

Save and Invest—Bonds, Stocks and Mutual Funds

Lesson Overview

Description

In this lesson, students will learn about the different types of investments including bonds, stocks and mutual funds. Using handouts, students will research stocks and bonds. To conclude the lesson, an optional stock market bingo game and an investing quiz have been included.

Standards

- [National Standard in K-12 Personal Finance Education](#)
- [Texas State Social Studies Standards](#)
- [Texas State CTE Standards](#)

Instructional Objectives

- Compare and contrast different types of investments such as stocks, bonds and mutual funds.
- Evaluate risk and return of various investment options.

Time Required

- Four 45-minute class periods.
- Two 90-minute class periods.

Materials Required

- PDF slides
- Copies of Handout 1: Vocabulary
- Copies of Handout 2: Comparing Bonds
- Copies of Handout 3: Stock Research
- Copies of Handout 4: Dow Jones Bingo Game
- Copies of Assessment 1: Investing Quiz

Lesson Procedures

1. **Display slide 1.** Tell students the topic of this lesson is bonds, stocks and mutual funds.
2. **Display slide 2.** Review the instructional objectives for the lesson.
3. **Display slide 3.** Tell students that after they have a good savings foundation, they may want to diversify their assets among different types of investments. Diversification is covered on the next slide. Use the questions below to gauge what prior knowledge your students have about investment concepts and terms.

Suggested questions for student discussion:

- What is diversification?
 - What is a stock, bond and/or mutual fund?
 - Have you heard of the stock market?
 - Do you currently invest?
4. **Display slide 4.** Review diversification.
 5. **Display slides 5–7.** Review bonds and face value. Tell students when they invest in a bond, they are lending their money. It is very similar to how banks lend individuals money and in return ask for the principal and interest back.
 - **Bonds** are financial assets that represent loans to corporations, municipalities, governments or their agencies.
 - The face value is used to calculate the payment the bondholder will receive.
 - Bonds are term loans. The length of time and interest rate are established before they are sold.
 - A bank, rather than an individual depositor, bears the risk of default on a loan. A bondholder individually bears the risk of default on a bond.
 - Banks generally have more stringent lending guidelines, while individual investors are free to accept more risk when they purchase bonds.
 6. **Display slide 8.** Use the graphic and information below to describe the life of a bond.
 - At issuance, investors (savers) purchase the bond for the face value. The investors (savers) are lending their money.
 - Institutions (borrowers) pay the coupon payments to investors (savers) for the life of the bond.
 - When the bond matures, investors (savers) receive the face value of the bond from the institutions (borrowers).

Suggested question for student discussion:

- Why would someone lend their money for a time period of 10 years? Answers will vary but might include the interest rate is higher than a traditional savings account, no need to use the money in the next 10 years, the person receives interest payments throughout the term of the bond.

7. **Display slide 9.** Review who issues bonds.

- Corporations, sovereign governments and municipalities often issue bonds.
- Corporations can issue bonds to finance a wide variety of business activities when costs exceed short-term revenue.
- Corporations use business revenues to pay interest on the bonds.
- Sovereign governments issue bonds to finance government activities like wars or social programs when costs exceed tax revenue.
- Governments have taxing authority to generate revenue to pay the interest on the bonds.
- Municipalities issue bonds to finance activities like streets, utilities, and school construction and renovation.
- Most municipalities levy taxes to pay the interest on the bonds.

8. **Display slide 10.** Review where you can buy a bond.

- Primary market: Investors (savers) purchase bonds directly from the original issuer (borrowers) for the face value.
- Secondary market: Investors purchase bonds from other investors:
 - Not all investors hold a bond for its entire life.
 - The price of bonds is no longer fixed.
 - Once a bond is in this market, the new owner will receive the future interest payments.
 - The sales price of a bond does not change its face value.

9. **Display slide 11.** Review U.S. savings bonds.

- Tell students that U.S. savings bonds are government issued and government backed. The only way an individual will not receive their original investment and interest is if the U.S. government defaults on paying them.
- Explain to students that government-issued bonds around the world differ. Countries with less-stable governments pay higher interest rates but also have a greater risk of the government defaulting.
- U.S. government bonds are considered very low risk.
- Explain to students that U.S. savings bonds are like a certificate of deposit (CD). However, the time period is usually longer for U.S. savings bonds, and U.S. savings bonds are not insured through the Federal Deposit Insurance Corp.
- **Optional reading article:** Municipalities can also issue bonds for local projects or even civic projects such as convention centers, ice skating rinks, theaters and hotels. These bonds are not backed by the U.S. government but instead are backed by the cities, counties and states where

they are issued. An article featured on Bloomberg.com, “Cities Save Hotels, Arenas from Bond Defaults After Pandemic Hit,” explains how a city stepped in to avoid bond defaults on civic projects: <https://www.bloomberg.com/news/articles/2020-12-15/cities-save-hotels-arenas-from-bond-defaults-after-pandemic-hit>.

Suggested questions for online discussion post:

- Would you rather invest in a bond for a city or the U.S. government? Do city and government bonds have the same return? Explain your answers.

10. **Display slides 12–13.** Review U.S. Treasury investments.

- Treasury investments are ones that the U.S. Treasury issues and are sold to pay for government activities and are backed by the full faith and credit of the federal government.
- **Treasury bonds** are securities with terms of 20 or 30 years. Interest is paid semiannually.
- **Treasury bills** are short-term securities with maturities ranging from a few days to 52 weeks. They are sold at a discount from their face value.
- The difference between cost and what is paid at maturity is the interest earned.
- **Treasury notes** are interest-bearing securities with maturities ranging from two to 10 years. Interest payments are made every six months.
- **Treasury inflation-protected securities (TIPS)** are marketable securities whose principal is adjusted by changes in the Consumer Price Index. TIPS pay interest every six months and are issued with maturities of five, 10 and 30 years.
- Investors (savers) can purchase bills, bonds and notes directly from the Treasury through TreasuryDirect at www.treasurydirect.gov.

11. **Display slide 14.** Review the advantages of investing in bonds.

12. **Display slide 15.** Distribute Handout 2: Comparing Bonds. Instruct students to use the internet to research different types of U.S. government bonds.

- Have students go to www.treasurydirect.gov/indiv/products/products.htm.
- Students will need to click on each bond hyperlink to find the information and compare different types of bonds.
- After they are finished with their research, have students answer the questions on the second page.

13. **Display slide 16.** Review stocks and explain that stocks are a type of financial asset.

- An **asset** is anything an individual or business owns that has commercial or exchange value.
- Investors buy stock in the hopes of increasing their net worth, but this is not guaranteed. Net worth = assets – liabilities. See Building Wealth Lesson 1 for more information.

14. **Display slide 17.** Explain the link between consumer markets and a stock exchange (market).

- A market brings together buyers and sellers for the purpose of exchange.

- **Consumer market:** a marketplace to buy and sell consumer goods.
 - A farmers market is an example of a physical market. People who sell fruits and vegetables find consumers who wish to purchase them.
 - Markets can be virtual. In virtual markets, transactions are completed electronically. For example, eBay and StockX are both virtual markets.
 - StockX is the world’s first stock market for things—a live bid/ask marketplace. Buyers place bids, sellers place asks and when a bid and ask meet, the transaction happens automatically. Source: <https://stockx.com/how-it-works>.
 - **Stock exchange (market):** a marketplace to buy and sell securities such as stocks and bonds.
 - Stock exchanges are the institutions that create markets for stocks. Examples of stock exchanges include New York Stock Exchange, Nasdaq, Tokyo Stock Exchange.
15. **Display slide 18–21.** Review the definitions. Explain to students that stocks are also called shares, as in shares of ownership. When investors buy stock, they become part owners of the company.
- **Stockholder/shareholder:** a person who owns stock in a company and is eligible to share in profits and losses.
 - **Dividend:** a share of profits paid to a stockholder.
 - **Common stock:** a kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met.
 - **Preferred stock:** a kind of ownership in a corporation that entitles the investor to the payment of fixed dividends and priority in the distribution of assets.
 - Preferred stockholders do not have voting rights, while common stockholders do.
 - **Stock appreciation:** value of the stock increases.
 - **Stock depreciation:** value of the stock decreases.
 - **Ticker symbol:** provides a unique identifier by which individual securities can be researched and traded.
 - **Market capitalization (market cap):** the total value of a company in the stock market.
16. **Display slide 22–23.** Use the news headline information on the slides. Review the difference between appreciation and depreciation.
- Explain to students that for each news headline, they will predict if the stock price appreciated or depreciated. The answers are displayed on slide 34.
 - Alibaba shares **slump (depreciate)** to six-month low despite proposed rise in shares buyback.
 - Boeing stock **falls (depreciates)** after FAA emergency order on thousands of 737 jets.
 - Zoom stock **falls (depreciates)** after service outage.
 - AMC and Cinemark stocks **soar (appreciate)** on vaccine news.
 - Airbnb, now a \$100 billion company after stock market debut, sees stock price **double (appreciate)**.

- Links to news articles:
 - www.yahoo.com/entertainment/alibaba-shares-slump-six-month-102028041.html
 - www.npr.org/2020/12/10/944931270/airbnb-defying-pandemic-fears-takes-its-company-public-in-ipo
 - www.investors.com/news/boeing-stock-faa-emergency-order-thousands-737-jets/
 - www.marketwatch.com/story/zoom-stock-falls-amid-service-outage-2020-08-24
 - www.cnn.com/2020/11/09/media/amc-cinemark-stock-theaters-vaccine/index.html

Classroom response strategies:

- Have students move to different sides of the classroom to identify whether stocks will appreciate or depreciate.
- Use an online poll to gather responses.

Suggested question for student discussion:

- Are there any key words in each news headline that helped you predict whether a stock appreciated or depreciated?

17. **Display slide 24.** Explain that when the bid price and the ask price match, a transaction occurs, and shares of stock are sold.

- When buyers offer to buy shares of stock at a given price, it is called a **bid price**.
- When sellers simultaneously offer to sell shares of stock at a given price, it is called a **sell price**.

18. **Display slide 25.** Use the questions on the slide and the information below to discuss the information an investor would seek before buying a stock.

- Who: name of the company and ticker symbol.
- What: the goods and services produced, line of business and sector of the economy.
- When: founding date and dividend payment schedule.
- Where: location of headquarters, production facilities or major markets.
- How much: revenue, total sales, profit margin, earnings, value of company.

19. **Display slide 26–29.** Use the information on each slide to determine which stock example students would rather invest in.

20. **Display slide 30.** Review the instructions on the slide and distribute Handout 3: Stock Research. Allow students time to research two stocks from the Dow Jones Industrial Average and create their investor sheet.

21. **Display slide 31–32.** Review mutual and index funds.

Tell students:

- Mutual funds are a way to diversify investments.

- Mutual funds are made up of a group (or basket) of stocks.
 - When you buy mutual fund shares, you become a shareholder of a fund that has invested in many other companies.
 - An **index fund** is a type of mutual fund where components of the fund track the performance of a financial market index.
22. **Display slide 33.** Tell students index funds categorized by location refer to the location of the headquarters of the company or the country in which the corporation was chartered. Use the table below to introduce some well-known indexes.
23. **Display slide 34.** Tell students sector indexes refer to the business of the company. Investors consider the types of goods and/or services the company produces. Below are examples of industry sectors found in the Standard & Poor's 500 index.
- Information technology sector consists of companies that develop or distribute technological items or services and includes internet companies. Examples include Microsoft, Oracle and Mastercard.
 - Health care consists of medical-supply companies, pharmaceutical companies and scientific-based operations or services that aim to improve human body or mind. Examples include Johnson & Johnson—which produces products like Tylenol—Pfizer and CVS.
 - Financial sectors include all companies involved in finance, investing and the movement or storage of money. It includes banks, credit card issuers, credit unions and insurance companies. Examples include Bank of America, JPMorgan Chase & Co., American Express and Goldman Sachs.
 - Consumer discretionary products are luxury items or services that are not necessary for survival. Products include cars, jewelry, sporting goods and electronic devices. Examples include Starbucks, Best Buy and Amazon.
 - The communication services sector consists of companies that keep people connected. This includes internet providers, phone plan providers, media and entertainment. Examples include Netflix, Walt Disney, AT&T, CBS and Facebook.
 - Industrials include a wide range of companies, from airlines and railroad companies to military weapons manufacturers. Examples include Southwest Airlines, FedEx and Boeing.
 - Consumer staples companies provide all the necessities of life. This includes food and beverage companies, household-product providers and personal-product providers. Examples include Procter & Gamble, Kroger and Costco.
 - The energy sector consists of all companies that play a part in the oil, gas and consumable fuels business. Examples include Exxon Mobil Corp., Chevron Corp. and Kinder Morgan, which transport fuel to gas stations.
 - Utility companies provide or generate electricity, water and gas to buildings and households. Examples include Atmos Energy, CenterPoint Energy and Entergy.

- Real estate includes realtors and other companies such as Public Storage, CBRE Group and Crown Castle International Corp.
- Companies within the materials sector provide the raw materials needed for other sectors to function. This includes the mining companies that provide gold, zinc and copper, and forestry companies that provide wood. Examples include International Paper, Sherwin-Williams and DuPont.

SOURCE: <https://corporatefinanceinstitute.com/resources/knowledge/finance/the-sp-sectors/>

24. **Display slide 35.** Review market cap indexes and use the table below to introduce examples of market cap indexes.

- Large-cap companies have a market value over \$10 billion.
- Mid-cap companies have a market value between \$2 billion and \$10 billion.
- Small-cap companies have a market value from \$300 million to \$2 billion.

25. **Display slide 36.** Review the risk-return relationship.

- Tell students that after deciding how much risk they can take, they can use the investment pyramid to help balance their savings and investments.
- Explain that before moving up the pyramid, they must build a strong foundation, which includes setting goals, developing a budget and saving for emergency and short-term needs.

Suggested questions for student discussion:

- How much risk are you willing to take?
- What are the benefits of saving and investing? Answers will vary but might include building wealth, being financially prepared for emergencies and growing your money.

26. **Display slides 37–38.** Review learning objectives with students.

27. **Optional.** Distribute copies of Handout 4: Dow Jones Bingo. Tell students that to familiarize the class with the companies that make up a well-known stock index, they will play a Dow Jones bingo game.

- These sheets contain a bingo card and descriptions of the 30 companies that make up the Dow Jones Industrial Average (DJIA). Keep one additional copy of the descriptions to aid in calling the game.
- Give students time to choose 24 ticker symbols from the company description list and write the ticker symbols for each company on their game card.
- Call through the ticker symbols on the company description pages and have students mark their cards until a student has five in a row. The five connecting boxes can be horizontal, vertical or diagonal. The first student to connect five boxes and yell “Bingo!” is the winner.
- After playing bingo, lead a discussion about the companies within the index.

Suggested questions for student discussion:

- Can companies be grouped by what they do? Answers may vary but might include: Chevron and Exxon Mobil, which are both in the oil and gas industry and Microsoft and Apple, which are both in the technology industry.
- What companies are you familiar with?
- Where there any companies listed in the Dow Jones index that you were not familiar with?

28. Hand out Assessment 1: Investing Quiz.

29. Additional Resources. Federal Reserve Bank of Atlanta infographic, [Saving and Investing](#).



Lesson 6—Handout 1

Vocabulary

Diversification—The distribution of investments among several companies to lessen the risk of loss.

Bonds—Financial assets that represent loans to corporations, municipalities, governments or their agencies.

Face value—The original value of the bond. This is usually stated in thousands of dollars.

I savings bonds—A low-risk savings product that earn interest while protecting you from inflation.

EE savings bonds—A secure savings product that pays interest based on current market rates until they reach 30 years or until you cash them, whichever comes first.

Treasury bonds—Securities with terms of 20 or 30 years. Interest is paid semiannually.

Treasury bills—Short-term securities with maturities ranging from a few days to 52 weeks. They are sold at a discount from their face value.

Treasury notes—Interest-bearing securities with maturities ranging from two to 10 years. Interest payments are made every six months.

Treasury inflation-protected securities (TIPS)—Marketable securities whose principal is adjusted by changes in the Consumer Price Index. TIPS pay interest every six months and are issued with maturities of five, 10 and 30 years.

Stockholder/shareholder—A person who owns stock in a company and is eligible to share in profits and losses.

Dividend—A share of profits paid to a stockholder.

Common stock—A kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met.

Preferred stock—A kind of ownership in a corporation that entitles the investor to the payment of fixed dividends and priority in the distribution of assets.

Stock appreciation—When the value of the stock increases.

Stock depreciation—When the value of the stock decreases.

Ticker symbol—Provides a unique identifier by which individual securities can be researched and traded.



Lesson 6—Handout 1

Vocabulary (Cont.)

Market capitalization (market cap)—Refers to the total value of a company in the stock market.

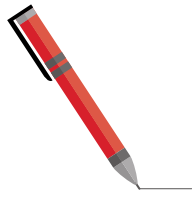
Bid price—When buyers offer to buy shares of stock at a given price.

Ask price—When sellers simultaneously offer to sell shares of stock at a given price.

Stock exchange (market)—A marketplace to buy and sell securities such as stocks and bonds.

Mutual fund—A pool of money managed by an investment company.

Index fund—A type of mutual fund where components of the fund track the performance of a financial market index.



Lesson 6—Handout 2

Comparing Bonds

Instructions:

- Go to www.treasurydirect.gov/indiv/products/products.htm
- Click on each type of bond listed and record the information found for each column.

Comparisons	Treasury bill	Treasury notes	Treasury bonds
Minimum purchase			
Issue method			
Minimum term of ownership			
Rates and terms			
Interest-earning period			
Tax considerations			



Lesson 6—Handout 2

Comparing Bonds (Cont.)

Comparisons	Treasury inflation-protected securities	Series I savings bonds	Series EE savings bonds
Minimum purchase			
Issue method			
Rates and terms			
Minimum term of ownership			
Interest-earning period			
Tax considerations			



Lesson 6—Handout 2

Comparing Bonds (Cont.)

1. How does bond ownership build wealth?
2. Are U.S. government bonds considered high or low risk? Explain why.



Lesson 6—Handout 3

Stock Research

Directions:

Part 1

Select two companies from the list of stocks included on the Dow Jones Industrial Average. Write the names of the companies below.

- _____
- _____

Use newspapers, corporate websites and online news sources to research information about both companies you selected. Information should include:

- **Who**—Name of the company.
- **What**—Description of the company and its business, major products or services that it produces, name of president and CEO (may be the same person) along with other leaders that you feel are important.
- **When**—Founding date, dividend payment schedule.
- **Where**—Location of headquarters, production facilities or major markets.
- **How much**—Information about the performance of the stock, including price, revenue, total sales, profit margin, earnings, value of company, dividends and yield over the past year.

Part 2

Create an investor information sheet about both of your companies. Provide information that a person should consider before purchasing stock in the company. The sheet should include:

- Information about the company that you gathered in your research.
- Graph of the stock price for the last year.
- Major competitors or related companies.
- Your assessment of the future prospects for the company (see note).

Note: When you assess the future of the company, consider economic developments that would help the company make profits and grow in coming years. Also, consider threats to the company's future growth or profitability. For instance, does the company produce goods or services that are increasingly popular? Are competitors from around the world threatening the company's market share?



Lesson 6—Handout 4

Dow Jones Bingo

Symbol	Company Description
AAPL	Apple is known for its Macintosh computers, iPhones, iPads and iPods. The company was founded in 1977 and is headquartered in Cupertino, California.
AMGN	Amgen Inc. is a biotechnology company that engages in the discovery, development, manufacture and marketing of human therapeutics. It was founded on April 8, 1980.
AXP	American Express Co. is best known for its flagship green charge card. It is a global financial services and travel company.
BA	The Boeing Co. designs, develops and manufactures commercial jetliners and military aircraft.
CAT	Caterpillar Inc. manufactures and sells construction, mining and forestry machinery. It also produces engines and has a financial services division.
CRM	Salesforce.com Inc. engages in the design and development of cloud-based enterprise software for customer relationship management. Its solutions include salesforce automation, customer service and support, marketing automation, digital commerce, community management, collaboration, industry-specific solutions and the salesforce platform.
CSCO	Cisco Systems Inc. produces internet-based networking products and provides services related to those products. It was started by scientists from Stanford University.
CVX	Chevron Corp. is an energy company with fully integrated petroleum operations, chemicals operations, mining operations of coal and other minerals, power generation and energy services.
DIS	Walt Disney Co. owns the rights to some of the most famous characters ever created. It operates amusement parks, makes and distributes movies and owns television networks including ABC and ESPN.
DOW	Dow Inc. is a materials science company, combining science and technology to develop innovative solutions. It operates through three business segments: Performance Materials & Coatings, Industrial Intermediates & Infrastructure and Packaging & Specialty Plastics.
GS	Goldman Sachs Group Inc. provides financial services to everyone from individuals to sovereign governments. The company was founded in 1869 and added to the DJIA in 2013.



Lesson 6—Handout 4

Dow Jones Bingo (Cont.)

Symbol	Company Description
HD	The Home Depot Inc. is a home-improvement retailer. It operates more than 2,200 full-service, warehouse-style stores that sell building materials and home improvement and lawn and garden products.
HON	Honeywell International Inc. is a software industrial company, which offers industry-specific solutions to aerospace and automotive products and services. It specializes in turbochargers control, sensing and security technologies for buildings and homes; specialty chemicals; electronic and advanced materials; process technology for refining and petrochemicals; and energy-efficient products and solutions for homes, business and transportation.
IBM	International Business Machines Corp. (IBM) is an information technology company that offers technology and business services, as well as system architecture and financing.
INTC	Intel Corp. produces semiconductor chips, boards and other products that are integral to computers, servers and other electronic products.
JNJ	Johnson & Johnson develops, manufactures and sells products in the health care field. Consumer products, pharmaceutical products, and medical devices and diagnostics form the core of its business.
JPM	JPMorgan Chase & Co. is a global financial services firm that offers investment banking, financial services for consumers, small business and commercial banking, financial-transaction processing, and investment and wealth management services.
KO	Coca-Cola is the world's largest beverage company. It manufactures, distributes and markets soft drink concentrates and syrups, water, juices, teas and other beverages in over 200 countries.
MCD	McDonald's Corp. has more than 30,000 quick-service restaurants in more than 100 countries. Items on the menu include the Big Mac, the Quarter Pounder and the Egg McMuffin.
MMM	3M Co. is based in St. Paul, Minnesota, and produces a variety of products, including Scotch tape and Post-it Notes.
MRK	Merck & Co. Inc. is a global pharmaceutical company that was established in 1891. It discovers, develops, manufactures and markets vaccines and medicines.
MSFT	Microsoft Corp. developed the Windows operating system and the Office suite of productivity software. This company also makes the Xbox.



Lesson 6—Handout 4

Dow Jones Bingo (Cont.)

Symbol	Company Description
NKE	Nike develops athletic apparel, footwear and equipment for many sports, including running, soccer, football, baseball and basketball. Nike also owns the Jordan brand, built around the reputation of basketball legend Michael Jordan.
PG	Procter & Gamble Co. makes and sells consumer products in 180 countries around the world. Its brands include Tide, Gillette, Duracell and Crest.
TRV	The Travelers Companies Inc. provides a wide variety of insurance products and services through its subsidiaries. Customers around the world include businesses and individuals.
UNH	UnitedHealth Group Inc. is a health and well-being company that provides health benefit plans to consumers and services to businesses of all sizes. The company serves a network of 780,000 physicians and 5,900 hospitals.
V	Visa Inc. is a payment services company that facilitates worldwide movement of financial capital. It is best known to customers for its Visa credit cards.
VZ	Verizon Communications Inc. provides communication services both domestically through its wireless network and internationally with voice, internet, broadband, long distance and other services.
WBA	Walgreens Boots Alliance Inc. engages in the provision of drug store services. The company was founded in 1901 and is headquartered in Deerfield, Illinois.
WMT	Wal-Mart Stores Inc. is the largest retailer in the world. From its headquarters in Arkansas, it operates its namesake discount stores and supercenters, as well as Sam's Clubs.



Lesson 6—Handout 4

Dow Jones Bingo (Cont.)

B	I	N	G	O



Lesson 6—Assessment 1

Investing Quiz

Directions: Match the following terms to the correct definition:

1. _____ Diversification	A. Share of profits paid to a stockholder
2. _____ Treasury bill	B. Total value of a company in the stock market
3. _____ Dividend	C. Short-term securities with maturities ranging from a few days to 52 weeks
4. _____ Emergency savings	D. Unique identifier by which individual securities can be researched and traded
5. _____ Index fund	E. Securities with terms of 20 or 30 years
6. _____ Stockholder	F. Original value of the bond
7. _____ Face value	G. Money set aside for unforeseen events
8. _____ Ticker symbol	H. Person who owns stock in a company and is eligible to share in profits and losses
9. _____ Market capitalization	I. Distribution of investments among several companies to lessen the risk of loss
10. _____ Treasury bonds	J. Type of mutual fund where components of the fund track the performance of a financial market index



Lesson 6—Assessment 1

Investing Quiz (Cont.)

Write a short response to the following questions:

11. Explain how financial markets and financial institutions help facilitate the transfer of funds from people who have saved money to people, firms and governments with investment projects.

12. What are three common types of emergencies people save money for?

13. What is the difference between stocks and bonds?

14. What is a stock exchange? Give one example.

15. If a company goes bankrupt and its stock price goes to zero, what happens to its shareholders?



Lesson 6—Assessment 1

Investing Quiz (Cont.)

Choose the correct answer:

16. A kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met:

Preferred stock

Common stock

17. When the value of the stock increases:

Stock appreciation

Stock depreciation

18. A financial asset that represents a piece, or share, of ownership in a company:

Stock exchange

Stock

19. When a buyer offers to buy shares of stock at a given price:

Bid price

Ask price

20. Companies have a market value of more than \$10 billion:

Large-cap

Small-cap



Lesson 6—Handout 3

Comparing Bonds Answer Key

Instructions:

- Go to www.treasurydirect.gov/indiv/products/products.htm.
- Click on each type of bond listed and record the information found for each column.

Comparisons	Treasury bill	Treasury notes	Treasury bonds
Minimum purchase	\$100	\$100	\$100
Issue method	Electronic	Electronic	Electronic
Minimum term of ownership	Four weeks	45 days	45 days
Rates and terms	Issued for four, eight, 13, 26 and 52 weeks and are sold at a discount from the face value	Notes pay interest every six months until maturity. At maturity, the face value of the note is paid to the owner.	Bonds pay interest every six months until they mature. When a bond matures, the owner is paid the face value of the bond. Bonds can be held until maturity or sold before maturity.
Interest-earning period	N/A—The difference between the face value and the discount price the bill is purchased for is the return on investment.	To maturity	To maturity
Tax considerations	Interest income is exempt from state and local income taxes. Interest income is subject to federal income tax.	Interest income is exempt from state and local income taxes. Interest income is subject to federal income tax.	Interest income is exempt from state and local income taxes. Interest income is subject to federal income tax.



Lesson 6—Handout 3

Comparing Bonds Answer Key (Cont.)

Comparisons	Treasury inflation-protected securities	Series I savings bonds	Series EE savings bonds
Minimum purchase	\$100	\$25	\$25
Issue method	Electronic	Electric and paper bonds are available if purchased with a tax refund.	Electronic
Rates and terms	Issued in terms of 5, 10 and 30 years and can be held until maturity or sold before maturity. Interest is paid every six months.	Interest is earned monthly from the first day of the month of the issue date. The interest accrues until the bond reaches 30 years or the bond is cashed, whichever comes first.	Interest is fixed and added monthly and paid when the bond is cashed.
Minimum term of ownership	45 days	1 year	1 year
Interest-earning period	To maturity	30 years or until they are cashed, whichever comes first	30 years or until they are cashed, whichever comes first
Tax considerations	Interest income and growth in principal are exempt from state and local income taxes. Interest income and growth in principal are subject to federal income tax.	Savings bonds are exempt from taxation and state and local income taxes, except for estate or inheritance taxes. Interest earnings are subject to federal income tax. Interest earnings may be excluded from federal income tax when used to finance education.	Savings bonds are exempt from taxation and state and local income taxes, except for estate or inheritance taxes. Interest earnings are subject to federal income tax. Interest earnings may be excluded from federal income tax when used to finance education.



Lesson 6—Handout 3

Comparing Bonds Answer Key (Cont.)

1. How does bond ownership build wealth?

Bonds build wealth through their coupon payments, which are paid as cash to bond owners. If a bond issuer does not default (fail to make regular payments), investors receive a predictable income stream based on the coupon rate and face value of the bond.

2. Are U.S. government bonds considered high or low risk? Explain why.

U.S. bonds are considered low risk since they are backed by the full faith and credit of the U.S. government.



Lesson 6—Assessment 1

Investing Quiz Answer Key

Directions: Match the following terms to the correct definition:

1. <u>I</u> Diversification	A. Share of profits paid to a stockholder
2. <u>C</u> Treasury bill	B. Total value of a company in the stock market
3. <u>A</u> Dividend	C. Short-term securities with maturities ranging from a few days to 52 weeks
4. <u>G</u> Emergency savings	D. Unique identifier by which individual securities can be researched and traded
5. <u>J</u> Index fund	E. Securities with terms of 20 or 30 years
6. <u>H</u> Stockholder	F. Original value of the bond
7. <u>F</u> Face value	G. Money set aside for unforeseen events
8. <u>D</u> Ticker symbol	H. Person who owns stock in a company and is eligible to share in profits and losses
9. <u>B</u> Market capitalization	I. Distribution of investments among several companies to lessen the risk of loss
10. <u>E</u> Treasury bonds	J. Type of mutual fund where components of the fund track the performance of a financial market index



Lesson 6—Assessment 1

Investing Quiz Answer Key (Cont.)

Write a short response to the following questions:

1. Explain how financial markets and financial institutions help facilitate the transfer of funds from people who have saved money to people, firms and governments with investment projects.

Financial markets are a marketplace that allows the transfer of money from savers to investors to buy and sell securities and investments. Financial institutions allow a place for both savers and investors to store their money and facilitate the transfer of money when transactions take place in financial markets.

2. What are three common types of emergencies people save money for?

Answers might vary but could include: unforeseen home and car repairs, job loss, emergency dental work, natural disaster, long-term illness, emergency travel

3. What is the difference between stocks and bonds?

When you purchase a bond, you lend your money in return for future payment. When you purchase a stock, you pay for a share of ownership in the company.

4. What is a stock exchange? Give one example.

A stock exchange is the institution that creates the market where stocks are bought and sold. Two U.S. exchanges are the New York Stock Exchange and the NASDAQ. International exchanges include the London Stock Exchange and the Tokyo Stock Exchange.

5. If a company goes bankrupt and its stock price goes to zero, what happens to its shareholders?

If a company's stock price goes to zero, investors lose all the money they have invested in the company.



Lesson 6—Assessment 1

Investing Quiz (Cont.)

Choose the correct answer:

16. Is a kind of ownership in a corporation that entitles the investor to share any profits remaining after all other obligations have been met.

Preferred stock

- **Common stock**

17. Is when the value of the stock increases.

Stock appreciation

- **Stock depreciation**

18. Is a financial asset that represents a piece, or share, of ownership in a company.

Stock exchange

- **Stock**

19. Is when a buyer offers to buy shares of stock at a given price.

- **Bid price**

Ask price

20. Companies have a market value of more than \$10 billion.

- **Large-cap**

Small-cap