



Lesson 8: Money Doesn't Grow on Trees

TOPIC: Investing Options

OVERVIEW:

This lesson will explore the concepts of **interest** and **investments** helping learners make initial discoveries about how their money can grow overtime.

Time: 65 min

Supplies:

- Loose-leaf paper for *Investing Tips Letter*
- Projector (for teacher presentation slides)
- Access to the Internet (optional)

Preparation:

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

Glossary with key vocabulary 15

OBJECTIVES:

1. Understand investment growth, losses, reward, and risk by developing and tracking a stock portfolio
2. Demonstrate a general understanding of investment vehicles, like bonds, stocks, and mutual funds
3. Create investment tips for an adult audience

INDIVIDUAL HANDOUTS:

- Stock Market Tracking Week 1
- Stock Market Tracking Week 2

GROUP HANDOUTS:

- None

TEACHER PRESENTATION SLIDES:

- Investment Vehicles
- Case Study: Three Stocks

ESSENTIAL QUESTIONS:

- What are the benefits to investing money?
- Is investing money worthwhile?
- What investing strategies will create positive rate of return?

ASSESSMENT ACTIVITIES:

Pre-Assessment:

- **Activity:** Investing in a Friend

Post-Assessment:

- **Activity:** Stock Market Tracking
- **Activity:** Investing Tips

Instruction Steps

WARM UP

Investing in a Friend

10 MINUTES

The lesson begins with students considering a concrete and age-appropriate example of investing.

Ask students to consider the following scenario:

A friend comes to you asking to invest \$50 to start a business (for example: lemonade stand, lawn care service, DJ service). When you invest money, you “commit money to an endeavor with the expectation (but not guarantee) of additional profit.”

- *What are the benefits of helping your friend?*
- *What are the drawbacks? According to the definition, investing means that there is an “expectation of additional profit,” so how might you make additional profit if you invested \$50 in your friend’s business?*

MONEY SMART TIP!

The U.S. Securities and Exchange Commission (SEC) has educational materials about investing for teachers, students, and parents. <https://investor.gov/classroom>

GUIDED EXPLORATION

Investment Vocabulary and Vehicles

20 MINUTES

As a whole group, discuss investment options and how investments are made. First, explain the general concepts and vocabulary of investing, and then share brief anecdotes to provide a scenario for investing.

Investing is the process of “committing money to an endeavor with the expectation (but not guarantee) of additional profit.” There are many ways to invest, including in business, real estate, and the stock market.

In this lesson, we’ll be focusing on **investing** in the stock market, which will include “purchasing securities, such as stocks, bonds, and mutual funds with the goal of increasing wealth over time, but with the risk of loss.”

For example: Charlie is 20 years old and loves technology. He’s investing in stock for a company he believes will grow in profits. If the company does poorly and Charlie sells the stock at a lower value, he could lose money.

Share an example of a low-risk investment a young person might make, and the possible reward of that investment.

For example: If Adeline, an 18-year-old, invests \$5 a week at an 8% interest rate, the money will grow to \$136,138 by the age of 65.

Access an online calculator such as www.investor.gov/additional-resources/free-financial-planning-tools/compound-interest-calculator to model investment growth for students.

Share that **risk** is “a measure of the likelihood of loss or the uncertainty of an investment’s rate of return.” Explain that investors have to consider whether they are financially comfortable with the risk that they might take when they invest. Additionally, different investment vehicles come with different levels of risk.

For example: Leon likes to avoid a lot of risk, so he invests his money in more than one stock.

Ask students:

- *Why might it be riskier to put all your money in a single company’s stock?*

Investment Vehicles

Stock

- Investment in a company
- Shares of ownership in a company
- Value of investment based on company performance

Mutual Funds

- Investments in several areas (companies, bonds, etc.)
- Diversified

Investors pool their money with a Registered Mutual Fund

Mutual Fund – Fund Manager invests this amount with securities

Returns on the pooled investments

Returns are passed to the investors

MUTUAL FUND

Money Smart for Young People Grades 3 - 5

Next, display the **Investment Vehicles** slide and explain each.

Investment vehicles are the methods that a person (or business) can use to invest money.

A **stock** is an investment that represents shares of ownership of the assets and earnings of a company. It is an investment made in a business. When you buy a stock, you become a partial owner of the company (like a fast-food company or a computer company) and you may get a say in certain decisions about how the company is run. The value of your investment goes up and down. Buying shares of stock in a company is a way to grow money quickly or lose it quickly. There is no guarantee that your money is safe. If the company does really well, your stock in the company will increase and be worth more, but if the company does poorly or goes out of business, your stock will decrease, and you could lose some or all of your investment. Therefore, stocks have more risk than savings bonds.

A **mutual fund** is an investment tool that pools the money of many shareholders and invests it in a large number of securities, such as stocks, bonds, and money market assets. When you invest in a mutual fund, you purchase a small piece of several stocks. For example: you may own a small piece of a sportswear company, a small piece of a technology company, and a small piece of a furniture company. Stock mutual funds are considered less risky than individual stocks because of the concept of **diversification**. Diversification is a strategy for reducing some types of risk by selecting a wide variety of investments. With stocks, it means spreading your money out to several different company stocks so that, if one company does poorly, you won't lose too much money.

Grade-Level Modification:

Beginner: Build background knowledge by watching *What's Up With the Stock Market?* Students will learn about the basics of the stock market, including vocabulary.

Check for understanding of the investment vehicles and associated vocabulary.

- *Which investment vehicles are you most interested in? Why?*
- *Which investment vehicles might a financially successful adult most be interested in? Why?*
- *Why is diversification important?*

Encourage students to use vocabulary terms as they explain their answers.

INDIVIDUAL EXPLORATION
Investing in Stock Simulation

25 MINUTES

Distribute the **Stock Market Tracking** handout and display the **Case Study: Three Stocks** slide. Explain to students that they will each be allowed to invest some money in a stock.




Grade-Level Modifications:

Beginner: The teacher can provide a set amount of money for investment for students, say \$1,000. This provides students with a round number to more easily work their math.

Advanced: The teacher can allow students to set their own amounts of money for investment. For example: some students may decide to invest just \$100, while others may choose to invest \$5,000. This should provide rich conversation about how the principal affects the return on investment.

Allow students time to study the **Case Study: Three Stocks** slide before selecting a company to purchase stock. (Note: If students are doing real-time, online stock tracking, they should research their stocks and share prices online.)

Case Study: Three Stocks 14

<p>Yum! Brands (YUM) Yum! Brands owns such popular chains as Taco Bell, KFC, and Pizza Hut. At \$73 per share, it sells for 20 times projected earnings, while yielding 2%. The company is expected to increase profits over the next 3-5 years. Stock symbol: YUM Today's share price: \$73</p> 	<p>Target (TGT) Target has 1,822 stores in the United States that sell everything from baby cribs to bananas. This retailer is expected to increase profits at a 15% pace in coming years. Shares are \$84 each as of October 2018. Stock symbol: TGT Today's share price: \$84</p> 	<p>Walt Disney (DIS) Walt Disney owns several business interests: animated films, theme parks, and the sports network ESPN, among others. At \$116 a share, it is expected to increase profits at a 15% pace for the next several years. Stock symbol: DIS Today's share price: \$116</p> 
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Share prices from 10/04/2018
Source: www.yum.com, www.target.com, www.disney.com
Money Smart for Young People Grades 3-5

Ask students to fill out the company, stock symbol, and purchase information on their Stock Market Tracking handout after they have selected their company.

Optional check for understanding questions:

- *Why did you choose your company?*
- **Advanced:** *Why did you choose to invest that amount of money?*

Demonstrate how to track stock information by reviewing the example on the **Stock Market Tracking Week 1** handout. To use the **Stock Market Tracker**, students should:

- Identify the stock symbol.
- Locate the stock symbol on the **Stock Market Week 1** report.
- Identify the stock's closing price for each day of the week.
- Calculate the percentage change from one day to the next.
(Demonstrate this using the model on the **Stock Market Tracker**. The basic formula is: $(\text{Price Sold} - \text{Purchase Price}) / (\text{Purchase Price})$. For example: $(105 - 100) / (100) = .05$. Then, multiply by 100 to calculate the percentage: 5% change.

MONEY SMART TIP!

Do all of your students have Internet access? Instead of using the Stock Market Week 1 handout, track stocks in real time at <https://finance.yahoo.com/most-active>.

Allow students to use the **Stock Market Week 1** handout to track their stock on the **Stock Market Tracker**. Optional check for understanding questions:

- *How is your stock doing after one week?*
- *Why do you think the stock prices change in the way that they do?*
- *How do you feel about the financial rewards and/or risk you've taken by purchasing stock?*

MONEY SMART TIP!

There is often a lot of volatility and risk associated with investing in stocks. Reading a stock quote provides information about the performance of a particular stock. The P/E ratio shows how much investors are spending on a stock vs. the earnings of the company. A higher P/E ratio can be a clue that investors expect the company to grow in the future. For more information join the Stock Market Game www.stockmarketgame.org/assets/documents/teachersguide.pdf.

Distribute copies of the **Stock Market Week 2** handout. Have students use their handouts to track their stock. Then, point out the business news that is on the **Stock Market Week 2** handout.

Discuss:

- *How did your stock do after two weeks?*
- *How might business news influence shareholders or potential investors?*

Finally, prompt students to finish the worksheet by tracking the stock's overall changes. Then, wrap up with one or two questions about investing in stocks:

- Which stocks had the biggest percentage change? What does that mean for investors?
- **Advanced:** *What impact did the amount of money you invested originally have on your gains or losses? Would you make the same decision about the money you invest in the future?*
- Do you think that you would invest in stock in the future? Why or why not?
- What tips would you give someone who is thinking about investing?

WRAP UP
Investing Tips

10 MINUTES

Ask students to reflect on things they have discovered about investing and mock up two social media posts using text and imagery to share two investment tips with family or friends.

Some helpful questions are:

- What goals might investors have?
- Why are investor goals important?
- Why is it a good idea to invest?
- What risks do you take when you invest money?
- What are low-risk investment vehicles and what are high-risk investment vehicles? Why?

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:

Is it worth the risk to invest? Explain your stance.

In your opinion, what's the best investment vehicle? Why?

Write a convincing argument to support your answer.

Pick an entrepreneur whom you admire.

How would you recommend they invest their profits to grow their long-term financial returns?

Share your answers as part of the annual SIFMA InvestWrite essay contest at www.investwrite.org/grades-6th-thru-8th.

Additional Readings/Resources:

Save and Invest by the Financial Literacy and Education Commission: Information for students on saving and investing.
www.mymoney.gov/save-invest/Pages/saveandinvest.aspx

What's Up With the Stock Market? by BizKids: A video overview of how the stock market works, including important vocabulary.

(Time of video: 4:07 minutes)

www.youtube.com/watch?v=osvQSd6Opac

MATH

Activity/Project Ideas:

Track a stock long-term. Use the *Stock Market Tracker* and <http://finance.yahoo.com/stock-center/> to observe the changes in stock prices over several months.

SOCIAL STUDIES AND ECONOMICS

Activity/Project Ideas:

Investigate the history of the Stock Market Crash of 1929. Compare and contrast the stock market of 1929 with the stock market of today to determine whether or not a major stock market crash could happen again.

www.history.com/topics/1929-stock-market-crash

Investigate the history of the financial crisis of 2008. Explore the causes of the crisis, the impact on investing, and the regulations the government has made in its wake.

www.britannica.com/EBchecked/topic/1484264/The-Financial-Crisis-of-2008-Year-In-Review-2008/280410/The-Crisis-Unfolds

TECHNOLOGY

Online Games/Tools:

Investment Calculators by the U.S. Securities and Exchange Commission: Several useful tools for calculating investment information.

www.investor.gov/additional-resources/free-financial-planning-tools#VDrmbtTF-Hs

The Stock Market Game by the Securities Industry and Financial Markets Association: An online stock market tracking game for students. **www.stockmarketgame.org**

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:

Distinguishing between earned and unearned income

Students play a game to help them learn the difference between earned and unearned income.

www.consumerfinance.gov/practitioner-resources/youth-financial-education/teach/activities/distinguishing-earned-unearned-income/

Making a good business investment

Students play an investment game where they'll choose between two businesses to invest in.

www.consumerfinance.gov/practitioner-resources/youth-financial-education/teach/activities/making-good-business-investment/

Answer Key

Student Handout 1:

Stock Market Tracking

Answers will vary.



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STOCK MARKET TRACKING WEEK 1

Name: _____

Company:

Stock Symbol:

Purchase Price:

of Shares Purchased:

Total Cost:

WEEK 1	YUM	TGT	DIS
Monday	73.10	62.94	71.01
Tuesday	73.13▲	63.02▼	71.03▲
Wednesday	73.16▲	63.05▲	71.04▲
Thursday	73.15▼	63.13▲	71.05▲
Friday	73.18▲	63.04▼	71.05

TRACKING EXAMPLE: Purchase Price: \$101.25			
Date	Day	Close Price	% Change
3/9/2019	Monday	\$101.25	0.00%
3/20/2019	Tuesday	\$101.13	-0.12%

TRACKING WEEK 1:

Date	Day	Close Price	% Change
	Monday		
	Tuesday		
	Wednesday		
	Thursday		
	Friday		

After Week 1, if you were to sell your shares, would you make money or lose money?

Use the space below to calculate and explain your answer.



Lesson 8: Money Doesn't Grow on Trees

STOCK MARKET TRACKING WEEK 2

Name: _____

Company:

Stock Symbol:

Purchase Price:

of Shares Purchased:

Total Cost:

WEEK 2	YUM	TGT	DIS
Monday	73.21	63.00	71.04
Tuesday	73.23▲	63.02▲	71.06▲
Wednesday	73.22▼	63.01▼	71.07▲
Thursday	73.23▲	62.98▼	71.08▲
Friday	73.26▲	63.94▼	71.10▲

BUSINESS NEWS: Week In Review

Yum! Brands continues its rapid growth again this week following news about recent company growth. Target continues its up and down trend after struggling to make the financial gains the company predicted at the beginning of the year. Behind its most recent hit movie, Walt Disney is gaining slowly but surely.

TRACKING EXAMPLE: Purchase Price: \$101.25			
Date	Day	Close Price	% Change
3/9/2019	Monday	\$101.25	0.00%
3/20/2019	Tuesday	\$101.13	-0.12%

TRACKING WEEK 2:

Date	Day	Close Price	% Change
	Monday		
	Tuesday		
	Wednesday		
	Thursday		
	Friday		

After Week 2, if you were to sell your shares, would you make money or lose money?

Use the space below to calculate and explain your answer.