



## Lesson Twelve

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# Saving and Investing

## saving and investing websites

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Saving and investing are cornerstones of financial management. To be effective money managers, students need to: establish and maintain a budget; set clear, specific financial goals; and understand all of their investment options.

# saving and investing lesson outline

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## overview

Saving just 35 cents a day will result in more than \$125 in a year. Small amounts saved and invested can easily grow into larger sums. However, a person must start to save.

This lesson provides students with a basic knowledge of saving and investing. The process starts with setting financial goals. Next, a commitment to saving is discussed.

Various savings plans are available to consumers. These include regular savings accounts, money market accounts, and certificates of deposit (CD). Then, students will analyze factors to consider when selecting a savings account. These include interest rates, fees, balance requirements, and deposit insurance.

Investing takes saving one step further in a person's financial plan. Bonds, stocks, mutual funds, real estate, and retirement accounts are covered in the next section of this lesson.

Finally, students are made aware of potential investment frauds. The variety of these swindles increases each year as con artists look for new opportunities to separate people from their money.

## goals

Introduce the advantages and disadvantages of common savings and investment vehicles, and show the short- and long-term effects of various savings and investment choices.

## lesson objectives

- List and prioritize some of your short- and long-term budget goals
- List and explain some of the advantages of saving money
- Understand the concept of “pay yourself first” and list some ways to encourage this habit
- List and explain the differences among the most common saving methods
- Understand the advantages and disadvantages of popular investment vehicles
- Understand what investment fraud is, and list some of the ways you can protect yourself against investment swindlers
- Compare and contrast the short- and long-term consequences of investment decisions



## presentation slides

- 12-A** pay yourself first (a little can add up)
- 12-B** types of savings accounts
- 12-C** money-market deposit accounts
- 12-D** certificates of deposit (CDs)
- 12-E** how simple and compound interest are calculated
- 12-F** choosing a savings account
- 12-G** truth in savings law

# saving and investing lesson outline

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**12-H** the rule of 72

**12-I** bonds

**12-J** mutual funds

**12-K** stocks

**12-L** real estate

**12-M** retirement plans

**12-N** individual retirement accounts (IRAs)—an example of return on investment

**12-O** comparing savings and investment plans

**12-P** avoiding investment fraud

## student activities

### **12-1** Setting and Prioritizing Your Financial Goals

- Have students complete the “Setting Financial Goals” worksheet. If your 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 cost, target date, and the amount they would need to save each week to meet their goal.
- Discuss and reemphasize the importance of goal setting and planning.
- Have students prioritize the goals they identified.

### **12-2** Calculating Interest

- Have students complete the “Calculating Interest” worksheet.
- Review the answers and, as needed, show the calculations on the board.
- Reemphasize how the interest rate and the method of calculation can affect how much their money grows.
- Have students visit [practicalmoneyskills.com/calculators](http://practicalmoneyskills.com/calculators) for online help.

### **12-3** Selecting Mutual Funds

- Review types of mutual funds.
- Have students complete this exercise.
- Ask students to explain their answers.

### **12-4** Test Your Knowledge of Saving and Investing




- Have students complete this exercise.
- Discuss their answers.

### **12-5** Lesson Twelve Quiz

**For more information, please refer to the Appendix.**

# saving and investing target audiences

Learning activities appropriate to varied target audiences for lesson twelve

			
<b>activity</b>	<b>teenagers (14-18)</b>	<b>young adults (19-25)</b>	<b>adults (26+)</b>
Student Activity 12-1	●	●	●
Survey/Interview	●	●	●
Student Activity 12-2	●	●	●
Field Activity	●	●	●
Web Activity	●	●	●
Student Activity 12-3	●	●	
Student Activity 12-4	●	●	●
Oral Presentation	●	●	
Web Activity	●	●	●
Lesson Twelve Quiz 12-5	●	●	●

# saving and investing teaching notes

## set financial goals

1. Why save?
  - To reach financial goals
  - In case of an emergency
  - To have the option of taking advantage of unforeseen opportunities
2. Why set goals?
  - Give direction for making plans and taking actions
3. Set and prioritize your financial goals
  - The goal-setting process
  - Short-term goals (1–4 weeks)
  - Medium-term goals (2–12 months)
  - Long-range goals (1 year or longer)



discussion



student activity 12-1

## pay yourself first

1. Why?
  - To make a habit of saving money to reach your financial goals
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
  - Amount saved isn’t as important as getting into the habit.



discussion



survey/interview:

Have students talk to several friends and relatives about the methods used to save and invest for various financial goals. For example, ask what types of savings accounts and investments are used.



slide 12-A

# saving and investing teaching notes

## savings accounts

1. Advantage
  - Simplest way to earn interest while keeping money readily accessible
2. Passbook and statement accounts



discussion



slide 12-B

## other saving methods

1. Money-market deposit account
2. Certificates of deposit



discussion



slides 12-C & 12-D

## how to calculate interest

1. Simple
2. Compound
3. Exercise



discussion



student activity 12-2



slide 12-E

## choosing a savings account

1. Factors to consider
  - Interest rate
  - Fees, charges, and penalties
  - Balance requirement
  - Balance calculation method
2. Truth in savings law



discussion



slides 12-F & 12-G

# saving and investing teaching notes

## shopping for a savings account

1. Optional class activity
2. Class presentations of their findings and choices



field activity:

Have students compare savings rates at various financial institutions. Also see: [bankrate.com](http://bankrate.com)

## about the rule of 72

1. What it is
  - A simple way to estimate how money can grow
  - 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.



discussion



slide 12-H

## saving vs. investing

1. Difference
  - Degree of risk
  - Rate and stability of return
  - Availability of funds for use
  - Amount of protection against inflation



discussion



web activity:

Have students obtain information from sites such as:  
[fool.com](http://fool.com)  
[finance.yahoo.com](http://finance.yahoo.com)



# saving and investing teaching notes

## some common investment vehicles

For each, discuss what it is, how it works, and what its advantages are

1. Bonds
2. Mutual funds
3. Stocks
4. Real estate
5. Retirement plans
  - IRAs—an example of return on investment



discussion



slides 12-I, 12-J,  
12-K, 12-L, 12-M &  
12-N

## comparing savings and investment vehicles

1. Review
  - Savings accounts
  - Bonds
  - Mutual funds
  - Stocks



discussion



student activity 12-3



slide 12-O

## capital gains and losses

1. What they are
  - The profit or loss made on an investment



discussion

# saving and investing teaching notes

## test your knowledge of saving and investing

1. Complete the exercise
2. Discuss the answers



student activity 12-4

## about investment fraud and investment swindlers

1. What they are
2. How they work
3. Techniques they use
4. What you can do to protect yourself



discussion



oral presentation:

Have students present in class or on video various investment situations. Discuss if these are legitimate or fraudulent investment opportunities.



web activity:

Have students obtain investment fraud information at:  
**ftc.gov**  
**fraud.org**  
**nasaa.org**

## lesson twelve quiz



quiz 12-5



# calculating interest

## answer key

### directions

Write the answers to the following questions in the blanks provided. Use the space below each problem to show how you arrived at your answers.

- 1.** If you put \$200 in a savings account that paid 5.5% simple interest each year, how much interest would you earn in five years?

**\$55**

$$\$200 \times 0.055 = \$11$$

$$\$11 \times 5 = \$55$$

- 2.** If you put \$150 in a savings account that paid 6% compounded yearly, how much interest would you earn in five years?

**\$50.73**

$$\$150 \times 1.06 = \$159 \text{ (after 1 year)}$$

$$\$159 \times 1.06 = \$168.54 \text{ (after 2 years)}$$

$$\$168.54 \times 1.06 = \$178.65 \text{ (after 3 years)}$$

$$\$178.65 \times 1.06 = \$189.37 \text{ (after 4 years)}$$

$$\$189.37 \times 1.06 = \$200.73 \text{ (after 5 years)}$$

- 3.** If you put \$25 each month into a savings account that paid a simple interest rate of 6.5% each year, how much would you have in your account at the end of two years?

**\$639.00**

	<i>Amount of Deposit</i>	<i>Interest Rate</i>	<i>Months on Deposit</i>	<i>Periods/yr</i>	<i>Interest</i>
<i>start of year 1</i>	25	0.065	12	12	1.63
	25	0.065	11	12	1.49
	25	0.065	11	12	1.49
	25	0.065	10	12	1.35
	25	0.065	9	12	1.22
	25	0.065	8	12	1.08
	25	0.065	7	12	0.95
	25	0.065	6	12	0.81
	25	0.065	5	12	0.68
	25	0.065	4	12	0.54
	25	0.065	3	12	0.41
	25	0.065	2	12	0.27
	25	0.065	1	12	0.14
<i>end of year 1</i>	300				

*cont. on next page*

## calculating interest answer key

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3. cont.

	<i>Amount of Deposit</i>	<i>Interest Rate</i>	<i>Months on Deposit</i>	<i>Periods/yr</i>	<i>Interest</i>
<i>start of year 2</i>	325	0.065	12	12	19.50
	25	0.065	11	12	1.49
	25	0.065	10	12	1.35
	25	0.065	9	12	1.22
	25	0.065	8	12	1.08
	25	0.065	7	12	0.95
	25	0.065	6	12	0.81
	25	0.065	5	12	0.68
	25	0.065	4	12	0.54
	25	0.065	3	12	0.41
	25	0.065	2	12	0.27
	25	0.065	1	12	0.14
<i>end of year 2</i>	600				

4. If you put \$10 each week into a savings account that paid 6% interest compounded yearly, how much money would you have in your account after three years?

(Hint: Use How Much Will My Savings Grow Calculator?)

**\$1,754.80**



# selecting mutual funds

## answer key

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### directions

For each of the investment situations below, select the type of mutual fund that would be most appropriate from this list:

**Balanced Fund**

**Income Fund**

**Global Bond Fund**

**Industry Fund**

**Global Stock Fund**

**Municipal Bond Fund**

**Growth Fund**

**Regional Stock Fund**

1. A person wants an international mutual fund without the risks associated with stocks.  
*Global Bond Fund*
2. An investor wants tax-exempt income from investments.  
*Municipal Bond Fund*
3. An investor is interested in investing in health-care stocks.  
*Industry Fund*
4. A person wants to invest in stocks from around the world.  
*Global Stock Fund*
5. A person is interested in long-term growth for future financial security.  
*Growth Fund*
6. An investor seeks to buy stock in companies located in Europe.  
*Regional Stock Fund*
7. A retired person desires investment earnings to provide for current living expenses.  
*Income Fund*
8. A person wants to invest in a blend of stocks and bonds.  
*Balanced Fund*
9. An investor wants to invest in debt instruments issued by state and local governments.  
*Municipal Bond Fund*
10. A person expects growth of companies in Latin America.  
*Regional Stock Fund*



# test your knowledge of saving and investing *answer key*

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## directions

Write the answers to the following questions in the blanks provided. Use the space below each problem to show how you arrived at your answers.

1. How long would it take to double your money in an account that paid 6% per year?

$$72/6 = 12 \text{ years}$$

2. What interest rate would double your money in 5 years?

$$72/5 = 14.4\%$$

In the space provided, write the letter of the savings account or savings method the statement represents.

- a) Passbook account  
b) Statement account  
c) Interest-earning checking  
d) Time deposit (Certificate of Deposit)  
e) Money-market deposit account

3.   e   A combination of a checking and savings account. Interest rates, which are based on a complex structure, vary with the size of your balance.

4.   c   Combines the benefits of a checking and savings account. Interest is paid each month on unused money in the account.

5.   e   You can only write a limited number of checks each month.

6.   d   Bank pays a fixed amount of interest, on a fixed amount of money, for a fixed amount of time.

7.   d   Penalty is usually charged if money is withdrawn before expiration date.

8.   c   Interest rate is usually lower than passbook or statement accounts.



## test your knowledge of saving and investing *answer key*

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In the space provided, write the letter of the investment vehicle the statement represents.

- a) Bonds
- b) Mutual funds
- c) Stocks
- d) Real estate
- e) Keogh plan

9.   d   This type of investment offers an excellent protection against inflation.
10.   e   A retirement plan for the self-employed.
11.   a   Issuer agrees to pay investors a fixed interest rate for a fixed period of time.
12.   e   You can contribute each year to this tax-deferred account.
13.   e   Penalty is usually charged if money is withdrawn before expiration date.
14.   b   Professionally managed portfolios made up of stocks, bonds, and other investments.
15. List the four most important factors to consider when shopping for a savings account

*Interest rates*  
*Balance requirement*  
*Fees, charges, penalties*  
*Balance calculation method*

16. List the four main differences between saving and investing.

*Degree of risk*  
*Availability of funds for use*  
*Rate and stability of return*  
*Amount of protection against inflation*



# lesson twelve quiz: saving and investing

## answer key

### true-false

1. t A certificate of deposit must be held for a set amount of time such as six months or a year.
2. f Compound interest refers to money earned from buying a tax-exempt investment.
3. t A share of stock represents ownership in a company.
4. f A mutual fund is an investment issued by a state or local government agency.
5. t Treasury bonds are a safer investment than real estate.

### multiple choice

6. B The lowest interest rate is usually earned on a:  
**A.** money-market account  
**B.** passbook account  
**C.** certificate of deposit  
**D.** mutual fund
7. B The total interest earned on \$100 for two years at 10 percent (compounded annually) would be:  
**A.** \$2  
**B.** \$21  
**C.** \$11  
**D.** \$10
8. D Based on the rule of 72, money earning 6 percent would take about \_\_\_\_\_ years to double.
9. A An example of a company's debt is a:  
**A.** corporate bond  
**B.** share of stock  
**C.** mutual fund  
**D.** municipal bond
10. C The investment with the most risk would be:  
**A.** a savings account  
**B.** U.S. Treasury bonds  
**C.** corporate stocks  
**D.** corporate bonds

### case application

The Johnson family includes Marv (age 34), Gail (33), Andrew (8), and Molly (4). What are some investment goals that might be appropriate for this family? What types of investments might be used to achieve these goals? *Common investment goals in this situation might be to create an emergency fund, to save for the children's college education, and to save for retirement. The Johnsons might start their saving-investing program with a savings account, money market account, or certificates of deposit. Next, they might consider an aggressive stock mutual fund that could give them good long-term growth for the education and retirement funds. All of those are easier to implement with an automatic withdrawal each month from a bank account to the savings account or the investment company.*