## Lesson Description

Students work in pairs to participate in a "Track Star" game that illustrates positive and negative spending behaviors. Each pair of students analyzes the "Track Star" results, identifies effective and ineffective budgeting behaviors, and generates a list of budgeting principles.

## Concepts

Budget
Expenses
Income

## Objectives

Students will:

- Define budget.
- Define income and expenses.
- Give examples of effective and ineffective budgeting behavior.
- Identify principles of effective budgeting.


## Content Standards

## National Standards in K-12 Personal Finance

Financial Responsibility and Decision Making: Apply reliable information and systematic decision making to personal financial decisions.

- $\quad$ Standard 1: Develop a plan for spending and saving.
- High school expectation 3: Identify changes in personal spending behavior that contributes to wealth-building.


## National Standards in Economics

- $\quad$ Standard 13: Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.
- Benchmark 2, Grade 8: To earn income, people sell productive resources. These include their labor, capital, natural resources and entrepreneurial talents.


## Time Required

45 minutes

## Materials

- A copy of Handout 4.1 cut into strips
- A copy of Handout 4.2, 4.3 and 4.4 for each pair of students
- A copy of Handouts 4.5 and 4.6 for each student
- Visual of Handout 4.5
- One copy of Handout 4.5-Answer Key and Handout 4.6-Answer Key for the teacher
- Scissors for each student or pair of students
- One calculator for each student


## Procedures

1. Distribute the definition strips from Handout 4.1: Definitions to various students and instruct them to wait until they are called on to read their definitions.
2. Write the word budget on the board and ask the students to write down three words or phrases that come to mind when they think about that term. Ask students to share various answers. (Answers will vary but may include: spending, saving, money, spending plan or credit.)
3. Explain that "budget" may be used as a noun or a verb. Call on the student who has the definition of the term "budget" from Handout 4.1 to read the definition aloud to the class.
4. Write the word "income" on the board and ask students what the term means. (Answers may vary but may include the money one makes, money received, job pay, etc.) Call on the student who has the definition of the term "income" from Handout 4.1 to read the definition aloud to the class.
5. Write the word "expenses" on the board and ask students what the term means. (Answers may vary but may include spending money, payments, costs, etc.) Call on the student who has the definition for "expenses" from Handout 4.1 to read the definition to the class.
6. Tell students that working in pairs they are going to play a "Track Star" game. The objective of this board game is to see which of the two players can finish running the track first. They advance by moving their game piece based on the information on the cards.
7. Divide students into pairs. Distribute Handout 4.2: Track Star Game Board to each pair of students. Tell students that the two competitors in the game are "Jet Stream" and "Whoosh." Tell students to decide which of the pair will be Jet Stream and which will be Whoosh.
8. Distribute to each pair of students a pair of scissors and one copy of Handout 4.3: Jet Stream's Cards and one copy of Handout 4.4: Whoosh's Cards. Tell students to cut out their cards and their game pieces from their Jet Stream (Handout 4.3) or Whoosh (Handout 4.4) sheet, shuffle their cards and place them face down on the appropriate box on the game board.
9. Explain the directions for playing the game as follows:

- Those students who chose to be Whoosh should draw the top card from their set, read it to their partner, follow the directions and place the used card at the bottom of the stack.
- If the card drawn instructs Whoosh to move back one or more spaces and the Whoosh game piece is on the start block, the player should put that card at the bottom of the Whoosh card stack and draw another card in order to move forward from the start block.
- After Whoosh has taken a turn, Jet Stream should take a turn drawing from the Jet Stream card set and following the same rules.
- Students should alternate taking turns until someone wins the game.
- If you land on an instruction space, follow the instructions.

10. Tell students to raise their hands when they finish the game. At that time, give each student a copy of Handout 4.5: Savvy Spending and Saving Principles. Tell students to develop answers as a pair but for both students to record their answers.
11. Ask students to identify expenses that both Whoosh and Jet Stream had in the game. (Answers may include friend's birthday party gift, flat tire repair, increased movie ticket prices, etc.) Ask students what these expenses have in common. (Answers may include that they are unexpected, that expenses such as flat tire repair and increased movie ticket prices are something over which they have no control, and that in some ways these expenses are optional for students-they don't have to go to a movie, for example -and in some ways, practically speaking, they are not optional because flat tires must be repaired, friends may expect a birthday present if you attend their party, etc.)
12. Using Handout 4.5 as a visual, call on students for their answers and fill in the visual so that all students will have the answers. See Handout 4.5: Savvy Spending and Saving Principles-Answer Key for suggested answers.

## Closure

13. Review the key points of this lesson by discussing the following.

- What is budgeting? (managing one's income and expenses by creating a plan)
- What is income? (earnings or payment received for resources provided, such as labor)
- What are expenses? (costs incurred or the spending of money)
- Why do you think there were blocks on the road that said, "Friend's Birthday Party Gift. Move back one block," "Flat tire repair. Move back one block," "Movie tickets increase in price. Move back one block."? (Even savvy spenders/ savers like Jet Stream have unexpected expenses.)
- What are some important principles to keep in mind if you want to be a savvy spender/saver? (See Handout 4.5: Savvy Spending and Saving PrinciplesAnswer Key.)


## Assessment

14. Distribute Handout 4.6: Maria's Story Assessment and have students follow the instructions to create a budget. (Budgets may vary but expenses should not exceed income.) Optional: Have students exchange their completed Handout 4.6 with another student and instruct them to check each other's budget for Maria to be sure that the math is correct and that expenses do not exceed income. See Handout 4.6: Maria's Story-Answer Key for suggested answers.

Handout 4.1: Definitions

| Term | Definition |
| :---: | :---: |
| Budget | (noun) A plan for managing income and expenses (verb) To plan or to manage income and expenses |
| Income | Earnings or payment received for resources provided such as labor |
| Expenses | Costs incurred or the spending of money |

## Handout 4.2: Track Star Game Board



Note: Game board can be photocopied at $200 \%$ to fit on 11" x 17"paper.

## Handout 4.3: Jet Stream's Cards

|  | You established a savings account and put 10 percent of your paycheck into that account before spending on other things. Move forward three spaces. | You put 5 percent of your paycheck in a fund for unexpected expenses. Move forward one space. |
| :---: | :---: | :---: |
| You elected to receive your paycheck by direct deposit. Move forward one space. | You waited until you received your first paycheck before you spent your earnings. Move forward two spaces. | Based on your monthly income, you created a budget. When your expenses were greater than your income, you reworked your budget so that your income was equal to or greater than your expenses. Move forward three spaces. |
| You started keeping track of your miscellaneous cash expenditures so that you'd know where your money was going. Move forward two spaces. | At the end of the month, you compared your actual spending to your budget and made a note of categories where you overspent. Move forward two spaces. | Based on your monthly income, you created a budget. Move forward two spaces. |
| You received a bill from Monster Music and paid it a week before it was due. Move forward two spaces. | You got $\$ 20$ cash from your ATM machine, kept the receipt and recorded that withdrawal. Move forward two spaces. | You received your monthly bank statement and balanced your checkbook. Move forward three spaces. |

## Handout 4.4: Whoosh's Cards

|  | You established a savings account and put 10 percent of your paycheck into that account before spending on other things. Move forward three spaces. | You did not put money from your paycheck in a fund for unexpected expenses. Move back one space. |
| :---: | :---: | :---: |
| You threw away your receipt after withdrawing cash from your ATM and forgot to record it. Move back two spaces. | You made a budget based on your gross rather than you net pay. Move forward two spaces for creating a budget but move back one space for basing it on gross rather than net pay. | You didn't double-check your math when you created a budget and do not have an accurate amount for your monthly expenses. Move back two spaces. |
| You notice you always run out of cash but have no idea where you are spending it. Move back two spaces for not keeping track of your miscellaneous cash transactions. | To stay within your entertainment budget, you didn't purchase any candy or soft drinks while at the movie. Move forward two spaces. | You purchased a shirt at a concert without having any money in your budget for this. Move back one space. |
| You received a bill from Instruments Inc. for a guitar you purchased, and you mailed the payment on the due date. Move back two spaces because your payment will be late. | You got $\$ 20$ cash from your ATM machine, kept the receipt and recorded the withdrawal. Move forward two spaces. | You received your monthly bank statement but never got around to balancing your account. Move back three spaces. |

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## Handout 4.5: Savvy Spending and Saving Principles

Instructions: Look at Jet Stream and Whoosh's cards from the Track Star Game. Put the cards that indicate successful spending/saving behavior (and result in moving forward) in one set and the cards that illustrate unsuccessful spending/saving behavior in the other set. Then use the instructions on each set of cards to create a list of spending and saving principles or guidelines for each. For example, for the card that says, "You got $\$ 20$ cash from your ATM machine, kept the receipt and recorded that withdrawal. Move forward two spaces," you might write a principle or guideline such as "Keep receipts of financial transactions" or "Record all financial transactions."

| Successful Spending/ <br> Saving Principles | Unsuccessful Spending/ <br> Saving Principles |
| :---: | :---: |
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## Handout 4.5: Savvy Spending and Saving Principles-Answer Key

Instructions: Look at Jet Stream and Whoosh's cards from the Track Star Game. Put the cards that indicate successful spending/saving behavior (and result in moving forward) in one set and the cards that illustrate unsuccessful spending/saving behavior in the other set. Then, look at each set of cards in order to create a list of general principles or guidelines for each. For example, for the card that says, "You got \$20 cash from your ATM machine, kept the receipt and recorded that withdrawal. Move forward two spaces," you might conclude that a principle or guidelines could be "Keep receipts of financial transactions," or "Record all financial transactions."

| Successful Spending/ Saving Principles | Unsuccessful Spending/ Saving Principles |
| :---: | :---: |
| Create a budget and stick with it. | Forget about taxes when estimating the amount of your paycheck. |
| Don't spend more than you make. | Don't have a "rainy day" fund for unexpected expenses. |
| Keep track of your cash transactions. | Don't worry about recording cash transactions. |
| Balance your bank accounts. | Don't worry about keeping receipts of financial transactions. |
| Keep receipts of financial transactions. | Don't bother to balance your bank accounts. Your bank knows how much money you have, even if you don't. |
| Double-check your math. | Don't hesitate to make an unplanned purchase. You can always make up that expenditure by cutting back on something else. |
| Pay your bills on time. | Don't worry about mailing your bill payments in advance of the due date. |
| Pay yourself first by saving before you spend. | Pay all your bills and spend on miscellaneous items before putting money into a savings account. |
| Save for unexpected expenses. |  |

## Handout 4.6: Maria's Story Assessment

Maria is one of your best friends. She keeps complaining that she runs out of money each month before she gets paid. She's asked you to help her make a budget based on her income from her part-time job. She handed you a crumpled paper with the following record of her expenditures for last month. Before you help her make a budget, first help her balance her monthly transactions by filling in the last column on the table below. To obtain the balance, add income and subtract expenditures and withdrawals.

| Date | Transaction | Expenditure | Income or <br> Withdrawal | Balance |
| :--- | :--- | :---: | :---: | :---: |
| $2 / 1$ | Paycheck-Direct Deposit |  | $\$ 168.43$ |  |
| $2 / 1$ | ATM cash + fee |  | $-\$ 21.50$ |  |
| $2 / 1$ | Movie and soft drink | $\$ 9.50$ |  |  |
| $2 / 3$ | Gasoline | $\$ 22.97$ |  |  |
| $2 / 5$ | Music CD | $\$ 17.99$ |  |  |
| $2 / 10$ | Old Navy clothes | $\$ 43.47$ |  |  |
| $2 / 12$ | ATM cash |  |  |  |
| $2 / 15$ | Jewelry | $\$ 14.99$ |  |  |
| $2 / 19$ | Gasoline | $\$ 16.02$ |  |  |
|  |  |  |  |  |

## Handout 4.6: Maria's Story Assessment cont.

Using the information on the previous page, help Maria make a budget so that her expenditures do not exceed her monthly income of $\$ 168.43$. Also, be sure to allocate at least $\$ 35$ per month for gasoline since Maria has to use her car to get to work. Use the form below. If your first budget attempt goes over her income, use the second budget attempt column.

| Income | 1st Budget Attempt | 2nd Budget Attempt |
| :---: | :--- | :--- |
| Earnings |  |  |
| Other (gifts, etc.) |  |  |
| Total Income |  |  |
|  |  |  |
| Expenses |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Total Expenses |  |  |
| Total Income <br> Less Expenses |  |  |

On the back of this page, write one paragraph explaining what a budget is and identifying at least three savvy spending and saving principles.

## Handout 4.6: Maria's Story Assessment—Answer Key

Maria is one of your best friends. She keeps complaining that she runs out of money each month before she gets paid. She's asked you to help her make a budget based on her income from her part-time job. She handed you a crumpled paper with the following record of her expenditures for last month. Before you help her make a budget, first help her balance her monthly transactions by filling in the last column on the table below. To obtain the balance, add income and subtract expenditures and withdrawals.

| Date | Transaction | Expenditure | Income or <br> Withdrawal | Balance |
| :--- | :--- | :---: | :---: | :---: |
| $2 / 1$ | Paycheck-Direct Deposit |  | $\$ 168.43$ | $\$ 168.43$ |
| $2 / 1$ | ATM cash + fee |  | $-\$ 21.50$ | 146.93 |
| $2 / 1$ | Movie and soft drink | $\$ 9.50$ |  | 137.43 |
| $2 / 3$ | Gasoline | $\$ 22.97$ |  | 114.46 |
| $2 / 5$ | Music CD | $\$ 17.99$ |  | 96.47 |
| $2 / 10$ | Old Navy clothes | $\$ 43.47$ |  | 53.00 |
| $2 / 12$ | ATM cash |  | $-\$ 40.00$ | 13.00 |
| $2 / 15$ | Jewelry | $\$ 14.99$ |  | -1.99 |
| $2 / 19$ | Gasoline | $\$ 16.02$ |  | -18.01 |
|  |  |  |  |  |

## Handout 4.6: Maria's Story Assessment—Answer Key cont.

(Answers will vary but will look similar to the example below.)
Using the information on the previous page, help Maria make a budget so that her expenditures do not exceed her monthly income of $\$ 168.43$. Also, be sure to allocate at least $\$ 35$ per month for gasoline since Maria has to use her car to get to work. Use the form below. If your first budget attempt goes over her income, use the second budget attempt column.

| Income | 1st Budget Attempt | 2nd Budget Attempt |
| :--- | :---: | :---: |
| Earnings | $\$ 163.43$ | $\$ 163.43$ |
| Other (gifts, etc.) | 0.00 |  |
| Total Income | 163.43 | 163.43 |
|  |  |  |
| Expenses | -35.00 | -35.00 |
| Gasoline | -60.00 | -50.00 |
| Cash | -30.00 | -20.00 |
| Clothes, jewelry |  |  |
| Entertainment, CDs | 175.00 |  |
|  | -11.57 | 155.00 |
| Total Expenses |  | 8.43 |
| Total Income <br> Less Expenses |  |  |
| Che |  |  |

On the back of this page, write one paragraph explaining what a budget is and identifying at least three savvy spending and saving principles.

