



Lesson 7: How to Stash Your Cash

TOPIC: Savings Options

OVERVIEW:

While students are beginning to formulate their knowledge of spending and saving, incorporate helping the less fortunate/those in need as part of a financial plan. Students will discover why they may choose to include **charitable** giving as part of a budget. They will also be reminded how time has an **opportunity cost**, so even if they don't have money to donate, they can support charitable causes through volunteering.

OBJECTIVES:

1. Evaluate and differentiate a variety of banking and savings options
2. Identify the benefits of creating a savings account
3. Understand compound interest and how it can increase savings

INDIVIDUAL HANDOUTS:

- Opening a Savings Account

GROUP HANDOUTS:

- Commercial Bank #1 (1 per group)
- Commercial Bank #2 (1 per group)
- Credit Union (1 per group)

TEACHER PRESENTATION SLIDES:

- Understanding Compound Interest Warm Up

ESSENTIAL QUESTIONS:

- What are the benefits of saving with a financial institution?
- What savings option is best for a particular situation?

ASSESSMENT ACTIVITIES:

Pre-Assessment:

- **Activity:** Understanding Compound Interest

Post-Assessment:

- **Activity:** Opening a Savings Account
- **Presentation:** Opening a Savings Account
- **Activity:** The Perfect Bank

Time: 50 min

Supplies:

- Projector (for teacher presentation slide)
- Chart paper and markers for student presentations
- Loose-leaf for Wrap Up activity
- Access to the Internet(optional)

Preparation:

- Make copies of student handout and group handouts
- Set up projector with presentation slide
- Set up individual or group computers with access to the Internet(optional)

Glossary with key vocabulary 15

Instruction Steps

WARM UP

Understanding Compound Interest

10 MINUTES

Understanding Compound Interest Warm Up

Principal: An amount of money originally invested, excluding any interest or dividends
Interest: Earnings from lending money
Compounding: Calculating interest on both principal and previously earned interest

You have placed \$2,000 (called the principal) into a savings account. Your bank offers a generous interest rate of 5%, compounded annually. Using the table below, determine how much money your \$2,000 would increase to in five years.

Year	Balance	Interest	Total
1	\$2,000	\$100	\$2,100
2	\$2,100		
3			
4			
5			

Compound Interest Formula

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

A = amount of money accumulated after n years, including interest
P = principal amount (the initial amount you borrow or deposit)
r = annual rate of interest (as a decimal)
n = number of times the interest is compounded per year
t = number of years the amount is deposited or borrowed for

Money Smart for Young People Grades 3 - 5

To begin the lesson, ask students: *How many of you have heard of compound interest?* Share the short video *Compound Interest Explained* (<http://time.com/money/4343323/compound-interest-returns-explained-magic/>).

Next, provide students with a math problem from the **Understanding Compound Interest Warm Up** slide to help them understand compound interest. Explain the compound interest formula to students: In order to find the amount of money that you'll make after n years, you have to add 1 plus the interest rate (as a decimal – represented by r on the slide) over the number of years that you leave the money in the account (represented by n on the slide). Multiply the number of times the interest is compounded per year (represented by n on the slide) by the number of years for which the amount is deposited (represented by t on the slide). Use the n product as an exponent for your first sum. Then multiply that by the principal (or the initial amount that you put in savings—represented by P on the slide).

For example: if you want to find the amount of money in your savings account after one year, assuming you originally deposited \$100, and with an interest rate of 5% compounded annually, you compute the following: Amount = \$100(1 + .05/1).

After reviewing the answers, discuss:

- *When we compound interest annually, notice that each year, my interest is added to my principal, and we find the interest of that new, bigger number.*
- *What would happen if I made the interest rate higher?* (more money accumulated in interest)
- *Lower?* (less money accumulated in interest)
- *What would happen if I started with a higher principal?* (more money accumulated in interest)
- *Lower?* (less money accumulated in interest)

Grade-Level Modification:

Beginner: Build background knowledge about compound interest by showing *Compound Interest: How to Make a Million Bucks*. Build additional background knowledge about the services financial institutions offer by showing *Take It to the Bank*. See additional readings and resources in Money Smart Tip below.

Advanced: Show a visual model of interest growing over time with the EconEdLink Compound Interest Calculator.

<https://archive.econedlink.org/interactives/EconEdLink-interactive-tool-player.php?iid=2>

MONEY SMART TIP!

Teach your students more about compound interest by discussing “10 Things You Need to Know About Compound Interest” from *U.S. News & World Report*.

<https://money.usnews.com/money/blogs/my-money/2012/09/20/10-things-you-need-to-know-about-compound-interest>

GROUP EXPLORATION

Opening a Savings Account — Decision Making

15 MINUTES

Split students into small groups of three to five for this activity. Each group will receive a set amount of money and will have a financial goal. Distribute the *Opening a Savings Account* student handout.

Have each group write its amount of money and its goal on the top of its handout. The groups are:

- **Group 1 – \$10,000.** This money has been sitting in a checking account, not earning interest, and you’re just hoping to make it start earning some interest.
- **Group 2 – \$5,000.** You’re hoping that you will have \$10,000 to buy a car in a few years.
- **Group 3 – \$3,000.** This is your emergency fund, which you’ve been keeping in your savings account. You need to be able to access it if there’s an emergency.
- **Group 4 – \$150.** You just got your first paycheck for your summer job and you want to make sure that you don’t spend it all right away.

Grade-Level Modifications:

Beginner: Provide only one or two options for students, using numbers that are easy for interest calculations.

Advanced: Allow students to determine their own scenario, including the amount of money they would like to put into the savings account.

Provide each group with a copy of the group handouts *Commercial Bank #1*, *Commercial Bank #2*, and the *Credit Union*. In their groups, students should read through the variety of savings options and select the best financial institution and account for their scenario. As they’re working through their decision, they should be filling out the *Opening a Savings Account* student handout. See a sample of a completed student handout in the **Answer Key**.

Grade-Level Modifications:

Beginner: Reduce the number of banking options and/or account options.

Advanced: Allow students to look up additional banking and account options online.

Opening A Savings Account – Presentation

15 MINUTES

Once groups have made their decision, they should prepare a group presentation about it. After a short preparation period, allow students to share their presentations with one another.

Check for understanding by asking the following questions:

- *What are the differences between some of the accounts that were available?*
- *Why did some groups choose one type of account and other groups choose another?*
- *How did the financial institutions themselves differ?*
- *What institution might you choose to create your first savings account? Why?*
- *Why is it important to save money with an insured financial institution?*
- *What might happen if you keep money somewhere other than an insured financial institution?*

WRAP UP The Perfect Savings Account

10 MINUTES

Have students take out a sheet of loose-leaf paper, on which they will quick-write about the perfect savings account. This activity will help students understand bank accounts from the perspective of a financial institution, rather than a consumer.

Prompt them with the following questions:

- *Describe the perfect savings account.*
- *What is the minimum initial deposit? What are the terms, fees, and interest rate?*
- *Now consider: Why can't this "perfect" bank account exist? (For example: what would happen if a bank paid very high interest rates on all of its deposit accounts?)*
- *Or, what would happen if people could earn interest and have protection on any amount of money, as opposed to the "up to \$250,000" offered by most banks?*

Ask students to use vocabulary that they learned in this lesson to demonstrate their understanding of savings options.

Extended Exploration

Note: Use the following ideas to extend financial literacy concepts throughout the school year within core content areas through English Language Arts, Math, Social Studies and Economics, and Technology activities, projects, and discussions. Duration of activities will vary.

ENGLISH LANGUAGE ARTS

Writing Prompts:

Imagine that you are about to embark on your first job. You will receive a biweekly paycheck of \$950 once taxes and deductions are taken out. Explain your savings plan for this period of your life.

Additional Readings/Resources:

Set a Goal: What to Save For by the Consumer Federation of America: Helpful advice for saving for a variety of things, like a car, a house, or retirement.

www.americasaves.org/for-savers/set-a-goal-what-to-save-for

Make a Plan: How to Save Money by the Consumer Federation of America: Suggestions for saving strategies and budgeting.

www.americasaves.org/for-savers/make-a-plan-how-to-save-money

Take It to the Bank by BizKids: A video overview of the services that financial institutions offer. (Time of video: 1:17 minutes)

<http://bizkids.com/episode/take-it-to-the-bank>

Compound Interest: How to Make a Million Bucks by Biz Kids: A video episode about how it is possible to make a lot of money through taking advantage of savings. (Time of video: 1:55 minutes)

<http://bizkids.com/clip/de-compound-interest>

MATH

Activity/Project Ideas:

Imagine that you receive a \$200 gift from a family member. Research savings accounts at a local bank. Determine how much interest you would earn on your \$200 savings account deposit if you allowed it to accumulate compound interest over 5, 10, 15, and 20 years.

SOCIAL STUDIES AND ECONOMICS

Activity/Project Ideas:

Learn more about the Bank Reform Act of 1933, which ultimately resulted in changes for depositors in the safety of their deposits in federally insured banks. Describe the differences between banks before the Bank Reform Act of 1933 and after. Explain the impact of the act.

TECHNOLOGY

Online Games/Tools:

Compound Interest Calculator by the U.S. Securities and Exchange Commission: A tool to calculate how much your money can grow with compound interest.

www.investor.gov/additional-resources/free-financial-planning-tools/compound-interest-calculator

Test Your Money Smarts by the U.S. Securities and Exchange Commission: An online quiz to test knowledge of saving and investing concepts.

www.sec.gov/investor/tools/quiz.htm

Hit the Road: A Financial Adventure Game by the National Credit Union Administration takes you on a virtual road trip across the country, but the journey is not an easy one. You must save and spend your money wisely to complete challenges along the way.

www.mycreditunion.gov/Pages/pocket-cents-game.aspx

Classroom activities from the Consumer Financial Protection Bureau (CFPB)

The CFPB has developed a set of classroom activities to help teachers develop and support the building blocks of financial capability in their students. Each activity is designed to be completed within a single class period and includes a teacher guide and supporting student material. Some specific activities that are relevant to this lesson include:

Contrasting long-term and short-term savings goals

Students learn the difference between short-term and long-term savings goals and apply their knowledge in an exercise-oriented game.

www.consumerfinance.gov/practitioner-resources/youth-financial-education/teach/activities/contrasting-long-short-term-savings-goals/

Saving and investing card game

Students play a game to learn the difference between saving and investing and explore when to save or invest.

www.consumerfinance.gov/practitioner-resources/youth-financial-education/teach/activities/saving-investing-card-game/

Visualizing a savings goal

Students create a savings progress chart to help them illustrate a savings plan, manage their savings process, and help them reach their financial goals.

www.consumerfinance.gov/practitioner-resources/youth-financial-education/teach/activities/visualizing-savings-goal/

Answer Key

Student Handout:

Opening a Savings Account

Answers will vary. See completed sample for Group 2 below.

Money to save: \$5,000

Scenario: You're hoping that you will have \$10,000 to buy a car in a few years.

Our Decision

Financial Institution: Commercial Bank #2

Account Name: Passbook Savings Account

Fees, Terms, and Other Important Information: \$5 minimum opening deposit, \$20 low fee if balance is less than \$250, one withdrawal per month.

INTEREST/APY RATE TABLE

Year	Balance	Interest	Total
1	\$5,000.00	\$2.50	\$5,002.50
2	\$5,002.50	\$2.50	\$5,005.00
3	\$5,005.00	\$2.50	\$5,007.50
4	\$5,007.50	\$2.50	\$5,010.00
5	\$5,010.00	\$2.51	\$5,012.51

Why did you choose this financial institution and this account over others? First, it has one of the higher interest rates for lower balances. Second, even though it only allows one withdrawal a month, it is being used to save, and that limit may help with savings.



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OPENING A SAVINGS ACCOUNT

Name: _____

Money to save:

Scenario:

OUR DECISION

Financial institution:

Account name:

Fees, terms, and other important information:

INTEREST/APY RATE TABLE

Year	Balance	Interest	Total
1			
2			
3			
4			
5			

Why did you choose this financial institution and this account over others?



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COMMERCIAL BANK #1

Use with *Opening a Savings Account–Decision Making* activity. One copy per group.

ABOUT US:

Our bank seeks to help our customers improve their financial lives. We work with more than millions of people individually, in a business setting or in their communities. As experts in finance, we hope we can serve you, too.

Basic Savings Account First savings account?	Personal Money Market Savings Account Want to earn more interest as your balance grows?
<p>Fees:</p> <ul style="list-style-type: none">▪ \$25 minimum opening deposit▪ \$5 monthly fee if balance is less than \$300 <p>Interest Rate:</p> <ul style="list-style-type: none">▪ .01% compounded interest <p>Benefits:</p> <ul style="list-style-type: none">▪ Includes a debit card for ATM withdrawals and deposits▪ Debit card may be used for point of sale transactions <p>Terms and Conditions:</p> <ul style="list-style-type: none">▪ Limited to three withdrawals per month	<p>Fees:</p> <ul style="list-style-type: none">▪ \$25 minimum opening deposit▪ \$12 monthly fee if balance is less than \$2,500 <p>Interest Rate:</p> <ul style="list-style-type: none">▪ .02% with balance less than \$20,000▪ .03% with balance of \$20,000–\$250,000▪ .04% with balance over \$250,000 <p>Benefits:</p> <ul style="list-style-type: none">▪ Online and mobile phone banking available <p>Terms and Conditions:</p> <ul style="list-style-type: none">▪ Limited to six withdrawals per month

WHAT IF THE BANK FAILS? INSURING YOUR MONEY:

The Federal Deposit Insurance Corporation (FDIC) is an independent agency of the United States government. The FDIC protects depositors against the loss of their insured deposits if an FDIC-insured bank or savings association fails. FDIC insurance is backed by the full faith and credit of the United States government. The FDIC provides up to \$250,000 in deposit insurance per depositor, per bank, and per account category, in accordance with the FDIC's deposit insurance regulations. Insured deposits include funds deposited in checking accounts, savings accounts, money market savings accounts, and CDs.



Lesson 7: How to Stash Your Cash

COMMERCIAL BANK #2

Use with *Opening a Savings Account–Decision Making* activity. One copy per group.

ABOUT US:

We are neighbors meeting the banking needs of neighbors. Join us today!

Passbook Savings Account Need a basic savings account?	High-Yield Savings Account Want premium interest rates?
<p>Fees:</p> <ul style="list-style-type: none">▪ \$5 minimum opening deposit▪ \$20 monthly fee if balance is less than \$250 <p>Interest Rate:</p> <ul style="list-style-type: none">▪ .05% compounded interest <p>Benefits:</p> <ul style="list-style-type: none">▪ Includes an ATM card for ATM withdrawals and deposits only <p>Terms and Conditions:</p> <ul style="list-style-type: none">▪ Limited to one withdrawal per month▪ FDIC-insured up to \$250,000	<p>Fees:</p> <ul style="list-style-type: none">▪ \$1 minimum opening deposit▪ \$10 monthly fee if balance is less than \$3,500 <p>Interest Rate:</p> <ul style="list-style-type: none">▪ .03% with balance less than \$100,000▪ .05% with balance over \$100,000 <p>Benefits:</p> <ul style="list-style-type: none">▪ Set up monthly automatic transfers from your checking account to reach your savings goals <p>Terms and Conditions:</p> <ul style="list-style-type: none">▪ Limited to six withdrawals per month▪ FDIC-insured up to \$250,000

WHAT IF THE BANK FAILS? INSURING YOUR MONEY:

The Federal Deposit Insurance Corporation (FDIC) is an independent agency of the United States government. The FDIC protects depositors against the loss of their insured deposits if an FDIC-insured bank or savings association fails. FDIC insurance is backed by the full faith and credit of the United States government. The FDIC provides up to \$250,000 in deposit insurance per depositor, per bank, and per account category, in accordance with the FDIC's deposit insurance regulations. Insured deposits include funds deposited in checking accounts, savings accounts, money market savings accounts, and CDs.



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CREDIT UNION

Use with *Opening a Savings Account–Decision Making* activity. One copy per group.

ABOUT US:

We are a member-owned, democratically controlled financial institution. That means that, if you open an account with us, you can help us make decisions. We work together to offer competitive rates for our members and to serve our community.

Young Savers Club Account Designed by students, for students	Share Savings Account Want premium interest rates?
Fees: <ul style="list-style-type: none">▪ \$10 minimum opening deposit	Fees: <ul style="list-style-type: none">▪ \$1 minimum opening deposit
Interest Rate: <ul style="list-style-type: none">▪ .03% compounded interest	Interest Rate: <ul style="list-style-type: none">▪ .03% compounded interest
Benefits: <ul style="list-style-type: none">▪ No monthly minimum fees	Benefits: <ul style="list-style-type: none">▪ No monthly minimum fees▪ Includes a debit card for ATM withdrawals and deposits only
Terms and Conditions: <ul style="list-style-type: none">▪ Withdrawals and deposits may only be made in person at the bank▪ Available only for students	Terms and Conditions: <ul style="list-style-type: none">▪ Limited to three withdrawals per month

WHAT IF THE CREDIT UNION FAILS? INSURING YOUR MONEY:

The National Credit Union Administration (NCUA) is an independent agency of the United States government. The NCUA protects credit union members against losses if an NCUA-insured credit union fails. NCUA insurance is backed by the full faith and credit of the United States government. The NCUA provides up to \$250,000 in insurance coverage to each shareowner, per insured credit union, for each account ownership category, in accordance with the NCUA's regulations. Funds that are insured by NCUA include regular shares (similar to savings), share drafts (similar to checking), money market accounts, and share certificates (similar to CDs).