



BUDGETING AND SAVING: IT'S IN YOUR OWN BEST INTEREST

Key Concepts

Needs and wants, opportunity cost, budgets, **simple interest** on savings accounts

Summary

This lesson introduces needs and wants and how to budget and save for them

Overview & Lesson Objectives

This lesson is intended for students in fourth and fifth grades. The lesson will teach students the concept of budgeting and calculating simple interest on a savings account.

Students will be able to:

- Describe the purpose of budgeting
- Create a budget
- Define the term *interest*
- Calculate simple interest when given a balance, interest rate, and length of time

Time Allocation:

15 - 20 Minute Prep

35 - 40 Minutes Engagement

Material:

- Calculators
- Copies of Sample Budget and Blank Budget worksheet (one per student)
- Copies of Interest worksheet (one per student)
- Sample school 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 Continues

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 school lunch menu to determine how much money you would need to buy lunch at school every day.

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.

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 next page for additional ideas to end the lesson.



Additional Engagement Opportunities / Resources

Pair and Share

Students (pairs) interview one another about the lesson content. They must summarize the partner's feedback in either written report or verbal format

Sample Questions:

- What did you learn during today's lesson?
- What are some expenses you may currently have?
- What types of earnings do you gather?
- Define interest

Quizbowl

Separate the students into two or three teams and ask questions related to the lesson.

Sample Questions:

- 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 desire?
- *Student generated questions should also be encouraged in place of or in addition to the ones listed above.*

Storyboard/Stretch to Sketch

Students write and illustrate a storyboard which is a piece of paper folded into six or eight squares. Each square is filled with a picture and caption. The story should be an example of how saving could be useful in each student's life.



Money Trivia

The following are miscellaneous facts about money that you may wish to include in your presentation. They may also be helpful in answering questions the students have:

- About 3,500 years ago Cowrie shells (small seashells) were used for money in China, Africa, and Australia.
- The Yap Islanders in the Pacific Ocean used large stone disks about 13 feet across for money. (This is about as long as a chalkboard.)
- China used bricks of tea leaves for money until just 100 years ago.
- The Roman soldiers earned their wages in an allowance of salt, called a *salarium*. This is where the word *salary* originates.
- Coins last about 20 or 30 years in circulation before they are worn out. \$1, \$5, \$10, and \$20 bills last about 3 months. Then they are shredded and burned by special people in the government. \$50 and \$100 bills can last for 3 or 4 years.
- Do you know who is pictured on our currency?

George Washington \$1 - One Dollar

Abraham Lincoln \$5 – Five Dollars

Andrew Jackson \$20 – Twenty Dollars

Benjamin Franklin \$100 – One Hundred Dollars

Thomas Jefferson \$2 – Two Dollars

Alexander Hamilton \$10 – Ten Dollars

Ulysses S. Grant \$50 – Fifty Dollars

William McKinley \$500 – Five Hundred Dollars



Educational Standards

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

- Number and Operations – (Students will) Understand numbers, ways of representing numbers, relationships among numbers, and number systems.
- Number and Operations – (Students will) Compute fluently and make reasonable estimates.
- 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 in Personal Financial Literacy 2014:

Standard 9.1: 21st Century Life and Careers

- 9.1 B. Money Management: 9.1.4.B.1, 9.1.4.B.2, 9.1.4.B.3, 9.1.4.B.4
- 9.1 C. Credit and Debt Management: 9.1.4.C.4
- 9.1 D. Planning, Saving, and Investing: 9.1.4.D.2
- 9.1 E. Becoming a Critical Consumer: 9.1.4.E.1, 9.1.4.E.2

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

Financial Decision Making:

- Standard 4, “Make criterion-based decisions by systematically considering alternatives and consequences.”
- Spending and Saving :
- Standard 1, “Develop a plan for spending and saving.”
- Standard 4, “Apply consumer skills to spending and saving decisions.”

Investing:

- Standard 1, “Explain how investing may build wealth and help meet financial goals.”
- Standard 2, “Evaluate investment alternatives.”

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

Content Standard 1, Scarcity



Interest Worksheet

Name: _____

Date: _____

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

1. John received \$100 as a gift from his grandparents for his elementary 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?

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?

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?

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?

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?



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 elementary 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



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



Blank 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