

Lesson Cycle

Lesson Title/Topic: Math and Money

Concept: Monthly Budget

Standards/Rationale: 111.27 (b)(1)(A) apply mathematics to problems arising in everyday life, society, and the workplace;

Learning Target:	Assessment:
When presented with a budget template, the student will calculate a monthly budget with 75% accuracy. Language Objective: Students will be able to recognize and orally explain the difference between income and expenses.	Calculated Monthly Budget

Materials: Fake money, Budget template, Money audio track, Income and Expense cards

Lesson Cycle:

The teacher will:	The student will:
Focus/Mental Set: Once students settle in seats, introduce topic of math and money. Have students divide in groups of 5 with students closest to them. Ask students, what is something they have been wanting lately and to consider how much it may cost. Ask a few students to share what that object is. Pick a student in each group to hand the fake money trays to students. Do not give	Students split into groups and answer the instructor's query about things they would like to purchase. The student with the money tray pays the expenses represented by the other group members and subtracts the amount on each expense card from the fake money. Students assist calculating the remaining money. Students respond to instructor's questions about money that is

the students the total amount in tray. Hand out index cards labeled for different expenses (expense cards) to each of the other members of the group. Instruct students with money to pay expenses to each expense card holder then figure what they have left in the tray for each group. Give them at least 2 minutes for this activity. When time is up, ask the students how much money is left and if it's enough to purchase what they wanted. Some groups will have more left than others. Ask the students if they knew how much they started with, or how much they owed, and if they would be able to purchase what they wanted with the money they had left. Allow the students to answer. Inform the students that a budget allows a person to plan out their money by using mathematics to calculate a monthly budget and plan for extra spending.

ELL Strategy:

Build background knowledge to represent income and expenses.

TPR: Ask students to stand and lead them through structure for income and expenses.

Use hand signals in a pulling motion toward your body to illustrate income. Use hand signals for passing something out for expenses. Use envelope with the word income and a picture of a job for the visual. Use another envelope with the word expense and a picture of a cashier from a store. Lead the class in choral response and hand motions.

left and their prior knowledge of the amount they were given and the expenses.

Teacher Input: Instruct students to remain in their teams created at the beginning of class. Call student's attention to a display of Budget Template graphic along with

Students will remain grouped in the teams they formed during the focus. Students will look at the displayed Monthly Budget Template and Income/Expense worksheet.

Income/Expense worksheet. Remind students about sixth grade math when they learned how to use a checkbook register and track the money in their checking account. Let the students know that today they will be learning about creating and calculating a budget. Utilizing the Income/Expense worksheet the key terms will be explained. Pointing to the dollar amount for income, a brief definition is provided. Income is the amount of money you earn throughout the month that is deposited into the bank. The money deposited into the bank has already had taxes, insurance, or retirement money subtracted from the total amount. The money that is given to you to put in your bank becomes the amount of money that you will place into the Budget Worksheet labeled "Monthly Income". At this point, the instructor explains the Kagan structure team stand-n-share. The students are asked to get out one piece of paper and a pencil. Each team designates a leader to start. The students are instructed to discuss each question the instructor asks until told otherwise, and to come up with a team answer. They are instructed that they will be given one minute per question to collaborate and decide on an answer, at which point the instructor will call on one group to provide the answer and receive feedback from the instructor. The leader for that team will do the speaking. After each question, the leader passes the paper and pencil to the right and that person becomes the new leader. The instructor begins by asking the students, "If the money called income goes into the bank, what happens to the money labeled expenses?" Follow up on

As the teacher leads a guided discussion, the students will assist the teacher to place income and expense monies into the correct labels of the template. The students will assist through participating in a collaborative learning structure called Team stand-n-share. Students will collaborate in their teams to answer each of the instructor's questions during teacher input. After each question the student leader for each group will pass the paper and pencil to the right to give another student a turn documenting and sharing his or her team's answer with the class. After assisting the teacher with inputting, the monies in the template, students will assist the teacher to calculate the Total Monthly Expenses. Finally, students will assist the teacher to calculate the difference between "Total Monthly Expenses" and "Total Monthly Income."

the chosen team's response by explaining just like income is the money added to your bank account, expenses are the money that is subtracted from your bank account. Point to the first Expense item on the Income/Expense worksheet and offer a brief definition of expenses. Ask the students, "Where do I put this money on my worksheet?" Allow the teams their response time. Explain that a Monthly Budget helps you plan how your money will be used during the month. Planning for our expenses helps us know what we can buy, what we cannot buy, and what we can save. Planning a monthly budget helps us have the money we need when we need to pay our expenses. Tell the students that we will work this budget together. Ask the students to tell you where the money labeled "House Expense" should be placed on the Income/Expense Worksheet. Allow the teams response time. For the next expense item, ask the students to tell you where to place the money labeled "Utilities". Briefly explain that utilities are electricity, water, sewer, and trash. Follow with the next monthly expense amounts, allowing the teams to respond with responses designating each one to the appropriate location on the Monthly Budget Template. After the monies have been placed in the appropriate places on the template ask the students, "How would I calculate how much money is my total monthly expenses?" Allow students to answer. Now using the projected template add the expenses and place the sum in the label for "Total Monthly Expenses". Ask the students, "Now that we have our total monthly income and total monthly

expenses, how would I calculate how much money I have left over, or how much money do I need to pay all my expenses?"

Explain that to calculate the Monthly Budget Template, that we need to calculate the difference between, "Total Monthly Income" and "Total Monthly Expenses".

Ask students, "How do we calculate the difference between two numbers?" On the projected Monthly Budget Template, subtract the "Total Monthly Income" from the "Total Monthly Expenses" and place the result in the label on the template "Income and Expense Difference". Instruct students that after you calculate the difference you will know if you have money left over at the end of the month, or if you will need more money to pay your expenses. If my "Total Monthly Income" is larger than my "Total Monthly Expenses" then I will have money left over at the end of the month. If my "Total Monthly Expenses" is larger than my "Total Monthly Income" then I know that I do not have enough money to pay all of my expenses for the month. Now let's practice calculating a Monthly Budget Template together.

ELL Strategy:

Illustrate how money is received and money is spent for expenses.

SIOP: In student pairs, have the students use the envelopes with visuals to for income and expense. Instruct the students to read the envelopes orally to the peers. Then students will orally explain income is money that you get from your job. Expense is money that you give to pay for stuff you need for your family.

Guided Practice: Students will be instructed to stay in the same groups they were given during the focus of the lesson. Each student will be given a Monthly Budget Template. Now the students will be led through a collaborative learning structure. The students that were given the fake money will now be the team leaders. Each team leader will collect the expense note cards they were provided at the beginning of class. Each member of the group will be given an expense note card by their team leader. Now the students are instructed to put the monies represented as income and expenses in the proper labels of the Monthly Budget Template. Everyone must remain quiet and only speak when it is their turn to tell the group about the income and expense money. Now the students are instructed to begin with telling their team how much money represents their total monthly income. Ask the students to begin and allow them five minutes to fill in their Monthly Budget Worksheets. After the five minutes are up, give the students two minutes to calculate their total expenses and find out the difference between “Total Monthly Income” and “Total Monthly Expenses”. When the two minutes are ended, instruct the students to now discuss their answers to compare their calculations. After this two-minute session, debrief with the teams to evaluate the calculations. Celebrate their success and evaluate the difficulties.

ELL:

Practice with hands on application of income and expenses.

Students will use the fake money and expense cards given during focus of lesson. The team leader will begin by telling the students in the team how much monthly income is represented by the money they were given. Each student will input the amount in the “Monthly Total Income” label on the template. The student on the left of the team leader will now read to the group the expense card that was given to them and students without talking will input the expense in the appropriate label on the template. Each student will move in succession until all the cards have been placed into the appropriate label on the template during the time allotted and calculate the “Total Monthly Expenses”. Students then will calculate the difference between “Total Monthly Expenses” and “Total Monthly Income”. When the calculations are finished the students then will discuss their templates to determine how their calculations compare. Then students will determine if they have money left over in their assigned budget, or if they have more expenses than monthly income.

Independent Practice: Pass out a clean monthly budget sheet to each student. Tell them to use a monthly income they would like to earn and give them basic monthly expenses, such as a mortgage, utilities, food, vehicle, and entertainment. Tell them to fill out the final balance. Allow them 10 minutes to complete their budget. Have the students stand and mix, pair, share for 5 minutes. Instruct students to use positive feedback and error correction respectfully. The instructor will tell the students that when they leave the classroom, they will draw two “wild cards” from boxes on instructor’s desk. The wild cards will be extra expenses or income to add in or subtract from their current budget. To prepare for next class, student homework will be explained to students. Students are to take home wild cards and place the amounts determined by the wild cards in the correct category on the budget worksheet and refigure the balance.

ELL Strategy:

Review the terms and identify the correct definition of income and expense.

CALLA: Use an organizational skill to illustrate the function of income and expense. Using the fake money, have the students identify the terms income and expense. Using a budget template with easy to read dollar amount, the students will state the dollar amount for income. Identify the correct envelope and orally say the name, explain what it represents, and place the money for the income or expense in correct envelope.

Students will complete a fresh budget sheet individually. They will then mix, pair, and share with their classmates for immediate feedback and error correction opportunities. Students will take home budget worksheets and do assigned homework to prepare for next class.

<p>Closure: Spend 3 minutes reviewing the concepts/definitions of monthly income by asking for a description of income from the students. For a quick review of expenses, ask for examples from the classroom. Announce next class will be a follow up on how to balance a budget when the unexpected happens. Make sure homework is complete and returned please.</p>	<p>Students will participate in a teacher led classroom review by responding to prompts from the instructor to define and provide examples of budget concepts and terms.</p>
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<p>Options:</p>	
<p>Enrichment:</p>	<p>Reteach:</p>

Modifications/Correctives:

<p>Autism: Pair students with a group that can assist with instructions. Provide students with calculators to accommodate calculating the budget. Reduce the number of categories expected on the budget template. Give students extra time to complete the budget template. Provide student with play money and envelopes with pictures of categories. Student can use the money and envelopes to organize they money into accounts. No homework assignment.</p>	<p>Auditory Processing Disorder: Move student in close proximity to teacher. Pair student with a reading partner.</p> <p>Dyscalculia: Use a calculator. Provide students with calculators to accommodate calculating the budget. Provide student with sample budget template for reference. Use simplified numbers in larger bold print. Reduce the number of categories expected on the budget template. Prepare a sample budget template for students to refer to as they work on the independent practice.</p>
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