

## OVERVIEW

The best reason for investing is that your money has the potential to make more money for you. When you invest, you buy something that you believe will increase in value or earn money for you. There's no guarantee that the investment will grow, but in the long run, investments have the potential to earn more than you can usually earn in interest from a savings account.

You may not think that you have much money to invest right now, but you are missing opportunities to grow wealth by not starting when you are young. In this lesson explore reasons to start investing now to get a jumpstart on achieving your financial goals.

## LEARNING OUTCOMES

In this lesson students explore how investing works. Along the way they will do the following:

- Summarize how the time value of money impacts saving and investing.
- Explain how to buy stocks.
- State fundamental investing guidelines.

Students will use what they learn to make decisions about stock investments.

## PREPARATION

- Order a Module 4 Student Guide for each student. (The Guide is available online to download.)
- Preview the lesson plan, PowerPoint presentation, learning tasks, and Module 4 Student Guide, particularly pages 12-23.
- Print or download the Student Learning Plan for this lesson so each student has a copy.
- Practice using the financial calculators that will be used for Task 3
- For Tasks 4 and 5, select a company to feature as you demonstrate how to search for company stock information. Consider choosing a local publicly owned company or another company that is familiar to your students but not listed in Activity 4.5 (page 22).

## WHAT YOU WILL NEED

- Module 4 Student Guide (pages 12-23)
- PowerPoint Presentation 4-2
- Student Learning Plan 4-2
- Activity 4.4: Getting a Late Start
- Activity 4.5: Own a Piece of the Business
- Activity 4.6: Watch the Price
- Internet access for each student or student pairs (Tasks 3, 4, 5)
- Financial calculators: Future Value, Compound Interest (Task 3)
- Bookmark the "Investor Relations" page on a publicly owned company website (Tasks 4, 5)

## NOTES:

Approximate time: 45 minutes (minimum) - 90 minutes (with extension activities)

Resources: These non-profit organizations are dedicated to investment education:

- American Association of Individual Investors, [www.aaii.com](http://www.aaii.com)
- BetterInvesting (National Association of Investors Corporation, NAIC), [www.better-investing.org](http://www.better-investing.org)

Learning Tasks	Teaching Notes	Materials
<p>1. Do you remember what it cost to buy a candy bar, a vending machine beverage, or a movie ticket five years ago? Do you think you'll need more or less money to buy "stuff" in the future?</p>	<p>PROCEDURE <span style="float: right;">Estimated Time: 5 minutes</span></p> <p><input type="checkbox"/> [Slide 2] Ask the students if they remember how much a candy bar, vending machine beverage, or movie ticket cost when they were younger. (Or pick another item that they can relate to that costs more now than 5-10 years ago.) Ask if they have ever heard adults say "I remember when __ used to cost only \$__." This is a good time to share personal experiences about rising costs of rent, gas, groceries, utilities, or other regular expenses.</p> <p><input type="checkbox"/> Ask students if they think the cost to buy a car, pay for phone service, or buy food or clothes will be more or less years from now when they turn 18 or when they are setting up their own households. Ask students to brainstorm ways they can deal with rising costs of items they need to live. (Examples: generate new income, share expenses, pool income sources, have an emergency fund for lean time or unexpected expenses, or be prepared to cut back on expenses to live within their means.) Keep this discussion brief. The purpose is to have the students thinking about the need to have sufficient income to cover the inevitability of increasing expenses.</p> <p><input type="checkbox"/> [Slide 3] Use this introductory discussion to transition into a preview of today's Learning Outcomes in the Student Learning Plan. By the end of this lesson, the students should be able to explain how investing has the potential to grow money as a strategy to contend with rising costs.</p> <p>EXTENSION: Have the students interview adult friends and family members on the costs of certain items when they were 16 years old. Possible items could include: a stamp, can of soda, a "song" or single, a movie, a new economy car, a new hardback book, etc.</p>	<p>Module 4 Student Guide</p> <p>Student Learning Plan</p> <p>SLIDES 2 - It costs how much? 3 - Preview</p>
<p>2. If you were to ask for a raise, what is a reasonable amount to request? Find out how inflation impacts your spending power and how your income fits into the equation.</p>	<p>PROCEDURE <span style="float: right;">Time: 10 minutes</span></p> <p><input type="checkbox"/> Display Slide 4 as you (or a student) read the <i>Beware Saving Enemy No. 1</i> section on pages 12-13 of the Student Guide to provide an explanation of inflation. Use a bag of groceries or another product to illustrate the concept of the same item(s) costing more money years later.</p>	<p>STUDENT GUIDE Pages 12-16</p> <p>SLIDES 4 - Inflation 5 - Time Value of Money 6 - Pay Raise for Whitney 7 - Pay Raise for Derrick</p>

Learning Tasks	Teaching Notes	Materials
	<p><input type="checkbox"/> [Slide 5] Transition into an explanation of how inflation relates to saving and investing. Read <i>When a Dollar is Not a Dollar</i> section on page 13 or explain the concept of time value of money (TVM). Explain that money saved in a glass jar at home over several years isn't earning any interest or "growing" at all so it will have less value over time. Due to inflation and rising costs, the money saved in the jar won't buy as much "stuff" later. One way to fight against this is to save or invest money in a way that has the potential for the money to gain in value at the same rate or higher than the rate of inflation.</p> <p><input type="checkbox"/> If the students have completed <b>Challenge 4-A: It Pays to Shop Around</b> to find out APY of savings accounts, ask how the APY rates compare to the historical annual average inflation rate of 3 percent. (Alternative: Do a quick Internet search to get several samples of current APY rates on savings accounts and CDs.) Make note that when rates are lower than the inflation rate, the value of the savings fund is losing value compared to the rate of inflation.</p> <p><input type="checkbox"/> Point out that when inflation is higher than the interest rate earned on savings, the savings is losing spending power in spite of earning interest. Likewise, when a person's pay is not increasing at least at the same rate as inflation, that person won't be able to buy as much later because things will cost more.</p> <p><input type="checkbox"/> Show the students the scenarios about pay increases, and ask these questions:</p> <ul style="list-style-type: none"> <li>▪ [Slide 6] <i>Is Whitney's wage increase sufficient to keep up with inflation?</i> (Answer: Yes, She received a seven percent increase in pay which exceeds the three percent average annual rate of inflation.  <math>\\$.50 / \\$7.25 = .06897</math> rounded up to seven percent)</li> <li>▪ <i>What is the minimum increase per hour she needs to at least match the average annual rate of inflation of three percent?</i>            Answer: Three percent of \$7.25 is \$.22 per hour pay increase</li> <li>▪ [Slide 7] <i>Justin's older brother wants to ask his supervisor for a raise. What is the minimum amount he should request to keep up with the average annual rate of inflation?</i>            Answer: At least \$843. (<math>\\$28,080 \times .03 = \\$842.40</math>)</li> <li>▪ (optional) If any students are now working, challenge them to calculate how much their pay should increase to keep up with inflation so their spending power doesn't slip backwards.</li> </ul>	ACTIVITY results of Challenge 4-A (if available)

Learning Tasks	Teaching Notes	Materials
<p>3. Complete <b>Activity 4.4: Getting a Late Start</b> to compare the difference between investing earlier to waiting until later. Predict the potential value of your change stash ten years from now if you were to invest that amount, earning an annual average of seven percent return.</p>	<p style="text-align: right;">Time: 5-10 minutes</p> <p>PROCEDURE</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Review that another way to keep up with inflation is to invest money in ways that have the potential to earn more money at a rate that is higher than inflation. [Slide 8] Read about Whitney’s “what if” scenario (<i>The Power of Now</i> on page 14) as students study the <i>Advantage of Starting Early</i> chart* on page 15.</li> <li><input type="checkbox"/> Guide the students to compare the difference in the final fund totals as they complete <b>Activity 4.4: Getting a Late Start</b> (Answer: \$90,891). Although they might think that investing \$2,000 (\$167 a month) is out of their reach, explain that this example is used to illustrate the value of regularly investing earlier rather than later to take advantage of any gains due to time and compounding earnings.</li> <li><input type="checkbox"/> Ask students to write down what they estimate is the total amount of loose change they have laying around their room, in their pockets, in their car, etc. Arrange for the each student to use a <i>Future Value</i> financial calculator to estimate how much the loose change total has the potential to “grow” if it is held in an investment for ten years and able to earn an annual average of seven percent. Have the students use a <i>Compound Interest</i> calculator to see the additional growth if they were to regularly add more change each month.</li> <li><input type="checkbox"/> Debrief by asking the students what they would rather do with their “extra money”—<i>spend the money now, let it accumulate in their house or car, or use it to make more money without breaking a sweat?</i> Point out that one way to increase the initial investment amount is to purposefully set aside income to invest. Another option is to use a “windfall” (Examples: gift of money, unexpected increase in pay or bonus) to boost the initial investment because a windfall is most likely money that hasn’t yet been assigned for any expenses.</li> </ul> <p>*Note: In this scenario, the returns earned on the investment compounded at an average rate of seven percent. The seven percent APR is used to illustrate potential returns on stock investments (not savings accounts). This conservative rate is based on the long-range annual average return of the Standard and Poor (S&amp;P) 500 index. The actual annual return realized on an individual’s investments will vary based on investment choices and investment performance. Over the very long run, the S&amp;P 500 has had an inflation-adjusted annualized return rate of between six and seven percent. The S&amp;P 500 is an index of the 500 largest, most stable stocks traded on the New York Stock Exchange.</p>	<p>STUDENT GUIDE Pages 14-15</p> <p>SLIDE 8 – Invest Now or Later?</p> <p>ACTIVITY Activity 4.4: Getting a Late Start</p> <p>www.financialcalculator.org - Future Value calculator - Compound Interest calculator</p>

Learning Tasks	Teaching Notes	Materials
<p>4. Think about companies you would like to own—as a shareholder.</p> <p>Complete <b>Activity 4.5: Own a Piece of the Business</b> as you learn about stock investments.</p>	<p style="text-align: right;">Time: 15-20 minutes</p> <p><b>PROCEDURE</b></p> <p><input type="checkbox"/> [Slide 9] Review that investing is a way to use money with the expectation that it will earn more money. In essence, an investor is buying something of value that can be converted into cash.</p> <p><input type="checkbox"/> Explain that people invest to receive regular income (income investment) and with anticipation that their purchase will grow in value over time (growth investment). Examples of each type of investment are shown in the slide. Point out that the actual amount received when selling a growth-type investment is determined by what buyers are willing to pay. An investor is taking a chance that the investment will be sold at an amount lower than the purchase price due to low demand or lack of buyers willing to pay a higher price. (Note: The risk of loss is covered in more depth in Lesson 4-3.)</p> <p><input type="checkbox"/> Ask students to classify savings accounts as a type of income or growth investment. (Answer: A savings account is an income investment which earns predictable interest.)</p> <p><input type="checkbox"/> Transition into a discussion about stock investments by asking students if they think a stock investment is classified as income or growth investment. (Answer: A growth investment because the investor buys with the anticipation that the stock will increase in value. However, stock can also be considered income investment if dividends are paid to stockholders.)</p> <p><input type="checkbox"/> Ask what they know about buying and selling stocks. [Slides 10-12] Fill in gaps by clarifying terms and explaining how to go about buying and selling stock. Reference content on pages 20-23 as needed. Symbol answers: GE-General Electric, NFLX-Netflix, F-Ford, DPS-Dr. Pepper/Snapple</p> <p><input type="checkbox"/> Guide the students to complete <b>Activity 4.5: Own a Piece of the Business</b> to identify the companies they would like to “own.” As time allows, ask students to share their reasons for their choices.</p> <p><input type="checkbox"/> First demonstrate and then arrange for the students to search online or scan the newspaper stock listing to find out the following about at least two of the companies listed in Activity 4.5:</p> <ul style="list-style-type: none"> <li>▪ Ticker symbol</li> <li>▪ Stock exchange where stock is traded</li> <li>▪ Recent closing price of stock</li> </ul> <p>Get the students started on their searches (either independently or in pairs) by looking for the “Investor Relations” tab on the company websites or searching on the NYSE or NASDAQ websites.</p> <ul style="list-style-type: none"> <li>▪ New York Stock Exchange website, <b>www.nyse.com</b></li> <li>▪ NASDAQ website, <b>www.nasdaq.com</b></li> </ul>	<p>STUDENT GUIDE Pages 16-22</p> <p>SLIDES 9 – Reasons to Invest 10-11 – Stock Talk 12 – How To Buy Stock</p> <p>ACTIVITY/PROPS Activity 4.5: Own a Piece of the Business</p> <p>Internet access for each student or pairs of students (or newspaper with NYSE and NASDAQ stock quotes)</p> <p>Bookmark a company website to demonstrate how to search for stock information</p>



Learning Tasks	Teaching Notes	Materials
<p>5. Find out the not-so-secret secrets of investing. Gather information about companies you think are interesting investment. Complete <b>Activity 4.6: Watch the Price.</b></p>	<p>PROCEDURE <span style="float: right;">Time: 10-15 minutes</span></p> <p><input type="checkbox"/> Ask the students how they would go about selecting stock to purchase for an investment. [Slide 13] Share general guidelines for selecting stock noting that there are never guarantees that their final decisions will be “winners.” (Note: In Lesson 4-3, the students will explore investment risks and strategies to reduce the impact of risk.)</p> <p><input type="checkbox"/> [Slide 14] Arrange for the students to search for stock prices using the Internet or a newspaper stock listing as they complete <b>Activity 4.6: Watch the Price.</b> Distribute the expanded version of this activity so students gather additional information for their stock study. Note: The following represent a sampling of resources where students will find more information about evaluating stock:</p> <ul style="list-style-type: none"> <li>▪ <i>The NASDAQ Dozen: Analyze a Stock in 12 Easy Steps</i>, <a href="http://www.nasdaq.com/investing/dozen">www.nasdaq.com/investing/dozen</a></li> <li>▪ <i>Wall Street Journal</i>, <a href="http://www.wsj.com">www.wsj.com</a></li> <li>▪ <i>Kiplinger’s Personal Finance</i> magazine, <a href="http://www.kiplinger.com">www.kiplinger.com</a></li> </ul>	<p>STUDENT GUIDE Pages 22-24</p> <p>SLIDES 13– Pick a Stock to Study 14 – Stock Study</p> <p>ACTIVITY/PROPS Activity 4.6: Watch the Price, expanded</p> <p>Bookmark a company website to demonstrate how to search for stock information</p>
<p>6. Write an article to help them learn about the value of saving and investing. Provide a Top Five list of tips for saving and investing.</p>	<p>PROCEDURE <span style="float: right;">In- class or out-of-class assignment</span></p> <p><input type="checkbox"/> [Slide 15] Arrange time for students to work in small groups to write an article or news report script aimed at explaining to middle school students the importance of saving and investing. Option: Consider publishing articles in a school publication or arrange for teams to share their news videos with middle school students.</p>	<p>SLIDE 15 - Challenge</p>
<p>TAKING IT FURTHER: Test out your stock investing skills by using an online simulation.</p>	<p>PROCEDURE <span style="float: right;">In- class or out-of-class assignment</span></p> <p><input type="checkbox"/> Arrange for students to participate in a stock investment simulation. (Note: Short-term stock simulations do not model recommended guidelines for long-term investment. However, investing simulations provide practice without using real money.)</p> <p>Alternative: Arrange for the students to meet with local investment club members (either in class or at a club meeting) to find out the club’s investment philosophy and strategies.</p> <p>Extension: Arrange for students to join or form their own investment club. Investment club guidelines are available from the BetterInvesting organization, <a href="http://www.better-investing.org">www.better-investing.org</a>.</p>	

### TAKING IT HOME

Find out about any experiences a family member or close adult has had with stock investments. What guidelines do they follow when deciding what stock to buy or sell?

### FURTHER STUDY

Read a book or newspaper article about investing in stock. Share what you have learned with your classmates.

### FURTHER STUDY

Test out your stock investing skills by participating in an online stock simulation.

MODULE  
04

**INVESTING:**  
Money Working for You

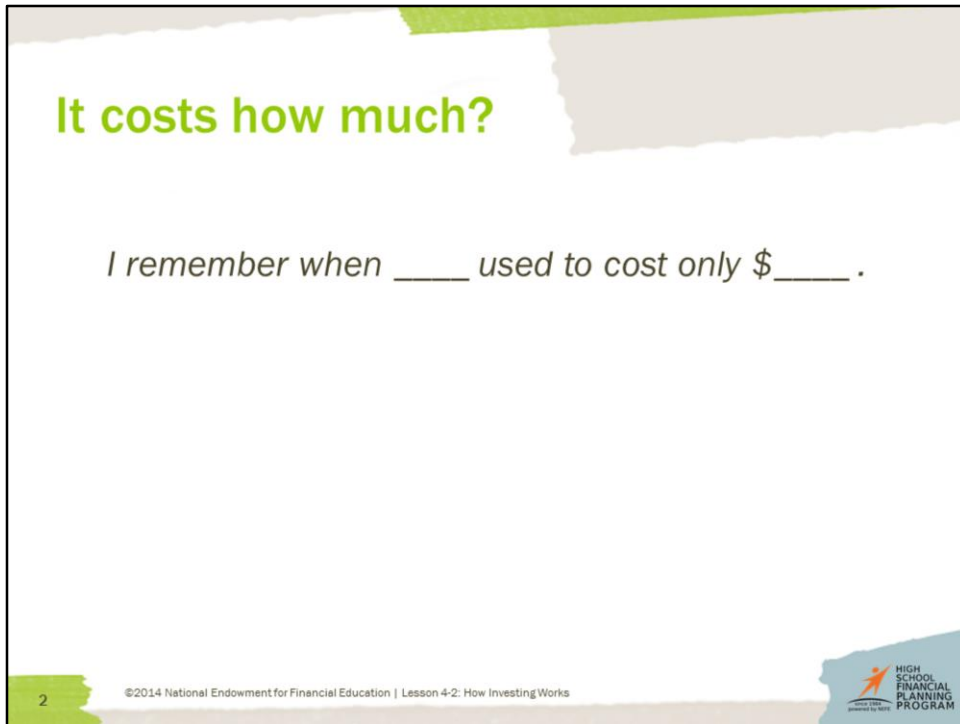
WWW.HSFPP.ORG

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- Display this slide as you begin today's lesson.





- Ask the students if they remember how much a candy bar, vending machine beverage, or movie ticket cost when they were younger. (Or pick another item that they can relate to that costs more now than 5-10 years ago.) Ask if they have ever heard adults say “*I remember when \_\_ used to cost only \$\_\_.*” This is a good time to share personal experiences about rising costs of rent, gas, groceries, utilities, or other regular expenses.
- Ask students if they think the cost to buy a car, pay for phone service, or buy food or clothes will be more or less years from now when they turn 18 or when they are setting up their own households.
- Ask students to brainstorm ways they can deal with rising costs of items they need to live. (Examples: generate new income, share expenses, pool income sources, have an emergency fund for lean time or unexpected expenses, or be prepared to cut back on expenses to live within their means.) Keep this discussion brief. The purpose is to have the students thinking about the need to have sufficient income to cover the inevitability of increasing expenses.

**Preview**

Today we will answer these questions:

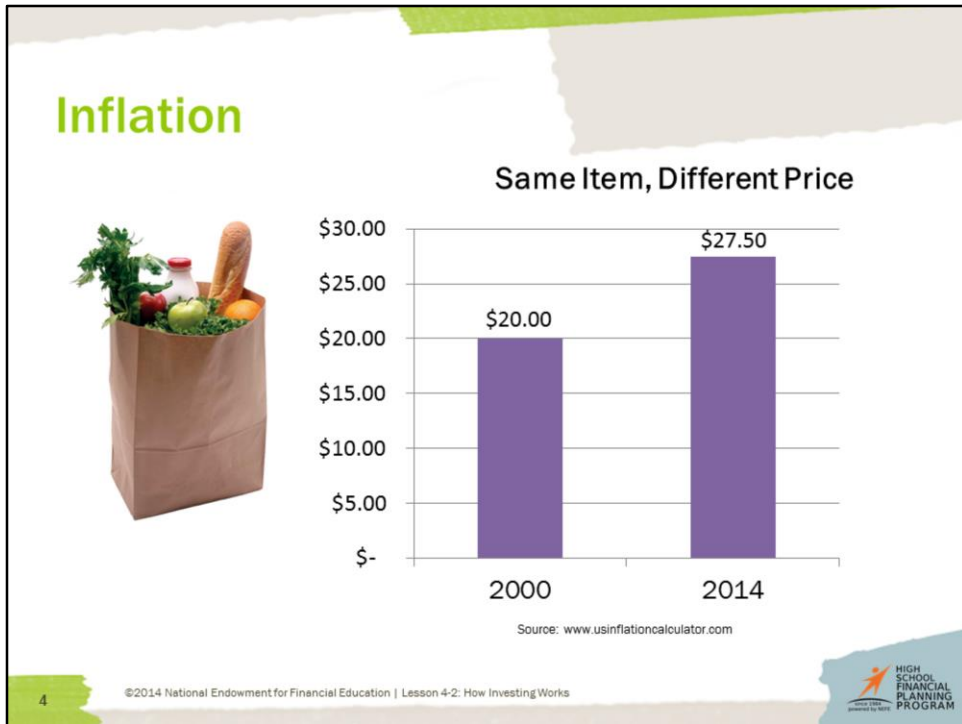
- When should I start investing?
- How do I buy stock?
- What are some guidelines to follow when investing?

Use what you learn today to  
make decisions about stock investments.

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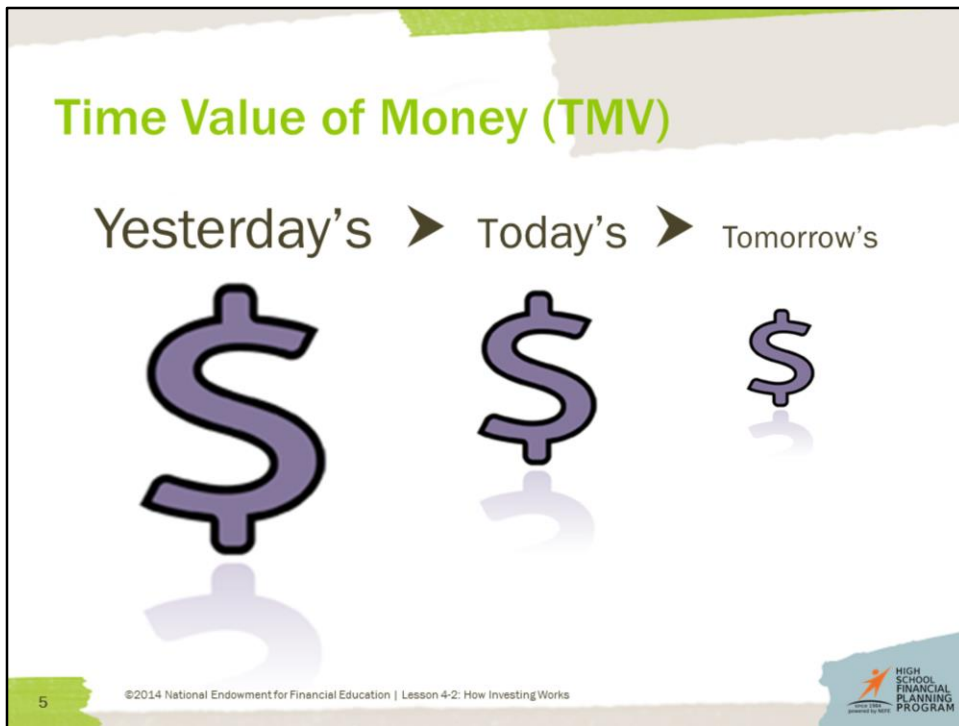
- Use this introductory discussion to transition into a preview of today’s Learning Outcomes in the Student Learning Plan. By the end of this lesson, the students should be able to explain how investing has the potential to grow money as a strategy to contend with rising costs.

**EXTENSION:** Have the students interview adult friends and family members on the costs of certain items when they were 16 years old. Possible items could include: a stamp, can of soda, a “song” or single, a movie, a new economy car, a new hardback book, etc.



Student Guide, pages 12-13

- ❑ Display this slide as you (or a student) read the *Beware Saving Enemy No. 1* section on pages 12-13 of the Student Guide to provide an explanation of inflation. Use a bag of groceries or another product to illustrate the concept of the same item(s) costing more money years later.




Student Guide, page 13

- ❑ Transition into an explanation of how inflation relates to saving and investing. Read *When a Dollar is Not a Dollar* section on page 13 or explain the concept of time value of money (TVM). Explain that money saved in a glass jar at home over several years isn't earning any interest or "growing" at all so it will have less value over time. Due to inflation and rising costs, the money saved in the jar won't buy as much "stuff" later. One way to fight against this is to save or invest money in a way that has the potential for the money to gain in value at the same rate or higher than the rate of inflation.
- ❑ If the students have completed **Challenge 4-A: It Pays to Shop Around** to find out APY of savings accounts, ask how the APY rates compare to the historical annual average inflation rate of 3 percent. (Alternative: Do a quick Internet search to get several samples of current APY rates on savings accounts and CDs.) Make note that when rates are lower than the inflation rate, the value of the savings fund is losing value compared to the rate of inflation.
- ❑ Point out that when inflation is higher than the interest rate earned on savings, the savings is losing spending power in spite of earning interest. Likewise, when a person's pay is not increasing at least at the same rate as inflation, that person won't be able to buy as much later because things will cost more.

## Pay Raise for Whitney

**Whitney** currently earns **\$7.25 an hour** working part time. During her performance review meeting her supervisor informed her that she has earned a **\$.50 increase** in hourly pay.

- *Is Whitney's wage increase enough to keep up with inflation?*
- *What is the minimum increase per hour she needs to at least match the average annual rate of inflation at three percent?*



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- Show the students the scenarios about pay increases, and ask these questions:
- *Is Whitney's wage increase sufficient to keep up with inflation?*  
Answer: Yes, She received a seven percent increase in pay which exceeds the three percent average annual rate of inflation.  
 $\$.55 / \$7.25 = .006897$  rounded up to seven percent
  - *What is the minimum increase per hour she needs to at least match the average annual rate of inflation?*  
Answer: Three percent of \$7.25 is \$.22 per hour pay increase

## Pay Raise for Derrick

Justin's older brother, **Derrick**, now earns an annual salary of **\$28,080**. He wants to ask about a raise at his next performance review.

- *What is the minimum amount of salary increase Derrick should request to keep up with the average annual rate of inflation?*



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□ Show the students the scenarios about pay increases, and ask these questions:

- *Justin's older brother wants to ask his supervisor for a raise. What is the minimum amount he should request to keep up with the average annual rate of inflation?*

Answer: At least \$843. ( $\$28,080 \times .03 = \$842.40$ )

- (optional) If any students are now working, challenge them to calculate how much their pay should increase annually to keep up with inflation so their spending power doesn't slip backwards.



**Invest Now or Later?**

Which is better?

**A.** Start investing a little now.

**B.** Wait a while to invest more later.

Yes  
No  
Maybe

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Student Guide, pages 14-15

- Review that another way to keep up with inflation is to invest money in ways that have the potential to earn more money at a rate that is higher than inflation. Read about Whitney's "what if" scenario (*The Power of Now* on page 14) as students study the *Advantage of Starting Early* chart\* on page 15.  
\*See additional notes in Teacher Lesson Plan regarding the choice of the seven percent annual percentage rate.
- Guide the students to compare the difference in the final fund totals as they complete **Activity 4.4: Getting a Late Start** (Answer: \$90,891). Although they might think that investing \$2,000 (\$167 a month) is out of their reach, explain that this example is used to illustrate the value of regularly investing earlier rather than later to take advantage of any gains due to time and compounding earnings.
- Ask students to write down what they estimate is the total amount of loose change they have laying around their room, in their pockets, in their car, etc. Arrange for the each student to use a *Future Value* financial calculator to estimate how much the loose change total has the potential to "grow" if it is held in an investment for ten years and able to earn an annual average of seven percent. Have the students use a *Compound Interest* calculator to see the additional growth if they were to regularly add more change each month.
- Debrief by asking the students what they would rather do with their "extra money"—*spend the money now, let it accumulate in their house or car, or use it to make more money without breaking a sweat?* Point out that one way to increase the initial investment amount is to purposefully set aside income to invest. Another option is to use a "windfall" (Examples: gift of money, unexpected increase in pay or bonus) to boost the initial investment because a windfall is most likely money that hasn't yet been assigned for any expenses.

**Reasons to Invest**

An **income** investment provides expected earnings, usually in predictable amounts.

- **Earned interest** – payment received in return for use of your money
- **Dividends** – share of profits some companies pay to their stockholders
- **Rent payments** – received from people or companies in return for using your property

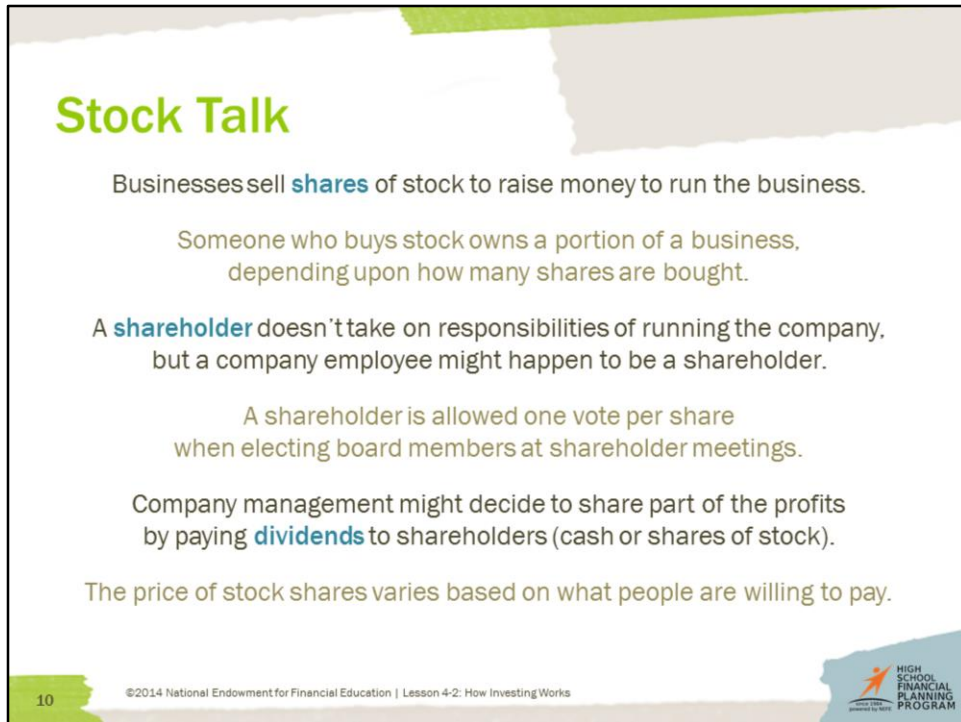
**Growth** investments are purchased because of the potential that the value will increase over time; an unpredictable amount of money is received when the investment is sold.

- Real estate
- Business
- Crops
- Precious metals

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Student Guide, pages 17-18

- Review that investing is a way to use money with the expectation that it will earn more money. In essence, an investor is buying something of value that can be converted into cash.
- Explain that people invest to receive regular income (income investment) and with anticipation that their purchase will grow in value over time (growth investment). Examples of each type of investment are shown in the slide. Point out that the actual amount received when selling a growth-type investment is determined by what buyers are willing to pay. An investor is taking a chance that the investment will be sold at an amount lower than the purchase price due to low demand or lack of buyers willing to pay a higher price. (Note: The risk of loss is covered in more depth in Lesson 4-3.)
- Ask students to classify savings accounts as a type of income or growth investment. (Answer: A savings account is an income investment which earns predictable interest.)



**Stock Talk**

Businesses sell **shares** of stock to raise money to run the business.

Someone who buys stock owns a portion of a business, depending upon how many shares are bought.

A **shareholder** doesn't take on responsibilities of running the company, but a company employee might happen to be a shareholder.

A shareholder is allowed one vote per share when electing board members at shareholder meetings.

Company management might decide to share part of the profits by paying **dividends** to shareholders (cash or shares of stock).

The price of stock shares varies based on what people are willing to pay.

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Student Guide, pages 20-23

- ❑ Transition into a discussion about stock investments by asking students if they think a stock investment is classified as income or growth investment. (Answer: A growth investment because the investor buys with the anticipation that the stock will increase in value. However, stock can also be considered income investment if dividends are paid to stockholders.)
- ❑ Ask what they know about buying and selling stocks. Use this slide and the next slide to fill in any gaps by clarifying terms and explaining how to go about buying and selling stock. Reference content on pages 20-23 as needed.

**Stock Talk**

Each stock has a unique **ticker symbol**  
(abbreviated name for lists).

*Guess the name of these four companies:*

**GE ♦ NFLX ♦ F ♦ DPS**

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Student Guide, pages 20-23

- ❑ Use this slide and the previous slide to fill in any gaps by clarifying terms and explaining how to go about buying and selling stock. Reference content on pages 20-23 as needed.

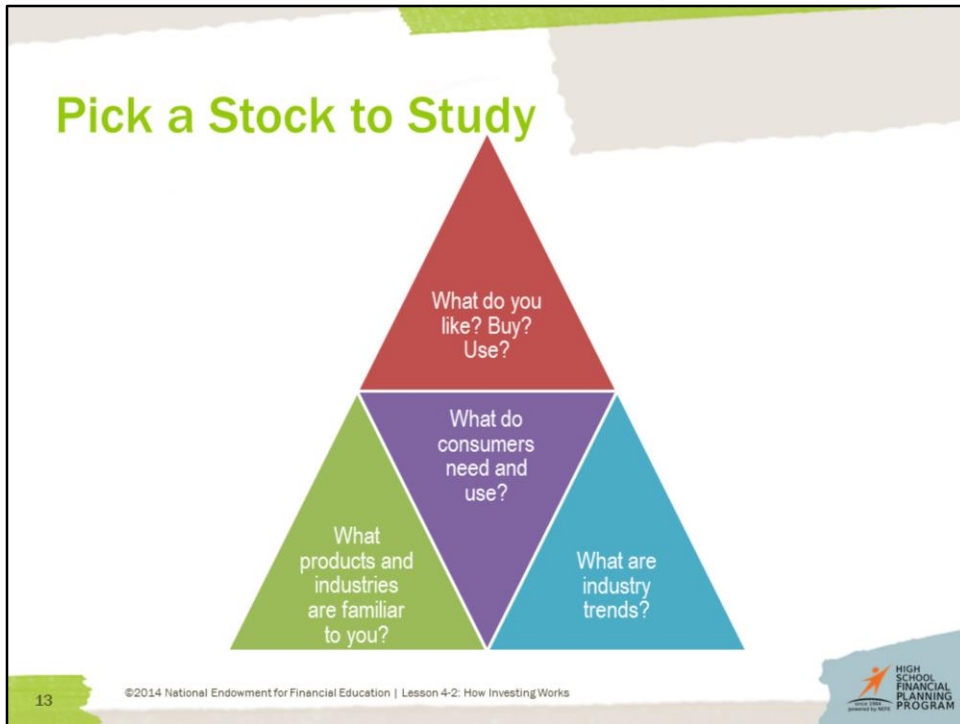
Ticker symbol answers:

GE	General Electric
NFLX	Netflix
F	Ford
DPS	Dr. Pepper/Snapple.



Student Guide, pages 20-23

- ❑ Fill in any gaps by clarifying terms and explaining how to go about buying and selling stock. Reference content on pages 20-23 as needed.
- ❑ Guide the students to complete **Activity 4.5: Own a Piece of the Business** to identify the companies they would like to “own.” As time allows, ask students to share their reasons for their choices.
- ❑ First demonstrate and then arrange for the students to search online or scan the newspaper stock listing to find out the following about at least two of the companies listed in Activity 4.5:
  - Ticker symbol
  - Stock exchange where stock is traded
  - Recent closing price of stock
- ❑ Get the students started on their searches (either independently or in pairs) by looking for the “Investor Relations” tab on the company websites or searching on the NYSE or NASDAQ websites.
  - New York Stock Exchange website, [www.nyse.com](http://www.nyse.com)
  - NASDAQ website, [www.nasdaq.com](http://www.nasdaq.com)

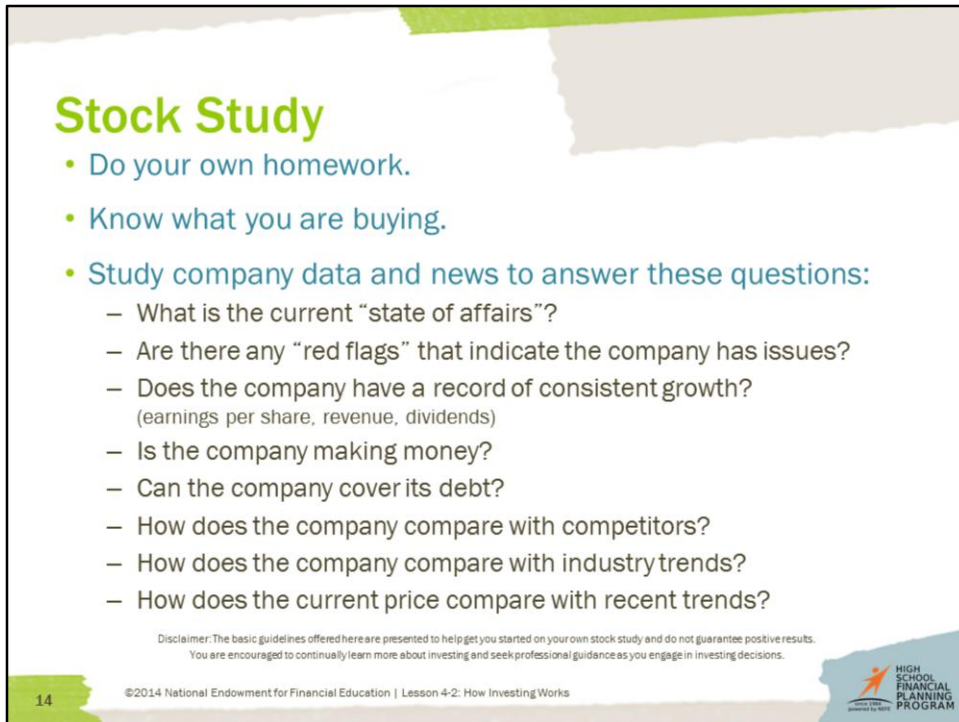


Student Guide, pages 23-24

- ❑ Ask the students how they would go about selecting stock to purchase for an investment. Share general guidelines for selecting stock noting that there are never guarantees that their final decisions will be “winners.” The aim here is to help take some of the mystery out of investing.

Note: In Lesson 4-3, the students will explore investment risks and strategies to reduce the impact of risk.






## Stock Study

- Do your own homework.
- Know what you are buying.
- Study company data and news to answer these questions:
  - What is the current “state of affairs”?
  - Are there any “red flags” that indicate the company has issues?
  - Does the company have a record of consistent growth? (earnings per share, revenue, dividends)
  - Is the company making money?
  - Can the company cover its debt?
  - How does the company compare with competitors?
  - How does the company compare with industry trends?
  - How does the current price compare with recent trends?

Disclaimer: The basic guidelines offered here are presented to help get you started on your own stock study and do not guarantee positive results. You are encouraged to continually learn more about investing and seek professional guidance as you engage in investing decisions.

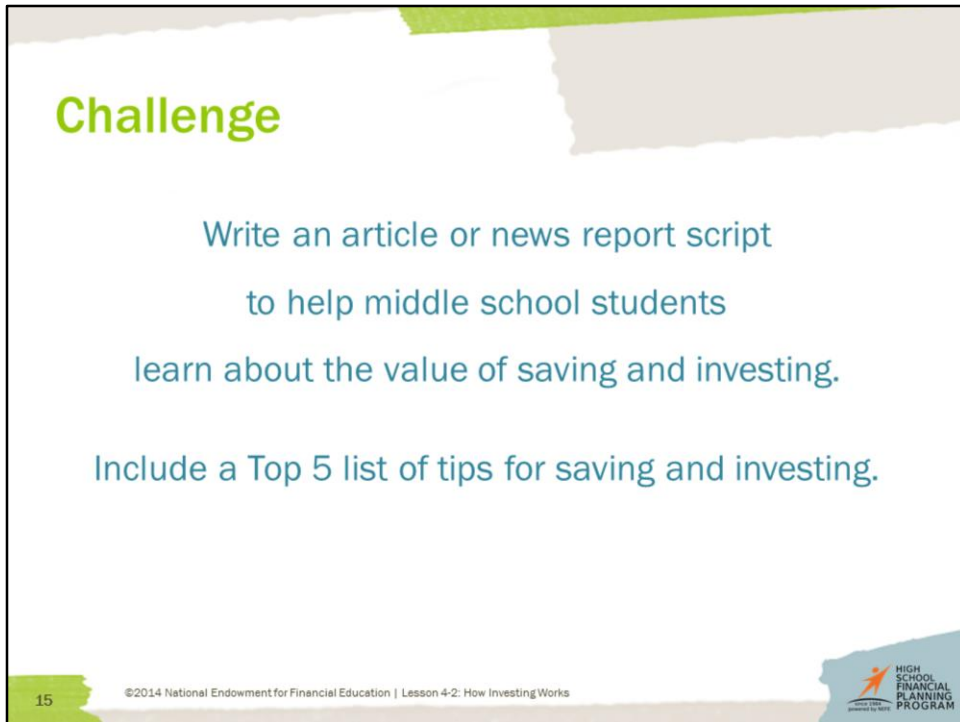
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Student Guide, pages 22-23

- ❑ Arrange for the students to search for stock prices using the Internet or a newspaper stock listing as they complete **Activity 4.6: Watch the Price**. Distribute the expanded version of this activity so students gather additional information for their stock study. Note: The following represent a sampling of resources where students will find more information about evaluating stock:
  - *The NASDAQ Dozen: Analyze a Stock in 12 Easy Steps*, [www.nasdaq.com/investing/dozen](http://www.nasdaq.com/investing/dozen)
  - *Wall Street Journal*, [www.wsj.com](http://www.wsj.com)
  - *Kiplinger's Personal Finance* magazine, [www.kiplinger.com](http://www.kiplinger.com)

A slide with a torn paper effect at the top and bottom. The top has a green and beige torn edge. The bottom has a green, beige, and blue torn edge. The text is centered in blue and green.

**Challenge**

Write an article or news report script  
to help middle school students  
learn about the value of saving and investing.

Include a Top 5 list of tips for saving and investing.

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HIGH SCHOOL FINANCIAL PLANNING PROGRAM  
www.hsfp.org

- ❑ Arrange time for students to work in small groups to write an article or news report script aimed at explaining to middle school students the value of saving and investing.

Option: Consider publishing articles in a school publication or arrange for teams to share their news videos with middle school students.



## OVERVIEW

The best reason for investing is that your money has the potential to actually make more money for you. When you invest, you buy something that you believe will increase in value or earn money for you. There's no guarantee that the investment will grow, but in the long run, investments have the potential to earn more than you can usually make in a savings account.

You may not think that you have much money to invest right now. But the sooner you get started investing, the less money you'll need over time to meet your financial goals. In this lesson explore ways to invest and reasons to get started now rather than later.

## LEARNING OUTCOMES

In this lesson you will explore how investing works. Along the way you will do the following:

- Summarize how the time value of money impacts saving and investing.
- Explain how to buy stocks.
- State fundamental investing guidelines.

Use what you learn to make decisions about stock investments.

## LEARNING TASKS

These tasks match pages 12-23 in Student Guide 4.

__ 1.	Do you remember what it cost to buy a candy bar, a vending machine beverage, or a movie ticket five years ago? Do you think you'll need more or less money to buy "stuff" in the future?
__ 2.	If you were to ask for a raise, what is a reasonable amount to request? Find out how inflation impacts your spending power and how your income fits into the equation.
__ 3.	Complete <b>Activity 4.4: Getting a Late Start</b> to compare the difference between investing earlier to waiting until later. Predict the potential value of your change stash ten years from now if you were to invest that amount, earning an annual average of seven percent return.
__ 4.	Think about companies you would like to own—as a shareholder. Complete <b>Activity 4.5: Own a Piece of the Business</b> as you learn about stock investments.
__ 5.	Find out the not-so-secret secrets of investing. Gather information about companies you think are interesting investment. Complete <b>Activity 4.6: Watch the Price</b> . (Your teacher will give you an expanded version of this activity to help you get started on a stock study.)
__ 6.	Write an article for middle school students to help them learn about the value of saving and investing. Provide a Top Five list of tips for saving and investing.



### TAKING IT HOME

Find out about any experiences a family member or close adult has had with stock investments. What guidelines do they follow when deciding what stock to buy or sell?



### FURTHER STUDY

Read a book or newspaper article about investing in stock. Share what you have learned with your classmates.



### FURTHER STUDY

Test out your stock investing skills by participating in an online stock simulation.

# Activity 4.4: Getting a Late Start



NAME:

DATE:

Directions:

Study the **Advantage of Starting Early** chart. As you can see in the chart, after a late start Whitney would have to invest more money for more years to catch up to the amount in an account started earlier.

In Whitney's second scenario, what is the cost of starting later?

\$ \_\_\_\_\_

Investments are assumed to be made annually and at the beginning of the investment period.

Balance amounts are rounded to the nearest dollar and are not adjusted for inflation.

THE ADVANTAGE OF STARTING EARLY				
Starting at Age 18			Starting at Age 31	
Amount Whitney Invested: \$20,000			Amount Whitney Invested: \$70,000	
7% APY	Year-End Balance	Age	7% APY	Year-End Balance
\$2,000	\$2,140	18	Starting later to invest \$2,000 annually for 35 years.	\$0
\$2,000	\$4,430	19		\$0
\$2,000	\$6,880	20		\$0
\$2,000	\$9,502	21		\$0
\$2,000	\$12,307	22		\$0
\$2,000	\$15,308	23		\$0
\$2,000	\$18,520	24		\$0
\$2,000	\$21,956	25		\$0
\$2,000	\$25,633	26		\$0
\$2,000	\$29,567	27		\$0
Stopping early after investing \$2,000 annually for ten years.	\$31,637	28		\$0
	\$33,852	29		\$0
	\$36,221	30		\$0
	\$38,757	31	\$2,000	\$2,140
	\$41,470	32	\$2,000	\$4,430
	\$44,372	33	\$2,000	\$6,880
	\$47,479	34	\$2,000	\$9,502
	\$50,802	35	\$2,000	\$12,307
	\$54,358	36	\$2,000	\$15,308
	\$58,163	37	\$2,000	\$18,520
\$62,235	38	\$2,000	\$21,956	
\$66,591	39	\$2,000	\$25,623	
\$71,252	40	\$2,000	\$29,567	
\$76,240	41	\$2,000	\$33,777	
\$81,577	42	\$2,000	\$38,281	
\$87,287	43	\$2,000	\$43,101	
\$93,397	44	\$2,000	\$48,258	
\$99,935	45	\$2,000	\$53,776	
\$106,931	46	\$2,000	\$59,680	
\$114,416	47	\$2,000	\$65,998	
\$122,425	48	\$2,000	\$72,758	
\$130,995	49	\$2,000	\$79,991	
\$140,164	50	\$2,000	\$87,730	
\$149,976	51	\$2,000	\$96,012	
\$160,474	52	\$2,000	\$104,872	
\$171,707	53	\$2,000	\$114,353	
\$183,727	54	\$2,000	\$124,498	
\$196,588	55	\$2,000	\$135,353	
\$210,349	56	\$2,000	\$146,968	
\$225,073	57	\$2,000	\$159,395	
\$240,828	58	\$2,000	\$172,693	
\$257,686	59	\$2,000	\$186,922	
\$275,724	60	\$2,000	\$202,146	
\$295,025	61	\$2,000	\$218,436	
\$315,677	62	\$2,000	\$235,867	
\$337,774	63	\$2,000	\$254,518	
\$361,418	64	\$2,000	\$274,474	
	<b>\$386,718</b>	<b>65</b>	<b>\$2,000</b>	<b>\$295,827</b>

# Activity 4.4: Getting a Late Start



NAME: **KEY**

**Directions:**

Study the **Advantage of Starting Early** chart. As you can see in the chart, after a late start Whitney would have to invest more money for more years to catch up to the amount in an account started earlier.

In Whitney's second scenario, what is the cost of starting later?

**\$386,718** (started at age 18)  
**-\$295,827** (started at age 31)  
**= \$90,891**

Investments are assumed to be made annually and at the beginning of the investment period.

Balance amounts are rounded to the nearest dollar and are not adjusted for inflation.

THE ADVANTAGE OF STARTING EARLY				
Starting at Age 18			Starting at Age 31	
Amount Whitney Invested: \$20,000			Amount Whitney Invested: \$70,000	
7% APY	Year-End Balance	Age	7% APY	Year-End Balance
\$2,000	\$2,140	18	Starting later to invest \$2,000 annually for 35 years.	\$0
\$2,000	\$4,430	19		\$0
\$2,000	\$6,880	20		\$0
\$2,000	\$9,502	21		\$0
\$2,000	\$12,307	22		\$0
\$2,000	\$15,308	23		\$0
\$2,000	\$18,520	24		\$0
\$2,000	\$21,956	25		\$0
\$2,000	\$25,633	26		\$0
\$2,000	\$29,567	27		\$0
Stopping early after investing \$2,000 annually for ten years.	\$31,637	28		\$0
	\$33,852	29		\$0
	\$36,221	30		\$0
	\$38,757	31	\$2,000	\$2,140
	\$41,470	32	\$2,000	\$4,430
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\$275,724	60	\$2,000	\$202,146	
\$295,025	61	\$2,000	\$218,436	
\$315,677	62	\$2,000	\$235,867	
\$337,774	63	\$2,000	\$254,518	
\$361,418	64	\$2,000	\$274,474	
	<b>\$386,718</b>	65	\$2,000	<b>\$295,827</b>



## Activity 4.5: Own a Piece of the Business

**NAME:**

**DATE:**

**Directions:**

The companies listed below offer stock you can purchase. Check the names of the companies you would like to own as a shareholder.

- |   |  |                                  |
|---|--|----------------------------------|
| <input type="checkbox"/> Amazon         | <input type="checkbox"/> Google          | <input type="checkbox"/> Hershey |
| <input type="checkbox"/> American Eagle | <input type="checkbox"/> Electronic Arts | <input type="checkbox"/> Nike    |
| <input type="checkbox"/> Apple          | <input type="checkbox"/> GameStop        | <input type="checkbox"/> Pixar   |
| <input type="checkbox"/> Coach          | <input type="checkbox"/> Harley-Davidson | <input type="checkbox"/> Target  |

What other companies might you consider “owning”?

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## Activity 4.5: Own a Piece of the Business

NAME: **KEY**

DATE:

### Directions:

The companies listed below offer stock you can purchase. Check the names of the companies you would like to own as a shareholder.

Company	Ticker Symbol	Exchange	
		NYSE	NASDAQ
Amazon	AMZN		X
American Eagle	AEO	X	
Apple	AAPL		X
Coach	COH	X	
Electronic Arts	EA		X
GameStop	GME	X	
Google	GOOG		X
Harley-Davidson	HOG	X	
Hershey	HSY	X	
Nike	NKE	X	
Pixar (Disney Company)	DIS	X	
Target Corp	TGT	X	

What other companies might you consider “owning”?

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## Activity 4.6: Watch the Price

**NAME:**

**DATE:**

### Directions:

Select two or three companies that are interesting to you because you use the companies' products. Look online or in a newspaper to study data and news about the companies you chose.

Research	Company A	Company B	Company C
Highest Price over the past 52 weeks.			
Lowest Price over the past 52 weeks.			
<i>What is the current "state of affairs" for the company? Are there any issues that raise concern?</i>			
<i>Is there a record of consistent growth in revenue or sales? (Past two years? Past five years?)</i>			
<i>Is there a record of consistent growth in earnings per share (EPS)? (Past two years? Past five years?) EPS = Net profits for past 12 months/total shares outstanding</i>			
<i>Is there a record of consistent growth in dividends paid each quarter? (Past two years? Past five years?)</i>			
<i>Is the company consistently earning a profit?</i>			
<i>Can the company cover its debt? (Are there more assets than current liabilities?)</i>			
<i>How does the company compare with competitors?</i>			
<i>How does the company compare with industry trends?</i>			
<i>Would you say the current price is in the high range or low range compared to recent trends?</i>			
<i>In your opinion, is this company worthy of further study to consider buying as an investment?</i>			

Disclaimer: The basic guidelines offered here are presented to help get you started on your own stock study and do not guarantee positive results. You are encouraged to continually learn more about investing and seek professional guidance as you engage in investing decisions.

# Activity 4.6: Watch the Price

**NAME:**

**DATE:**

**Directions:**

Select two or three companies that are interesting to you because you use the company products. Look online or in a newspaper to find out the highest and lowest selling prices over the past 52 weeks for each company.

Company	Highest Price	Lowest Price