Teacher's Guide Lesson Ten

Saving and Investing

## saving and investing websites



## websites for savings and investing

The following websites can provide students and others with current information, assistance, and data related to this lesson. Web addresses ending in "com" are commercial; ".org" are nonprofit; and ".gov" are government.

| Bloomberg | bloomberg.com |
| :--- | :--- |
| Current Rates for Savings | bankrate.com |
| Instruments | fdic.gov |
| Federal Deposit Insurance <br> Corporation | investopedia.com |
| Investopedia.com | investorguide.com |
| Investorguide.com | nyse.com/markets/nyse-american |
| NYSE American | thebalance.com |
| The Balance | fool.com |
| The Motley Fool | nasdaq.com |
| NASDAQ |  |

## saving and investing lesson outline

## overview

"Will I ever be able to afford a new computer?"
"How many years will it take to double my savings?"
Small amounts of money can quickly grow into larger sums, but the sooner a person gets started saving and investing, the better!

Lesson 10 provides students with a basic knowledge of saving and investing, a process that begins with setting financial goals. It encourages students to "pay themselves first" by making a commitment to saving money on a regular basis.

Next, the lesson familiarizes students with the importance of setting aside money for savings in order to provide funds for emergencies, short-term goals, and investments. Students will compare savings options and identify factors to consider when selecting a savings account.

Investing takes saving one step further in a person's financial plan, by increasing wealth and accumulating funds for long-term financial goals such as retirement. The lesson provides an overview of some of the most common investment vehicles. Lastly, it makes students aware of potential investment frauds.

Suggested teaching strategies, teaching notes, activities, slides, and short quizzes are linked to student objectives. Additional ideas to help students practice and generalize skills learned in "Savings and Investing" to real-life situations are included at the end of the lesson.

## student performance goal:

- The student will demonstrate increased awareness of common savings and investment vehicles and their importance for achieving financial goals.


## lesson objectives: the student will...

10-1 recognize the importance of saving and investing money to reach financial goals.
10-2 identify advantages and disadvantages of common saving methods.
10-3 identify several investment options.

## saving and investing teaching notes

10-1 The student will recognize the importance of saving and investing money to reach financial goals.

## what are your financial goals? how can you reach them?

- Define the term "saving."
- Define the term "investing."
- Discuss the reasons why people save and invest money.
- Talk about the importance of setting financial goals. Give students examples of financial goals, such as "buy used car," "save enough money for prom night," or "double the amount of money presently in savings."
- Define goals as short range (1-4 weeks), mediumrange (2-12 months), or long-range (more than 1 year). Stress that people need to have all three: short, medium, and long-range goals.
- Have students complete the Setting Your Financial Goals worksheet (activity 10-1a). If students don't have enough income to complete this exercise, give them a theoretical income to work with.
- Ask students to share some of their goals with the class, including estimated costs, target dates, and the amounts they would need to save each week to meet their goals.
- Introduce the concept of making money grow. Emphasize that by understanding how interest rates work, students can make their money grow faster.
- Using slide 10-1a, demonstrate how to calculate simple interest. Show students how to convert the interest rate into a decimal for calculation purposes.
- Using slide 10-1b, demonstrate how to calculate compound interest. Remind students how to convert the interest rate into a decimal for calculation purposes.
- Compare the results of simple and compound interest calculations. Discuss the advantage of earning interest on interest to "grow money" faster.

discussion
student activity 10-1a
slide 10-1a
slide 10-1b

student activity 10-1b


## saving and investing teaching notes

- Have students complete the Calculating Interest worksheet individually or in small groups (activity 10-1b). Review the answers and, as needed, show the calculations on the board. (You may also allow them to use an online loan calculator.)
- Reemphasize how the interest rate and the method of calculation affect how money grows.

slide 9-1a
- Explain that the compounding effect applies to any investment, not just a bank account.


## terms you should know

Saving - The process of setting aside money until a future date instead of spending it today. The goal of saving is to provide funds for emergencies, short-term goals, and investments.
Investing - The process of setting money aside to increase wealth over time and accumulate funds for long-term financial goals such as retirement.

## setting financial goals

1. Why save?

- In case of an emergency
- To have the option of taking advantage of unforeseen opportunities
- To reach financial goals

student activity 10-1a

2. Why set goals?

- Give direction for making plans and taking actions

3. Set and prioritize your financial goals

## interest terms you should know

Interest - the fee paid for the use of money.
Simple Interest - interest paid on the initial deposit or investment only.
Compound Interest - interest paid on the initial deposit or investment and also on the interest as it builds.
$\square$ slide 10-1a
$\square$ slide 10-1b

## saving and investing teaching notes

## 10-2 The student will identify advantages and disadvantages of common saving methods. <br> what kind of savings plan is right for you?

- Define the concept of "pay yourself first" as a consistent habit of saving money to reach financial
slide $10-2 a, 10-2 b$,
10-2c, 10-2d, 10-2e
- Use slide 10-2a to illustrate how savings add up. Discuss how students might modify their spending habits in order to save. Emphasize that the amount saved is not as important as getting into the habit. Talk about possible methods for achieving this.
- Explain that opening a savings account and making regular deposits is the easiest way to earn a small amount of interest on money while keeping money readily accessible. Outline various types of savings accounts using slide 10-2b.
- Outline other saving methods using slides 10-2c and 10-2d. Explain that there are advantages and trade-offs for every savings option.
- Discuss factors to consider when choosing a savings account. (slide 10-2e)


## pay yourself first

1. Why?
2. What it takes:

- Commitment
- Discipline
- Delayed gratification

3. Ways to do it:

- From each paycheck or allowance, deposit a set amount or percentage into your savings account before spending money on anything else. At the end of the day, put all your change in a "savings" container. Once a month, deposit the money in a savings account.
- Whenever you get unexpected money, put a portion of it into savings.

4. Remember, the amount saved isn't as important as getting into the habit.

## saving and investing teaching notes

## choosing a savings account

Factors to consider:

- Interest rate
- Fees, charges, and penalties
- Balance requirements
- Balance calculation method
Passbook account - a saving account in which the depositor receives a booklet to record deposits, withdrawals, and interest.
$\square$ slide 10-2e

Statement account - a savings account in which the depositor receives monthly statements.
Interest-earning checking account - a checking account that earns interest, combining the benefits of checking and savings.

Money-market account - a savings account that requires a large minimum balance, pays a higher interest rate than a regular savings account, and allows the depositor to write a limited number of checks.
Minimum balance - the amount the customer must keep in an account to avoid service charges.

Certificates of Deposit (CDs) - similar to a savings account except that the bank pays the depositor a fixed amount of interest for a fixed amount of money during a fixed amount of time. It pays a higher interest rate than a money market account.
Maturity Date - the date when money can be withdrawn from a CD without losing interest.
Early withdrawal penalties - the amount of interest lost when money is taken out of an account before the specified time period is up.

| time period is up. |  |
| :--- | :--- |
| lesson 10 quiz: saving your money | (q) quiz 10-2 |

## saving and investing teaching notes

## 10-3 The student will identify several investment options.

## what are some investment choices?

- Define "investing" and terms related to investing. Tell students that there are many kinds of investments. Emphasize that investments involve some degree of risk-taking.
- Discuss some of the differences between saving and investing money.
- Ask students what investment opportunities they may have heard about. Can they name any company stocks? Do they know what stocks their parents own? List them on the board.
- Explain to students that they have a big advantage over their parents as investors - they have more time for their investments to grow!
- Remind students of the power of compounding interest. Explain that wise investors make a habit of re-investing their profits back into their original investments to make their money grow even faster.
- Discuss the "rule of 72 " as a simple method for estimating how invested money can grow with compounding interest. (slide 10-3a)
- Outline some common investment vehicles. For each, discuss what it is, how it works, and what its benefits and trade-offs are. Define terms related to investments.


## terms you should know

Investing - The process of setting money aside to increase wealth over time and accumulate funds for long-term financial goals such as retirement.
Risk - the chance of losing money. Exposure to loss of investment capital due to a variety of causes such as business failure, stock market volatility, and interest rate changes.
Investors - people placing their money in securities, such as stocks and bonds, to achieve long-term goals. Investors risk money to make a profit.
Return - the amount of money received from an investment.
Profit - the money that is made over and above the amount invested.
Loss - when the money returned to the investor is less than the amount invested.

## saving and investing teaching notes

differences between saving and investing

- Degree of risk
- Rate and stability of return
- Availability of funds for use
- Amount of protection against inflation
about the rule of 72
- A quick way to calculate how long it will take to double a sum of money
- Divide 72 by the interest rate to find how many years you need for your money to double.
- Divide 72 by a number of years to determine the interest rate needed to double your money in that period of time.

K slide 10-3a

## investments and investing terms

Stocks - ownership in a company. Investors (stockholders) own a share of the company and receive a share of the profits. They benefit when the price of the stock goes up and lose money when the price goes down.
Dividends - a share of the company's profit paid to the investors.
Bonds - certificates of a loan to the government or company that outline the terms of repayment.
Mutual funds - an investment product in which a person's money is pooled with other investors' money and managed by professionals.
Portfolio - a collection of a variety of investments (e.g. stocks, bonds, and other investments).
Individual Retirement Account (IRA) - a savings account for retirement or for educational purposes. A portion of a person's income is deposited each year.
Capital Gain or Loss - the difference between the price paid for an investment and the price it is sold for (may be either a profit or a loss).
slide 10-3b
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lesson 10 quiz: investing your money

## saving and investing lesson outline

## additional activities for practice and generalization of concepts related to saving and investing

- Have students interview several relatives about the methods used to save and invest for various financial goals. Ask students to present reports on the types of savings accounts and investments that were most successful in achieving specific goals. Assemble these success stories in a notebook.
- Have students compare savings rates at various financial institutions. Students can access information using www.bankrate.com.
- Have students experience the impressive effect of compound interest on savings and investments by using the compound interest calculator at: www.practicalmoneyskills.com/sn1
- Have students identify a financial goal they have set for themselves. Then, show them how to use the Practical Money Skills for Life online calculators to determine how they can reach that savings goal (Save a Million calculator) or save the needed funds for educational or other purposes (Building an Education Fund calculator).
- Collect and use stories relevant to students to reinforce investment concepts. For example, the book, Teenvestor: The Practical Guide For Teens and Their Parents (Emmanuel Modu and Andrea Walker) takes students through the process of starting a T-shirt business to illustrate concepts behind stock ownership.
- Familiarize students with the daily stock market pages of the newspaper. Have them track companies that they are familiar with. Ask them to follow the stocks weekly and report on which company closed highest or lowest at the end of a designated time period.
- Invite a stockbroker or financial advisor to visit the classroom and discuss how stocks are evaluated. Before the visit, have students select stocks of interest for the advisor to comment on.
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calculating interest

Calculate the interest earned in the examples below.

1. You put $\$ 200$ in a savings account that pays $5 \%$ simple interest each year. How much interest will you earn in five years?
\$200 x $\qquad$ x $\qquad$ $=$ $\qquad$

## Deposit x Interest Rate x Number of Years = Interest Earned

What will the total value of your account be? \$250
2. You put $\$ 150$ in a savings account that pays $6 \%$ compounded yearly. How much interest will you earn in three years?
(\$150 $+$ $\qquad$ ) x $\qquad$ $=$ $\qquad$
(Deposit + Earned Interest) $\mathbf{x}$ Interest Rate $=$ Interest Earned
(\$150
$+$ $\qquad$ ) $x$ $\qquad$ $=$ $\qquad$ $\$ 9.54$
(Deposit + Earned Interest) $\times$ Interest Rate $=$ Interest Earned
(\$159 $+$ $\qquad$ ) $x$ $\qquad$ $=$ $\qquad$
(Deposit + Earned Interest) x Interest Rate $=$ Interest Earned
What will the total value of your account be? $\$ 178.65$
3. You put $\$ 1000$ into a savings account that pays $6.5 \%$ simple interest rate each year. How much will you have in your account at the end of twelve years?
$\$ 1,000$
x $\qquad$
$\qquad$
x $\qquad$
$\qquad$

Deposit $x$ Interest Rate $x$ Number of Years = Interest Earned
What will the total value of your account be? \$1,780

## savings choices

directions
In the space provided, write the letter of the savings account or savings method the statement represents. You may use a letter more than once.

1. $E$ A combination of a checking and savings account. Interest rates vary with the size of the balance.
2. $C$ Combines the benefits of a checking and savings account. Interest is paid each month on unused money in the account.
3. $B$ Interest rates are usually the same as passbook account.
4. D Bank pays a fixed amount of interest, on a fixed amount of money, for a fixed amount of time.
5. $C$ Interest rate is usually lower than passbook or statement accounts.
6. D Penalty is usually charged if money is withdrawn before expiration date.
7. $A$ A booklet must be presented for every deposit or withdrawal.
8. $E$ The account holder can only write a limited number of checks each month.
A. Passbook account
B. Statement account
C. Interest-earning checking
D. Certificate of Deposit
E. Money-market account
$\qquad$

## lesson $\mathbf{1 0}$ quiz: saving your money

choose the correct answer.

1. $\quad$ " "Paying yourself first" refers to:
a. saving money on a regular basis.
b. buying what you want when you get paid.
c. putting money in a checking account to pay bills.
d. putting your whole paycheck into savings immediately.
2. $d$ Which of these are not factors to consider when choosing a savings account?
a. interest rates
b. fees, charges, and penalties
c. balance requirements
d. passbook prices
3. $d$ The lowest interest rate is usually earned on a:
a. money-market account.
b. passbook account.
c. certificate of deposit.
d. checking account.
4. $\mathcal{c}$ The highest interest rate is usually earned on a:
a. money-market account.
b. passbook account.
c. certificate of deposit.
d. checking account.
5. $b$ An advantage of putting savings in a Certificate of Deposit (CD) is that:
a. there is no access to the money during a set period of time.
b. it is risk-free.
c. it is very risky but pays high interest.
d. it has a penalty to withdraw money early.
$\qquad$

## lesson 10 quiz: investing your money

choose the correct answer.

1. $d$ How many years would it take money earning 6 percent interest to double? Use the rule of 72 .
a. 6 years
b. 8 years
c. 9 years
d. 12 years
2. $b$ The amount of money received from an investment is called:
a. a portfolio.
b. the return.
c. an individual retirement account.
d. all of the above.
3. $\quad b \quad$ Which of these pays investors a fixed interest rate for a fixed period of time?
a. Stocks
b. Bonds
c. Mutual funds
d. IRAs
4. $\quad$ Which of these allows an investor to own a part of a company?
a. Stocks
b. Bonds
c. Mutual funds
d. IRAs
5. $c$ Professionally-managed portfolios made up of a variety of investments are called:
a. Stocks.
b. Bonds.
c. Mutual funds.
d. IRAs.
