

Financial Literacy: Integrated and Contextualized Learning



Household Cash Flow

Use financial literacy context to teach or reinforce mathematic calculations (addition, subtraction, percentages) while introducing learners to the use of cash flow logs. This 30-minute activity can be used as a standalone, within a related math lesson, or when covering cash flow concepts in a personal finance lesson.

By the end of this lesson, the students will be able to:

Content objectives

- Understand how a cash flow log tracks spending and saving.
- Complete calculations of cash flow in various scenarios.

Language objectives

- Draw on the vocabulary of personal finance to talk about the calculations related to cash flow in different scenarios.

Ideal level: Beginning Basic Education or Low Intermediate

Steps	Description	Materials	The Skills that Matter Addressed or Evident
<p>Step I: Instruction on vocabulary</p>	<p>To get students ready for this activity, begin with a “Speedy Lists” activity to energize the group, activate background knowledge, and find out what they already know on the topic. Students work in pairs or trios while performing the following steps:</p> <p>Take out a blank sheet of paper and give these instructions: “I will say a phrase or category, and you write down all the words you can think of associated with that phrase or category as quickly as possible. Decide who is going to be the recorder right now. You have 30 seconds per word. Ready?!” (Note: In a group of lower proficiency or ESL students, allow 1–2 minutes.)</p> <p>Read words aloud, giving the students 1 minute to generate the speedy list. Words you might read include these:</p> <p>ways I spend money, ways I earn money, saving money, cashflow</p> <p>Ask for a few shout-outs from the group for each, asking follow-up questions and for definitions or examples of some of the items they listed that directly relate to today’s lesson. Note individuals who seem to be struggling to keep up with the concepts.</p> <p>If not all the key terms or topics have emerged, introduce and review key vocabulary words required to talk about personal finance:</p> <ul style="list-style-type: none"> • <i>Cash inflow</i>: money you received (e.g., paycheck, savings interest, payment for sale of item) • <i>Cash outflow</i>: money you spent, saved, invested, donated, or used to repay what was borrowed (introduce “fixed” if the word does not come up organically, as it will needed later). • <i>Net cash flow</i>: difference between total cash inflow and total cash outflow • <i>Cash flow log</i>: a record of cash inflows and cash outflows 		<p>Critical thinking</p> <p>Communication</p> <p>Processing and analyzing information</p>



Steps	Description	Materials	The Skills that Matter Addressed or Evident
<p>Step II: Presentation</p>	<p>Introduce the activity by explaining that a cash flow log is a tool used to track spending and saving habits for an individual or household using information from previous months. When outflows exceed inflows, a person is losing money! Cash flow information can be analyzed to identify options for changing spending and earnings in order to stop losing money or to save more. If inflows exceed outflows, we can look at how the extra money might be best spent or how it might be saved or used to pay back debts.</p> <p>Refer to the opening activity on “how we spend money” and remind students that these are our “expenses.” As needed, use photos or graphics to represent types of expenses, such as housing, transportation, utilities, etc.</p> <p>Hand out the cash flow scenarios (Appendices A to C). Ask students to focus on Case 1 (Appendix A), and give them a couple of minutes to read it quietly. They should mark places that are unclear. They may read with a partner if they prefer.</p> <p>As a whole group, read through the case together and clarify any language that is unclear. On a screen if possible, model for students how to complete the calculations to tally cash outflows, compare outflows to inflows, and perform calculations for “what if” scenarios.</p> <p>An answer key with possible answers has been provided (Appendix D).</p> <p>Display the results for Case 1 so that the work teams can reference them as they work through Case 2 (Appendix B).</p>	<ul style="list-style-type: none"> • Cash Flow Scenarios – Case 1 (Appendix A) • Cash Flow Scenarios – Answer Key (Appendix D) 	<p>Processing and analyzing information</p> <p>Navigating systems</p> <p>Problem solving</p>



Steps	Description	Materials	The Skills that Matter Addressed or Evident
<p>Step III: Guided practice</p>	<p>Arrange students into partner pairs or trios. Have each team work to complete calculations for Case 2 (Appendix B) in same way as was done for Case 1.</p> <p>As students are deciding what outflows to adjust, guide them to identify and circle the types of outflows that can be expected to be the same every month. Point out that these “fixed” amounts must remain the same for all three scenarios in the case study. Learners can choose to adjust any of the other types of outflows to balance the cash flow.</p> <p>Explain the 80/20 rule. Has anyone heard of it? If so, let a student talk first, then add or clarify the definition:</p> <ul style="list-style-type: none"> 80/20 rule: A rule of thumb used as a guide to help individuals plan spending or analyze spending and saving habits. In general, using 80% of net income for living expenses and other discretionary spending leaves up to 20% of net income to be used to achieve savings goals or pay down debt. Note that this is a guideline only and will vary according to individual values, aspirations, and circumstances. Necessary financial obligations take priority over all other spending and saving. <p>As time allows, lead a whole-group discussion to help teams work through the first two questions and at least Scenario 1 of the third question for Case 3 (Appendix C). Expense adjustments will vary among the groups, as each group makes different assumptions based on information provided.</p>	<ul style="list-style-type: none"> Cash Flow Scenarios – Case 2 (Appendix B) Cash Flow Scenarios – Case 3 (Appendix C) Cash Flow Scenarios – Answer Key (Appendix D) 	<p>Communication</p> <p>Processing and analyzing information</p> <p>Problem solving</p> <p>Navigating systems</p>



Steps	Description	Materials	The Skills that Matter Addressed or Evident
Step IV: Extended practice	<p>Encourage learners to perform calculations on their own using personal information.</p> <p>Use research skills to investigate generally accepted rules of thumb for housing cost limits or transportation cost limits. Provide 1 or 2 recommended websites for learners to facilitate this task.</p> <p>Ask learners to share observations and assumptions about the data for each household.</p>	<ul style="list-style-type: none"> • Websites • Web access and computer 	<p>Communication</p> <p>Self-awareness</p> <p>Processing and analyzing information</p> <p>Navigating systems</p> <p>Adaptability and willingness to learn</p>



Appendix A. Cash Flow Scenarios – Case 1

Martin is single, lives in a one-bedroom apartment, and has two jobs. He has very little free time, but the time he has is spent going out to eat and playing video games with friends.

Directions

Complete the following tasks for Martin:

Scenario A: Calculate Martin's cash outflow and compare it to his cash inflow. Which is greater? How would you adjust the outflow to balance the amounts? Report your choice to the class.

Scenario B: Imagine that Martin's rent goes up by 10% after he balanced his inflow and outflow in scenario A. Calculate his outflow with this increase. What additional adjustments should he make to his cash outflow or inflow? Explain your thinking.

	Case 1: Single Person Monthly Cash Inflow \$2,030	
	Scenarios	
Monthly Cash Outflow	Now	Rent After 10% Increase
Rent and Renters' Insurance	\$750	
Utilities	\$75	
Health Care	\$65	
Transportation	\$120	
Food	\$400	
Clothing and Personal Effects	\$200	
Technology	\$220	
Entertainment	\$150	
Gifts and Charity	\$40	
Savings	\$40	
Credit Card Payments	\$70	
TOTAL Outflow		



Appendix B. Cash Flow Scenarios – Case 2

Joe’s parents have moved in with him and his wife, Suzie, and now live in their three-bedroom home. This will make it easier for Joe and Suzie to help take care of his parents as they grow older.

Directions

Complete the following tasks for Joe and Suzie:

Scenario A: Calculate Joe and Suzie’s cash outflow and compare it to their cash inflow. Which is greater? How would you adjust the outflow to balance the amounts? Report your choice to the class.

Scenario B: Imagine that Joe and Suzie’s health care costs increased by 25% after they balanced their inflow and outflow in scenario A. What additional adjustments should they make to their cash outflow or inflow? Explain your thinking.

Case 2: Couple Living With Parents Monthly Cash Inflow \$5,865		
Scenarios		
Monthly Cash Outflow	Now	Health Insurance After 25% Increase
Home Insurance and Property Tax	\$775	
Utilities	\$200	
Health Care	\$220	
Transportation	\$625	
Food	\$1,000	
Clothing and Personal Effects	\$300	
Technology	\$220	
Entertainment	\$200	
Gifts and Charity	\$100	
Savings	\$100	
Credit Card Payments	\$100	
Home Loan	\$1,725	
TOTAL Outflow		



Appendix C. Cash Flow Scenarios – Case 3

Directions

1. Apply the 80/20 rule to calculate a target amount for total living expenses and personal expenses based on inflow for:

Martin (Case 1): Target \$ _____

Joe and Suzie (Case 2): Target \$ _____

2. Calculate a target amount for total savings based on inflow for:

Martin (Case 1): Target \$ _____

Joe and Suzie (Case 2): \$ _____

3. Adjust the expense amounts below. Aim to match the guideline targets you identified above for Case 1 and Case 2. What do you notice?

Monthly Cash Outflow	Apply 80/20 Rule			
	Martin (Case 1)		Joe and Suzie (Case 2)	
Rent and Renter's Insurance		Savings:		Savings:
Home Insurance and Property Tax				
Utilities				
Health Care				
Transportation				
Food				
Clothing Personal Effects				
Technology				
Entertainment				
Gifts and Charity				
Savings				
Credit Card Payments				
TOTAL Outflow				



Appendix D. Cash Flow Scenarios – Answer Key

Monthly Cash Outflow	Case 1: Single Person Monthly Cash Inflow \$2,030		Case 2: Couple and Parents Monthly Cash Inflow \$5,865		Case 3: Apply 80/20 Rule		
	Scenarios		Scenarios		Scenarios		
	Now	Rent After 10% Increase	Now	Health Care After 25% Increase	Martin (Case 1)	Joe and Suzie (Case 2)	
Rent and Renter's Insurance	\$750	\$825	—	—	\$750	—	Savings: \$1,173
Home Insurance and Property Tax	—	—	\$775	\$775	—	\$775	
Utilities	\$75	\$75	\$200	\$200	\$60	\$160	
Health Care	\$65	\$65	\$220	\$275	\$65	\$275	
Transportation	\$120	\$120	\$625	\$625	\$90	\$450	
Food	\$400	\$350	\$1,000	\$1,000	\$274	\$700	
Clothing and Personal Effects	\$200	\$200	\$300	\$300	\$100	\$130	
Technology	\$220	\$205	\$220	\$220	\$140	\$180	
Entertainment	\$150	\$125	\$200	\$200	\$75	\$130	
Gifts and Charity	\$40	\$30	\$100	\$100	—	\$52	
Savings	\$40	\$40	\$100	\$200	—	—	
Credit Card Payments	\$70	\$70	\$100	\$150	\$70	\$100	
Home Loan	—	—	\$1,725	\$1,875	—	\$1,740	
TOTAL Outflow	\$2,130	\$2,105	\$5,565	\$4,965	\$2,030	\$5,865	

Case 1, Scenario A: Martin's outflow is greater by \$100. He could reduce the amount spent on things like food, clothing, technology, entertainment, and gifts by a total of \$100. (Note: Students may distribute this amount differently.)

Case 1, Scenario B: Martin's outflow increased by \$75. He could increase his inflow by finding another job or getting a raise, or he could decrease his outflow even more by reducing the amount spent on things like food, clothing, technology, entertainment, and gifts. (Note: Students may distribute this amount differently than in the table above, depending on the decisions they made in Scenario A, but the total should be the same.)

Case 2, Scenario A: Joe and Suzie's inflow is greater by \$300. They could increase the amount they put into their savings, put more toward their credit card payments, or increase the amount they use to pay off their home loan by a total of \$300. (Note: Students may distribute this amount differently. They may suggest spending more on food, clothing, technology, entertainment, or gifts.)



Case 2, Scenario B: Joe and Suzie's outflow increased by \$55. They could reduce the increased amount they put toward different things in Scenario A. (Note: Students may have distributed this amount differently than in the table above, depending on the decisions they made in Scenario A, but the total should be the same.)

Case 3, Question 1: Martin (Case 1): Target \$1,624

Joe and Suzie (Case 2): Target \$4,692

Case 3, Question 2: Martin (Case 1): Target \$406

Joe and Suzie (Case 2): Target \$1,173

Case 3, Question 3: See table above for one solution. Students may notice that using the 80/20 rule means that they need to decide which bills are nonnegotiable (Does the full rent need to be paid every month? If so, that means less money is available to go toward something else.)

