



PLANNING A BUDGET

Key Concepts

Income, needs vs. wants, budgets, simple interest, savings accounts, paying yourself first

Summary

This lesson reviews trade-offs and priorities in order to prepare a budget. Students learn sources of income and then make a budget. Savings is introduced with the concept of earning simple interest.

Overview & Lesson Objectives

This lesson is intended for middle school students in sixth, seventh and eighth grades. The lesson teaches students the concept of budgeting and calculating simple interest on a savings account.

Students will be able to:

- Identify sources of income
- Identify monthly expenses
- Calculate simple interest
- Plan a monthly budget

Time Allocation:

15 - 20 Minute Prep

35 - 40 Minutes Engagement

Materials:

- Copies of Sample Budget (one per student)
- Copies of Blank Budget Worksheet (one per student)
- Copies of Simple Interest Worksheet (one per student)
- Copies of Sample Lunch menu (one per student)



Lesson Begins: Setting the Stage

Background Builder #1: Instruct students to make a t-chart on the back of the Interest Worksheet. Or you can make a t-chart on the board (see below)

| Needs | Wants |
|-------|-------|
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |
| 5. | 5. |

Ask students to define needs and define wants. Select several students. Remind them that a need is something that we must have to survive, and a want is something we would like to have. Ask the students to name needs and wants and write them down on the board. Discuss the results with the class. Ask students to think of ways that they can get what they need and want (i.e. working and saving). Finally, tell students that saving is a good thing, and a plan or budget will help them achieve their goal and guarantee financial success.

State the Objective: tell the students what they will be able to do upon conclusion of the lesson.

“At the end of this lesson, you will understand the purpose of budgeting and be able to create your own. You will also be able to calculate simple interest.”

Lesson Procedure

Budgeting is the process of making your needs and wants fit. It can be difficult at times, but it is the key to making sure you have your money under control.

Review attached sample budget with students to demonstrate and clarify concepts. Allow students to work in pairs with a calculator and pencil to complete the attached budget worksheet.

Provide the following scenario:

You expect to receive \$100 each month as an allowance. Use your calculator and sample school lunch menu to determine how much money you would need to buy lunch at school every day. (Answer \$12.00)

Allow students to use the sample budget worksheet.



It is difficult to go to school without pencils, paper and other supplies. Even if your school or teacher gives you most of your supplies, there are items you will need or want to buy. Maybe you buy gel pens, highlighters, and glue sticks. Gel pens cost on average \$5.95, highlighters cost \$3.50, and glue sticks cost \$2.50. How much will you need for school supplies this month? (*Answer: \$11.95*)

Allow students to work and write the correct answer on the budget sheet. Below are some sample purchases to say out loud?

- Is this a week when you are going to a birthday party? You will need to buy a gift.
- Is there a new movie that you want to see?
- Is there a video game that you really want?
- Add the following amounts together to see how much your other expenses will be. Let's say you buy a birthday gift for \$20.
- You went to the movies twice this month, and each time you bought a ticket you spent \$10.00. You bought popcorn one time and it cost \$4.50.
- There is a new video game you want that costs \$21.99.
- What is your expense total for these categories?

You may have to write these amounts on the board in order to help the students record them correctly. (Answer: \$66.49 - \$41.99 for Entertainment, \$20.00 for Gifts, \$4.50 Snacks). Allow students to copy the correct answer onto the budget sheet.

How much did you spend of your allowance? How can we figure that out?

Allow students to add the totals for each category. Allow students to add the totals together and then call on someone to give an answer.

If we want to know how much is left over from our original \$100 a month allowance, what do we need to do? Subtract expenses from income. Your savings for this month would be what is left. When you look at how you spend your money, you should recognize that you have control over meeting your expenses. If you want to start saving more money, what spending habit could you change from this budget?

Allow students to offer suggestions such as packing a lunch a few days a month, going to the movies only once, foregoing the video game, etc.

A bank is the safest place to keep your money, and because people let us protect their money, banks give you back what is called interest. Interest is money that you earn just by having money in a savings account. It is a percent of the total amount of money that you keep in a bank. The interest rate, the length of time and the amount of money in your account determines the amount of interest you will receive from the bank.

For example, if you save \$100 for one year in an account with a 1% interest rate you would have earned \$1.00 from the bank.



Write 0.01 on the board. Model how you arrived at this answer via the chalkboard and by using the calculator for computation.

Distribute worksheets (included in this file) and allow students to work on them independently. Circulate and help students as needed. When students have finished, review the answers and discuss how saving more money can earn more interest.

Lesson Closes

Ask students to clarify between needs and wants and how a budget can help them achieve their goals. Elicit from students that saving money in the bank is not only safe but also profitable because they will earn interest. See the suggestion page for “Additional Engagement Opportunities/Resources”, for additional ideas.



Additional Engagement Opportunities / Resources

Pair and Share: Group students into pairs and ask each pair to exchange two or three new things learned during the day's lesson. Call on select pairs to share with the whole class what has been learned.

Sample questions:

- What are some expenses you may have currently?
- What types of earnings do you gather?
- Define interest.
- What item would you be willing to save money for in order to make the purchase?
 - Where do you expect to get the money you'll save?
 - How much spending money will be available?
 - Are there items you'll need to forego in order to save enough money?
 - How long will it take you to save enough money for the item you want to buy?

Misinformation: Quote information from the day's lesson purposely erroneous. Call on various students to restate the information correctly.

Samples:

- A budget is not necessary to stay on track with expenses
- Wants and Needs are the same thing.

What's left out? Supply students with statements that have some information missing. This can be done verbally or it can be done on a board. Ask students to provide the missing information.

Samples:

- _____ is money that you earn just by having money in a savings account.
 - *Answer is "interest"*
- A _____ is something that we must have to survive, and a _____ is something we would like to have
 - *1st Answers is "need", and 2nd answer is "want"*



INTEREST WORKSHEET ANSWER KEY

Use the formula $I=PRT$ to solve the following problems.

1. John received \$100 as a gift from his grandparents for his middle school graduation. He decided to save it in the bank until he decided what he would do with the money. The interest rate on his savings account is 1.5%. How much interest will he earn the first year?

\$1.50

2. Nicole received a check for \$50 when she won a local essay contest. Her mother told her to save it for college. If it earns interest at a rate of 1%, how much money will Nicole have after one year?

\$50.50

3. When Mary's new baby sister was born, her relatives gave her \$25 to start a savings account. How much will Mary's sister have when she turns 1 if her money is kept in the bank earning 1% interest?

\$25.25

4. Eduardo earned \$520 over the year for doing chores around the house. He decided to take \$200 to the bank where it will earn 1.5% interest. How much interest will he earn if he leaves it there for 1 year?

\$3.00

5. When Lori and Jeff got married, they put \$1,000 of their gifts into a savings account in the hopes of purchasing a bigger home sometime in the future. If they get a rate of 2%, how much will they have toward their home in 1 year?

\$1,020.00



Educational Standards

National Council of Teachers of Mathematics Principles and Standards for School Mathematics, 2000.

Number and Operations – (Students will) Understand meanings of operations and how they relate to one another.

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Algebra – (Students will) Understand patterns, relations, and functions.

Problem Solving – (Students will) Build new mathematical knowledge through problem solving.

Communication – (Students will) Use the language of mathematics to express mathematical ideas precisely.

Connections – (Students will) Recognize and use connections among mathematical ideas.

Representation – (Students will) Create and use representations to organize, record, and communicate mathematical ideas.

NJ Core Curriculum Content Standards for Personal Financial Literacy 2014:

Standard 9.1: 21st Century Life and Careers

9.1.A. Income and Careers: 9.2.8.A.6

9.1 B. Money Management: 9.2.8.B.3, 9.2.8.B.7

9.1 D. Planning, Saving, and Investing: 9.2.8.D.1

9.1 E. Becoming a Critical Consumer: 9.2.8.E.4

National Standards in K – 12 Personal Finance Education (from Jump\$tart Coalition) 2017:

Financial Decision Making:

Standard 4, “Make criterion-based financial decisions by systematically considering alternatives and consequences.”

Employment and Income:

Standard 2, “Compare sources of personal income and compensation.”

Spending and Saving:

Standard 1, “Develop a plan for spending and saving.”

Investing:

Standard 1, “Explain how investing may build wealth and help meet financial goals.”

National Content Standards in Economics (from Council for Economic Education) 2010:

Standard 1, Scarcity:



INTEREST WORKSHEET

Name: _____

Date: _____

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5. When Lori and Jeff got married, they put \$1,000 of their gifts into a savings account in the hopes of purchasing a bigger home sometime in the future. If they get a rate of 2%, how much will they have toward their home in 1 year?



MONTHLY BUDGET WORKSHEET

The following is an example of a monthly budget. You can use it to refer to as you plan your own budget.

INCOME/MONEY RECEIVED

| | |
|---------------|----------------|
| Earnings: | \$20.00 |
| Allowance: | \$10.00 |
| Gifts: | \$25.00 |
| Other: | \$ 0.00 |
| TOTAL: | \$55.00 |

EXPENSES/MONEY SPENT

| | |
|------------------|----------------|
| Snacks/Lunch: | \$20.00 |
| School Supplies: | \$ 5.00 |
| Gifts Bought: | \$ 7.50 |
| Entertainment: | \$12.00 |
| TOTAL: | \$44.50 |

EXCESS/MONTHLY TOTAL

| | |
|-------------------------|----------------|
| Income: | \$55.00 |
| Expenses: - | \$44.50 |
| TOTAL (Savings): | \$10.50 |



MONTHLY BUDGET WORKSHEET

The following is monthly budget worksheet. You can use it as you plan your own budget.

INCOME/MONEY RECEIVED

Earnings: _____

Allowance: _____

Gifts: _____

Other: _____

TOTAL: _____

EXPENSES/MONEY SPENT

Snacks/Lunch: _____

School Supplies: _____

Gifts Bought: _____

Entertainment : _____

TOTAL: _____

EXCESS/MONTHLY TOTAL

Income: _____

Expenses: - _____

TOTAL (Savings): _____



Sample Lunch Menu

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|--|--|---|---|---|
| 1 Bean & Cheese Burrito with Mexican Rice and Corn | 2 Creamy Buttered Penne Pasta Parmesan Bread with Seasonal Melon | 3 Cheese Pizza or Peperoni Pizza with Celery, Carrots & Ranch Dressing | 4 Chicken Burger with Potato Smiles and Baby Carrots | 5 Egg Roll and Rice Meal with Edamame |
| 8 Turkey Corn Dog Meal with Green Salad and Mandarin Oranges | 9 Pasta Alfredo Meal Parmesan Bread with Peas | 10 Cheese Pizza or Peperoni Pizza with Celery, Carrots & Ranch Dressing | 11 Meat Ball Sub Sandwich with Corn and Seasonal Fruit | 12 French Toast and Sausage with Seasonal Berries |
| 15 Turkey Hot Dog Meal with Potato Fritters and Water Melon | 16 Lasagna Meal with Parmesan Bread and Baby Carrots | 17 Cheese Pizza or Peperoni Pizza with Celery, Carrots & Ranch Dressing | 18 BBQ Chicken Slider Meal with Ranch Beans and Apple Sauce | 19 Grilled Chicken Skewers with Rice and Pineapple |
| 22 Cheese Burger Meal with Sweet Potato Fries And Pears | 23 Creamy Cheese Macaroni Meal with Peas and Seasonal Melon | 24 Cheese Pizza or Peperoni Pizza with Celery, Carrots & Ranch Dressing | 25 Chicken Nuggets with Corn and Mandarin Oranges | 26 Grilled Panini Cheese Sandwich with Tomato Soup and Apple Slices |
| 29 Popcorn Chicken with Trail Mix Snacks and Melon | 30 Pasta Marinara with Parmesan Bread And Baby Carrots | 31 Cheese Pizza or Peperoni Pizza with Celery, Carrots & Ranch Dressing | | |

Pricing

| | |
|-------------|--------|
| Monday's | \$2.00 |
| Tuesday's | \$3.00 |
| Wednesday's | \$2.00 |
| Thursday's | \$3.00 |
| Friday's | \$2.00 |