



THE MONEY CIRCLE

THEME THREE: APPLY FINANCIAL PLANNING AND BUDGETING MECHANISMS

LESSON TITLE:

Theme 3, Lesson 1: Money Logic

Lesson Description:

This lesson helps students better understand what financial wealth is and how to achieve it by exercising systematic decision-making principles. Students will use the P.A.C.E.D. decision-making model for use in budgeting and making choices in their daily lives.

Grade Level: 9-12

Key Concepts: Assets, liabilities, net worth, financial planning, budgeting, decision-making, fixed expenses, variable expenses

Objectives: Students will be able to:

1. Identify how assets, liabilities and net worth define financial wealth.
2. Explain the budgeting process, including fixed and variable expenses.
3. Apply strategic decision-making to the financial planning process

Time Required: 50 - 60 minutes

Materials:

- Handout 1; one per student
- Handout 1 Answer Key
- Visual 1
- Handout 2
- Handout 3; one per small group/pair
- Handout 4; one per small group/pair
- Visual 2
- Handout 5; (extension activity)

Procedures:

1. Ask students to share what financial wealth means to them. (Answers will vary, but could include being a millionaire, having your wants and needs met, having money for extras, etc.)

2. Tell students that financial wealth can be calculated as the difference between an individual's assets and liabilities, also known as net worth.
3. Write the formula on the board: $\text{Assets} - \text{Liabilities} = \text{Net Worth}$.
Define assets and liabilities.
 - Asset: something of monetary value owned by an individual or organization.
 - Liability: money an individual or organization owes; same as debt.
4. Distribute Handout 1 and ask students to read the story on their own and identify the assets and liabilities. Assets should be marked with an "A" and liabilities should be marked with an "L."
5. Use Handout 1 Answer Key to review correct answers with the class.
6. Ask students to think about what they would like their net worth to be. Then ask how many students have a plan in place to increase their net worth. Allow some students to share their plans.
7. Explain that most people with high amounts of net worth did not become wealthy overnight or through an inheritance; they achieved wealth by setting budget goals and planning.
8. Share concepts from Visual 1 with students.
9. Explain that in the next activity students will have an opportunity to begin developing budgeting principles to help them reach their financial goals. The exercise also will include a model for decision-making that students can use in their daily lives.

Teacher note: The next exercise uses the P.A.C.E.D. decision-making model. Review how the model works through the steps outlined below before conducting the exercise in class.

10. Share Handout 2 with the class and ask one of the students to read the paragraph aloud.

11. Create a blank P.A.C.E.D grid on the board and fill it in based on responses from the class from the next few steps.

12. Ask a student to identify Jessica’s problem (Jessica has to choose a community service project for her senior class to complete before graduation).

13. Ask the class what Jessica’s alternatives or options are and list them in the first column of the blank grid, as indicated in the sample below (environmental cleanup, car wash, blood drive, homeless shelter).

Teacher note: Sample table with alternatives.

	Criteria 1	Criteria 2	Criteria 3	Criteria 4
Environment				
Car Wash				
Blood Drive				
Homeless Shelter				

14. Introduce/review the word “criteria” as “a standard used to judge or evaluate something.” Ask the class what criteria Jessica should consider as she makes her decision. This can also be phrased as “how should Jessica judge the importance of each alternative?” The criteria should be placed in the first row of the table, as indicated in the sample below (appeal to students, what will not take too much time away from other interests, what would have the greatest impact in the community, etc.).

Teacher note: Sample table with alternatives and criteria.

	Appealing	Time Away From Other Interests	High Impact	Evaluation
Environment				
Car Wash				
Blood Drive				
Homeless Shelter				

15. Also ask the class to consider if any of the criteria are more important than the others and should carry more weight (e.g., what is appealing to the most students is more important, because the more students who participate, the faster they’ll reach their goal). If certain criteria are more important, indicate how many times more important by adding to the table as indicated below (e.g., twice as important = x2; three times as important = x3, etc.).

16. Using positive (+) and negative (-) symbols, evaluate the alternatives based on the criteria given and place them in the evaluation column of the table per the sample below.

Teacher note: Sample table with alternatives, criteria and evaluation.

	Appealing X2	Time Away From Other Interests	High Impact	Evaluation
Environment	--	-	-	-4
Car Wash	++	+	-	+2
Blood Drive	--	-	+	-2
Homeless Shelter	--	-	+	-2

17. The alternative with the highest number in the “Evaluate” column becomes the decision that Jessica should choose. Inform the class that choices may change based on the alternatives and criteria at a given time, but that the P.A.C.E.D. decision-making tool can be used to help with any decision. For instance, this tool can be used when it comes to personal financial planning and budgeting.

Teacher note: The economic concept of opportunity cost could be introduced following the sample scenario and defined as the “next best alternative.” Ask students to identify the next best alternative or opportunity cost in the scenario. (The blood drive and homeless shelter are the next best alternatives based on results above).

18. Divide the class into small groups or pairs and distribute a copy of Handouts 3 and 4 to each group or pair. Ask each group to review the budget scenario in Handout 3, delineating fixed vs. variable expenses, and find a way to have more assets than liabilities at the end of the month and at least \$100 to save or invest using Handout 4. Share Visual 2 as an example of how they might accomplish these goals.

Teacher note: The decision-making grid in Handout 4 allows up to six alternatives and five criteria. Inform students that they do not have to use all of these in order to reach a decision. Students should set up their grid similar to the example in Visual 2.

- 19.** Invite each group to share its evaluation and results with the class.

Closure:

- 20.** Ask students the following questions:
- How do you calculate financial wealth or net worth? (assets minus liabilities)
 - What are assets? (something of monetary value owned by an individual or organization)
 - What are liabilities? (money an individual or organization owes; same as debt)
 - How do fixed expenses differ from variable expenses? (fixed expenses stay the same from month to month and variable expenses fluctuate)
 - What are the principles for successful budgeting? (know where your money is going, ensure you don't spend more than you make and find uses for your money that will increase your financial wealth)
 - What are the steps to complete a PACED decision-making grid? (Identify the problem, list the alternatives, select the criteria most important to consider, evaluate options compared to criteria, and make a decision)

Assessment:

- 21.** Ask students to develop a 3- to 4-minute presentation (using PowerPoint, Prezi, etc.) on their personal plan for future financial wealth, including all of the key concepts (assets, liabilities, net worth, budgeting, decision-making, fixed expenses, variable expenses) reviewed in the lesson, to share with other students, either in small groups or as a class.

Extension Activity 1:

- 22.** Encourage students to identify their savings goals and to make a plan to budget for those goals accordingly using Handout 5.

Extension Activity 2:

- 23.** Ask students to apply the P.A.C.E.D. decision-making tool to a choice they have to make or have made in their personal lives.

Alignment to Standards:

National Economic Content Standards:

- Standard 2, Decision-making: Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Many choices involve doing a little more or a little less of something; few choices are "all or nothing" decisions.

National Standards for Financial Literacy:

- Standard 2, Buying Goods and Services: A budget includes fixed and variable expenses, as well as income, savings and taxes.
- Standard 3, Saving: 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.

JumpStart National Personal Finance Standards:

- Standard 1, Financial Responsibility and Decision-Making: Take responsibility for personal financial decisions.
- Standard 4, Financial Responsibility and Decision-Making: Make financial decisions by systematically considering alternatives and consequences.
- Standard 1, Planning and Money Management: Develop a plan for spending and saving.
- Standard 6, Planning and Money Management: Develop a personal financial plan.

Common Core Standards:

Writing:

- Production and Distribution of Writing:
 - CCSS.ELA-Literacy.W.9-10.4 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.
 - CCSS.ELA-Literacy.W.11-12.4 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.

ASSETS OR LIABILITIES

Joseph, a high school student, is preparing to leave for college in a few months and has begun to think about expenses in his new environment. He is worried about needing money to buy things he wants. Joseph will take the television that his parents bought for him and the stereo system he is paying for in installments from the local electronics store. Because freshmen at his college aren't allowed to park their cars on campus, he won't take his car. But his younger sister has agreed to rent his car for \$75/month while he's gone. Joseph has a limited edition collection of comic books and knows a few people that might be interested in buying them. He has about \$175 in a savings account that his grandparents started for him on his 16th birthday. He had more money originally, but spent some of it on new clothes and music. He may have to work a part-time job on weekends to make some extra spending money. His parents agreed to send him a \$50 monthly allowance if he keeps his grades at a B or above average. They bought a few savings bonds in his name, but don't want him to cash the bonds until he graduates from college. He's decided to pursue a business degree and will need a laptop computer. One of his friends who will attend trade school and won't need his laptop has agreed to let Joseph purchase it in installments of \$30/month.

ASSETS OR LIABILITIES ANSWER KEY

Joseph, a high school student, is preparing to leave for college in a few months and has begun to think about expenses in his new environment. He is worried about needing money to buy things he wants. Joseph will take the ^Atelevision that his parents bought for him and the ^Lstereo system he is paying for in installments from the local electronics store. Because freshmen at his college aren't allowed to park their cars on campus, he won't take his ^Acar. But his younger sister has agreed to ^Arent his car for \$75/month while he's gone. Joseph has a limited edition collection of ^Acomic books and knows a few people that might be interested in buying them. He has about \$175 in a ^Asavings account that his grandparents started for him on his 16th birthday. He had more money originally, but spent some of it on new clothes and music. He may have to work a part-time job on weekends to make some extra spending money. His parents agreed to send him a \$50 monthly ^Aallowance if he keeps his grades at a B or above average. They bought a few ^Asavings bonds in his name, but don't want him to cash the bonds until he graduates from college. He's decided to pursue a business degree and will need a laptop computer. One of his friends who will attend trade school and won't need his ^Llaptop has agreed to let Joseph purchase it in installments of \$30/month.

BUDGETING PRINCIPLES

A budget allows you to:

- Understand where your money goes.
- Ensure you don't spend more than you make.
- Find uses for your money that will increase your wealth.

To develop a budget, you should:

- Calculate your income (from allowance, part-time job, etc.).
- Determine how much money you will save to achieve your financial goals and "pay yourself first."
- Decide how much money you need to pay your fixed expenses (car payment, insurance, school lunch card, etc.).
- Track your other (variable) expenses to ensure you are in line with your financial goals.
- Adjust if needed to build wealth or as fixed expenses change, etc.

P.A.C.E.D DECISION-MAKING MODEL

Jessica is the senior class president at her high school and has to choose a community service project for her class to complete. The senior class has to collectively earn a total of 150 hours of community service before graduation, and they can select one type of activity. Jessica wants to identify an activity that will appeal to the most students; that will not take away from other school and extracurricular activities that students might be involved in; and that will have the highest impact in their community. Last year's senior class completed an environmental cleanup project of local parks and highways. Other ideas that have been suggested include: coordinating a car wash and giving the proceeds to a national children's charity; hosting a community blood drive twice a year at the school; and volunteering at local homeless shelters every month. What should Jessica choose as the senior class community service project?

- P** - Identify the *problem*
- A** - List the *alternatives*
- C** - Select the *criteria* that is most important to consider
- E** - *Evaluate* the options compared to the criteria
- D** - Make a *decision*

	CRITERIA 1	CRITERIA 2	CRITERIA 3	EVALUATE
ALTERNATIVE 1				
ALTERNATIVE 2				
ALTERNATIVE 3				
ALTERNATIVE 4				

SAMPLE MONTHLY BUDGET

	CURRENT INCOME	INCOME CHANGES	NEW BUDGET
Wage/Salary (after taxes and deductions)	\$2,085		
Interest on saving accounts	\$ –		
Investment earnings	\$ –		
Other income	\$ –		
TOTAL INCOME	\$2,085		
	CURRENT EXPENSES	SPENDING CHANGES	NEW BUDGET
Rent	\$650		
Renter's Insurance	\$20		
Tuition loan	\$50		
Electricity	\$60		
Gas	\$25		
Water	\$25		
Trash/Sewage	\$15		
Telephone	\$50		
Cell phone	\$35		
Cable TV	\$60		
Internet	\$20		
Life Insurance	\$ –		
Credit card payment	\$35		
Groceries	\$160		
Clothing	\$75		
Car loan	\$350		
Car insurance	\$85		
Gas for car	\$160		
Eating out/entertainment	\$200		
Miscellaneous	\$55		
TOTAL EXPENSES	\$2,130		
Monthly Net (Income – Expenses)	\$(45)		
Available to SAVE or INVEST	\$ –		

FINANCIAL PLANNING TEMPLATE

- P** - Identify the *problem*
- A** - List the *alternatives*
- C** - Select the *criteria* that is most important to consider
- E** - *Evaluate* the options compared to the criteria
- D** - Make a *decision*

	CRITERIA 1	CRITERIA 2	CRITERIA 3	CRITERIA 4	CRITERIA 5	EVALUATE
ALT. 1						
ALT. 2						
ALT. 3						
ALT. 4						
ALT. 5						
ALT. 6						

FINANCIAL PLANNING USING P.A.C.E.D. EXAMPLE

- P** - Identify the *problem*
- A** - List the *alternatives*
- C** - Select the *criteria* that is most important to consider
- E** - *Evaluate* the options compared to the criteria
- D** - Make a *decision*

	CRITERIA 1 Appealing (X2)	CRITERIA 2 Reasonable	CRITERIA 3 High Impact	CRITERIA 4	CRITERIA 5	EVALUATE
ALT. 1 Cut Cable TV	++	+	-			+2
ALT. 2 Cut Internet	++	+	-			+2
ALT. 3 Reduce Entertainment by half	++	+	+			+4
ALT. 4 Reduce Groceries by 25%	++	-	-			0
ALT. 5 Cut Clothing	++	-	-			0
ALT. 6 Cut Gas	++	-	+			+2

