, because the total income equals the total expenses.)**

- o. *Is there another option for Jordan? (Sample response: Jordan could buy a less expensive pair of basketball shoes. This would allow him to increase his entertainment. Jordan could save less each week and start the season with an old pair of basketball shoes. When he has the money saved, he can buy the shoes.)*

Evaluate

6. To evaluate students understanding of this activity, ask the questions below.
- How would you describe a budget? **(A budget is a plan to manage income and expenses.)**
 - Why is having a budget important? **(It's important to make sure your expenses are not greater than your income. It's also important to plan for savings so that you can have the things you want in the future.)**
 - What may happen if you do not stick to your budget? **(If you don't stick to your budget, you may not have enough money for the things you need and for the things you want. It's important to take care of your needs before taking care of your wants.)**

Elaborate

7. Pair the students up into teams of two. Distribute one copy of **Activity 5.4-2a** to each pair of students. Say: *We've worked on Jordan's budget together to make sure he has a balanced budget. Now it's your turn to help Ginger.* Have students cut out the cards. Sort the cards in two stacks; one for income and one for expenses. Distribute **Activity 5.4-2b** to each student. Then read the directions to the students and allow time for them to complete the activity sheet.
8. Once students have completed **Activity 5.4-2b**, ask volunteers to share their answers and their plan to balance Ginger's budget.

Elaborate

9. Tell students that they are to plan a weekly budget for themselves. Distribute **Activity 5.4-3** to each student and read the following guidelines:
- *You must have at least \$30.00 weekly income. No more than \$15.00 can be allowance. You must show jobs that you can do and would be willing to do every week.*
 - *You must save at least \$5.00 of your weekly income in a college savings plan.*
 - *You must share/donate some of your income with others.*
 - *You must spend some of your money. Your spending must be reasonable for someone your age.*
 - *Your expenses may not exceed your income.*

Evaluate/End

10. To end the lesson, use the following questions to promote class discussion.
- *What is income? (Income is money you earn or get from other sources such as an allowance.)*
 - *What are expenses? (Expenses are your bills; money that you payout.)*
 - *What is a budget? (A budget is a plan for managing your income and then your expenses.)*
 - *Why is having a budget important? (Having a budget is important so that you can cover all your expenses before you run out of money. It's also a good tool to help plan your savings for unexpected expenses or for items that you cannot afford right now.)*
 - *What does it mean to have a balanced budget? (If a budget is balanced, income is*

equal to expenses.)

- *What must you do if your expenses exceed your income? (You can reduce your variable expenses until the total of the expenses equals your income. You can increase your income by doing extra jobs until the total income equals the expenses. You can do a combination of both.)*
- *Why is it important to have a savings? (You can pay for unexpected expenses such as a flat tire.)*

EXTENSIONS

1. Take students to a computer lab and have them participate in a budget simulation at: <http://themint.org/kids/determining-your-budget.html>
2. Students may create a skit about the Budgee twins, Spender and Saver. As their names imply, Spender likes to spend money while Saver prefers to save his money. The skit should illustrate problems that arise when one does not have a balanced budget.

Activity 5.4-1

Name _____ Class Period _____

Directions: Fill in Jordan's Budget Worksheet as your teacher reads to you his weekly income and expenses. Then balance his budget to determine how much he can save in five weeks to buy a pair of \$80 basketball shoes.

Jordan's BUDGET WORKSHEET

Column A Weekly Income		Column B Weekly Expenses	
Source	Amount	Item	Amount
Total:		Total:	

Key 5.4-1

Name _____ Class Period _____

The following are sample methods for balancing Jordan's budget. The methods will vary.

Jordan's BUDGET WORKSHEET

Column A Weekly Income		Column B Weekly Expenses	
Source	Amount	Item	Amount
allowance for household chores	\$10.00	dues for Scouts - f	\$2.00
mow the yard	\$15.00	college savings - f	\$5.00
bathe the dog	\$5.00	cell phone - f	\$5.00
		entertainment - v	\$10.00
			\$2.00
		saving for basketball shoes - v	\$16.00
Total:	\$30.00	Total:	\$22.00
			\$38.00
			\$30.00

Jordan can reduce his entertainment from \$10 to \$2 for 5 weeks.

Jordan's BUDGET WORKSHEET

Column A Weekly Income		Column B Weekly Expenses	
Source	Amount	Item	Amount
allowance for household chores	\$10.00	dues for Scouts - f	\$2.00
mow the yard	\$15.00	college savings - f	\$5.00
bathe the dog	\$5.00	cell phone - f	\$5.00
		entertainment - v	\$10.00
		saving for basketball shoes - v	\$16.00
			\$8.00
Total:	\$30.00	Total:	\$22.00
			\$38.00
			\$30.00

Jordan can buy \$40 basketball shoes instead of Air Jordan shoes.

Jordan's BUDGET WORKSHEET

Column A Weekly Income		Column B Weekly Expenses	
Source	Amount	Item	Amount
allowance for household chores	\$10.00	dues for Scouts f	\$2.00
mow the yard	\$15.00	college savings f	\$5.00
bathe the dog	\$5.00	cell phone - f	\$5.00
bathe the neighbor's dog	\$5.00	entertainment - v	\$10.00 \$7.00
		saving for basketball shoes v	\$15.00
Total:	\$40.00 \$35.00	Total:	\$27.00 \$35.00

Jordan can increase his income and decrease his entertainment.

Activity 5.4-2a

Name _____ Class Period _____

Directions: Cut out the cards below. Then sort the cards in two stacks; one for income and one for expenses.

Ginger's Weekly Income and Expenses

allowance for household chores \$10	Wednesday after-school babysitting \$10.00
walk Mr. Britton's dog \$3.00	rainy day savings \$1.50
college savings \$5.00	gifts for friends and family \$5.00
entertainment \$6.00	clothing and accessories \$10.00
donation to food bank \$3.00	wash weekend dishes \$5.00

Activity 5.4-2b

Name _____ Class Period _____

Directions: Use the budget cards from Activity 6.2 to create a budget for Ginger using the table below. Then answer the questions about the budget.

Ginger's Budget

Column A Weekly Income		Column B Weekly Expenses	
Source	Amount	Item	Amount
Total:		Total:	

1. What is Ginger's income? _____ How did you find it? _____

2. What are Ginger's expenses? _____ How did you determine that? _____

3. Does Ginger have a balanced budget? _____ How do you know? _____

4. What can Ginger do differently to balance her budget? _____

5. Adjust Ginger's budget in the table above.

Key 5.4-2b

Name _____ Class Period _____

This is a sample key. The method in which the budget is balanced will vary.

Ginger's Budget

Column A Weekly Income		Column B Weekly Expenses	
Source	Amount	Item	Amount
allowance for household chores	\$10.00	college savings	\$5.00
walk Mr. Britton's dog	\$3.00	entertainment	\$6.00 \$5.50
wash weekend dishes	\$5.00	donation to food bank	\$3.00 \$2.50
Wednesday afterschool babysitting	\$10.00	clothing & accessories	\$10.00 \$9.00
		gifts for friends and family	\$5.00 \$4.50
		rainy day savings	\$1.50
Total:	\$28.00	Total:	\$30.50 \$28.00

1. What is Ginger's income? \$28 How did you find it? _____add \$10 + \$3 + \$5 + \$102. What are Ginger's expenses? \$30.50 How did you determine that?add \$5 + \$3 + \$6 + \$10 + \$5 + \$1.503. Does Ginger have a balanced budget? no How do you know? _____income < expenses or expenses > income4. What can Ginger do differently to balance her budget? answers will vary

Activity 5.4-3

Name _____ Class Period _____

Directions: Use the guidelines below to create your own weekly budget.

- You must have at least \$30.00 weekly income. No more than \$15.00 can be allowance. You must show jobs that you can do and would be willing to do every week.
- You must save at least \$5.00 of your weekly income in a college savings plan.
- You must share/donate some of your income with others.
- You must spend some of your money. Your spending must be reasonable for someone your age.
- Your expenses may not exceed your income.

Student Budget Worksheet

Column A Weekly Income		Column B Weekly Expenses	
Source	Amount	Item	Amount
Total:		Total:	