TAKE STOCK IN YOUR FUTURE

GUIDE FOR VOLUNTEERS AND TEACHERS
Acknowledgements

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Future Financiers, LLC expresses gratitude to the following individuals and organizations for their contribution to the development of *Future Financiers™ simulation*. Their expertise in business, economics, education and banking has significantly enhanced the quality of this program.

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Finally, JA thanks Sarah Sullivan and the staff of Junior Achievement of Arizona for coordinating and organizing all the education materials above into this Teacher and Volunteer Guide as well as the Student Workbook.
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Introduction

Thank you for being part of Junior Achievement of Greater Miami’s Take Stock in Your Future, a preparatory program for high school students participating in the JA Student Stock Market Challenge.

Take Stock in Your Future is an interactive program made up of five 45-minute classroom sessions that introduce students to the stock market. Session One will introduce basic concepts to the students about the stock market. Sessions Two and Three will cover more in depth information about buying and selling stocks, including diversification and IPOs. During Session Four, the class will compete in an in-class simulation of trading on the stock market. Session Five has the students reflect on what they have learned and set financial goals. Through this program, students will discover the benefits and challenges of investing.

In addition, teachers and volunteers may work together to supplement these sessions with internet based activities (including online classroom competitions) found at www.futurefinanciers.com. For Session Five, please review the Future Financiers Volunteer Guide.

By the end of the program, the goal is for students to understand the fundamentals of the stock market. Participating students will be prepared to compete in the JA Student Stock Market Challenge. During this program, they will learn the risks and rewards of trading and have fun doing it!
Tips for Working with Students

Throughout *Take Stock In Your Future*, students will be looking to you as a role model for leadership. Be prepared to lead each session, enhance content with real-life examples from business, and create opportunities for students to offer their own solutions to problems. Be sure to treat them as individuals, use their names, and focus on their strengths.

To help prepare you to facilitate *Take Stock in Your Future*, the following general tips are offered:

- Know your material. Spend at least 30 minutes preparing for each classroom visit. Read through the entire session twice prior to your visit.
- Ask the teacher to help you pace the session to the participants’ level and to help with class management (as needed).
- Be enthusiastic and friendly. Use the students’ first names.
- List your main points and/or key terms on the whiteboard, projector, or flip chart as a reminder to students.
- Facilitate discussion rather than lecturing. Limit lectures to no more than 3 minutes as they are the least effective of all teaching techniques.
- Invite questions from the students and ask open-ended questions to keep them involved and active.
- Give additional clues or information if they don’t respond or answer questions incorrectly.
- Focus on the positive. Recognize individual strengths and remember to support students’ goals and dreams as they share them.
- Ask the teacher for assistance with dividing the students into groups for exercises. Circulate among the groups to provide support, answer questions, and ensure that they are on-task.
- Begin sessions by asking for students’ knowledge on topics. Use language, examples, and analogies that the students can understand.
- Remind the participants along the way of what they have learned. Encourage feedback from students and the teacher.
- You can greatly enrich sessions by drawing on both the students’ and your personal experiences. Use examples that are relevant to the session.
# Master List of Materials

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>JA Take Stock in Your Future Guide for Volunteers and Teachers</td>
</tr>
<tr>
<td>30</td>
<td>Table Tents/ Name Tags</td>
</tr>
<tr>
<td>30</td>
<td>Student Workbooks– teachers will be asked to copy in advance</td>
</tr>
</tbody>
</table>
SESSION ONE (Volunteer Led)
UNDERSTANDING STOCKS

OVERVIEW
Students will learn about the stock market, explore the difference between public and private companies, and discover why companies issue stock. Students will understand why individuals invest in companies through stocks, how stocks are bought and sold through stock exchanges and markets, and that there is risk associated with owning stock.

OBJECTIVES
The students will:

• Learn why the stock market is an integral part of our free enterprise system
• Understand why companies issue stock
• Learn about stocks as an individual investment option
• Understand how stocks are traded

PREPARATION
☐ Prior to teaching this session, students should have completed the Pre-Test.
☐ Review the session objectives, key terms, and activities.
☐ References to the JA Student Stock Market Challenge used in sessions are from past events and will not be used in future events.

RECOMMENDED TIME
This session typically takes 45 minutes to complete.

MATERIALS
• Student Workbooks
• Table Tents/ Name Tags
• Pens and/or Pencils (not included)
• Calculators (not included)
Introduction
Briefly introduce the Junior Achievement program.

Introduce yourself and give a brief description of your job and background. Explain that you are a volunteer with Junior Achievement, an organization dedicated to inspiring and preparing young people to succeed in a global economy. Distribute the Table Tents. Ask the students to write their names on the tents if you have not already done so.

Discuss with students why companies issue stock, why individuals invest in companies through stocks, how they are bought and sold, and that there can be risk associated with owning stock. During this session’s activity, students will purchase stock for a mock portfolio.

Private vs. Public Companies

Private companies are owned by an individual (known as a sole proprietorship) or a small group of people (called a partnership). They do not have stocks that are traded on exchanges. Ask the students if they know of any possible advantages and disadvantages of keeping a company private. Advantages:
• You have more control over the company. Remaining privately owned keeps you in control of your company. You do not report to a board of directors or company officers.
• You receive more of the company’s income.
Disadvantages:
• Limited capital potential. Remaining privately owned limits your ability to raise business capital. You cannot sell your stock to the general public through a national exchange.
• More personal liability. You have unlimited liability if your privately owned business is a sole proprietorship or partnership. Both of these business entities do not protect you from creditor claims or lawsuits.

Publicly owned companies are owned by stockholders. Stockholders (or shareholders) are individuals who have purchased a share (or many shares) of stock. Businesses that are owned by stockholders are called publicly owned. Ask the students: who can purchase a share of stock for the current price in a public company? (Answer: Anyone) Ask the class to brainstorm possible advantages and disadvantages of becoming a public company. Advantages:
• The ability to raise more money in order to expand or improve, purchase equipment, and conduct research that may lead to a new product or improving an existing product.
• The company obtains increased visibility.
Disadvantages:
• Stockholders and owners share in the profits earned.
• Management loses some of its freedom to act without board approval and approval of a majority of the shareholders in certain matters.

The introduction of the stock market has been instrumental in enabling companies like Google, Starbucks and Apple to grow and develop innovative products. It has also enabled some individuals to become wealthy, thus powering our free enterprise system. Consider the wealth of Mark Zuckerberg (Facebook) as an example.
Stock Basics
Ask if anyone can define stock. A stock is a share of the ownership of a company. When you own stock in a company, you become a partial owner. It gives you claim on the company’s income but does not hold you liable if the company goes into debt.

There are two ways to make money by owning stock.
1. **Value of the stock can increase over time.**
2. **Dividends** are a percentage of profits that are paid periodically (usually quarterly) to stockholders.

Ask students to give examples of why a company’s stock value can increase.
- A new product or service is introduced. *For example*, when the PokemonGo app was introduced, Nintendo’s stock price increased.
- Cost Savings. *For example*, if a company is able to buy used equipment rather than new equipment and saves money.
- Economic trends. *For example*, as gas prices rise, the demand for hybrid cars (using less gas) increase.

Stock Values Increasing/Decreasing
**Researching Stocks:** A stock price is determined by a variety of factors, including:

- Expert opinion
- The amount of debt the company has
- Expert opinions product or service
- How old is the company
- Background of corporate officers
- A company’s track record
- Projected earnings
- The future outlook for the company
- The size of the company
- Economic conditions such as interest rates, company sales, and industry growth

*An example from a previous JA Student Stock Market Challenge:* A company called Rebel Ride offered customers the chance to take a flight to outer space. After the first fiscal quarter, Rebel Ride boasted a profit of $20 million. What do you think happened to the value of their stock? (Answer: It increased)

You can also lose money investing in stocks. If the company does not perform as expected, the stock value goes down. This could happen for many reasons. Ask the class for examples.

- Competitors produce a similar, cheaper version of a product or service. *For example*, knockoff Michael Kors bags are released and are less expensive than the original ones, which effects Michael Kors’ profits.
- The cost to produce a product or provide a service was higher then expected. *For example*, Florida crops unexpectedly freeze over, causing Tropicana to raise its orange juice prices to make up for the huge loss.
- Product Safety Concerns have a negative effect on the demand for a service or product. *For example*, an outbreak of E-Coli at Chipotle caused the stock prices of Chipotle to drop drastically.

*An example from a previous JA Student Stock Market Challenge:* A teenage clothing company (Young Stuff Apparel) was forced to recall their entire spring line due to faulty manufacturing, costing the company $50 million. What happened to the value of their stock? (Answer: It decreased)
Minimize Risk...Diversify

Risk, as related to the stock market, is defined as the probability of making a profit or losing money on one’s investments. The risk involved in owning stock is why many stockholders diversify their holdings. Diversification means owning a number of different stocks in various industries that perform differently under a variety of economic conditions.

By diversifying one’s investments, a person minimizes their risk. For example, if an investor only buys stock in one company and its stock decreases in value, the investor would lose a lot of his or her money. If the investor owns stock in a number of companies, odds are each company will perform differently. Another option is to invest in mutual funds. A mutual fund is a managed collection of stocks, allowing a number of investors to purchase stock in numerous companies.

- Individuals often seek guidance from financial planners/advisors or join an investment club to gain investment assistance.

Buying & Selling Stocks

Stock is exchanged when one person sells their share of stock and another person buys it through a stock exchange. A broker acts as a go-between for the buyer and seller, usually charging a commission fee.

Stock Markets or Exchanges

A stock exchange floor is a location in which stocks are bought and sold. They include:

- New York Stock Exchange (NYSE): This is the world’s largest stock exchange and is based in New York City. Today, more than half of all NYSE trades are conducted electronically. Floor traders are used to set pricing and deal in high volume institutional trading.
- National Association of Security Deals (NASDAQ): This is the second largest stock market and is primarily technology stocks. All of these transactions are done electronically.

Tracking the Market

Virtually every media outlet (newspaper, TV, radio) reports on the performance of stocks by referring to stock indexes or averages. There are some well-known indexes or averages.

- The Standard and Poors (S&P) 500. The index includes 500 of the largest (not necessarily the 500 largest) companies whose stocks trade on either the NYSE or NASDAQ. These include Apple Inc., Bank of America, CVS, Exxon, Nike and Microsoft.
- The Nasdaq-100. The index includes 100 of the largest non-financial companies listed on the NASDAQ. Industrial, Technology, Retail, Telecommunication, Biotechnology, Health Care, Transportation, Media, and Service companies.
- The Dow Jones Industrial Average. The Dow is a group of 30 stocks traded on the NYSE that represent a number of different industries and give investors a quick recap of whether stock values went up or down on any given day.

Investors must deal with of the ups and downs of the market. When the market rises over a number of months people refer to the trend as a “bull market.” When the market trends go down over a period of time people refer to it as a “bear market.”

Ask for student volunteers to share what kind of market they think we are in now and why. (We have been in a bull market since March 2016.)
Activity

Pass out a Student Workbook to each student and ask them to write their names on the cover. They will be utilizing these throughout the program and they will be collected at the end of each session. Once each student has their workbook, instruct them to turn to page 2. Ask for student volunteers to read each paragraph.

Welcome to Junior Achievement’s Take Stock in Your Future. You will be using this guide during the 5 sessions that make up the classroom portion of the program. By the end of the program, you will understand the fundamentals of the stock market, and participating students will be prepared to compete in the JA Student Stock Market Challenge event.

During the JA Student Stock Market Challenge, you will see boards that look like this. Notice that company names are abbreviated. This is called the stock symbol.

In these activities, we are going to use a fictitious exchange made up of 6 different stocks. Your job will be to select a portfolio from these stocks. A portfolio is a grouping of financial assets such as stocks, bonds and cash equivalents. You will have $10,000 in fictitious cash to spend on your initial investment. Whatever money you do not use to buy stock will be held in cash.

Over the next sessions, you will see how your stocks perform. You will need to buy and sell the stocks you own in order to maximize the value of your portfolio.

Have students go to page 3 of their Student Workbooks to begin the activity for Session One. In this activity, students have $10,000 to invest. Ask for student volunteers read the descriptions of each the 6 companies on the classroom exchange. Discuss possible market conditions that could cause prices to rise or fall and concept of “buying low and selling high” after each description is read.

1. **Globehopper Airlines (GHA)**. Globehopper Airlines is a relative newcomer to the industry. This airline offers discounted fares to exotic locations. It caters to the leisure traveler more than to the business traveler. While the fares are competitive, the company has had difficulties with reliability. After a couple of close-calls on the runway, the stock price fell from an all-time high of $30 per share to $22 per share. Now, it has hired a new COO (Chief Operating Officer) from a major competitor. The stock has recovered somewhat, and is currently trading for $23 per share.

2. **Texas Tea Oil Company (TTO)**. Texas Tea Oil Company is a natural gas and crude oil exploration and production company based in Houston, Texas. It operates mainly in the Gulf Coast region of the United States.

3. **Freedom Bank Corporation (FRB)**. Freedom Bank is a leading US Banking and financial services corporation headquartered in Charlotte, North Carolina.

4. **Burger Bell Palace (BBP)**. Burger Bell Palace offers fast-food options across the United States. It has recently ventured into the international market in Europe, with very limited success. It is in a highly competitive market, and is less well known than its major competitors. They have recently revised their menu, and are offering a new, spicy, Tex-Mex burger they hope will set them apart from their competitors.

5. **Insta-snap-link (ISL)**. Insta-Snap-Link operates as a mobile application and website that connects users on mobile devices and personal computers. It is relatively new to the market and faces steep competition from other, more well-established companies as well as new start-ups. The company went public only a few months ago, and stock performance has been disappointing.

6. **Rags, Inc. (RAG)**. Rags Inc. is a clothing retailer. You can find stores in nearly every shopping mall across the United States. The clothing is especially appealing to young millennials and is known for having an urban vibe. Quality control has been a recent problem and some criticize it for being overpriced for the quality. It is currently negotiating with a popular teen musician but an agreement has not been reached.

HOT TIP! For teams competing in the JA Stock Market Challenge, each team may purchase stocks for their portfolio in advance. They may also hold all of their initial investment capital in cash. Team members can obtain a portfolio statement from Help Desks to keep track of their stocks, but teams are limited to a maximum of 5 portfolio statements from the Help Desk over the course of the simulation.

Presenting Tip: Minimum amount you must invest when using a broker is usually $500.

Portfolio: A grouping of financial assets such as stocks, bonds and cash equivalents.
Students will now create their own portfolio. Direct the class to **Session One Worksheet 1: Initial Stock Purchase** on page 4 of their Student Workbooks. Suggest that it is wise to keep some of their assets in cash to take advantage of future opportunities without having to sell stock. Inform the class that we will track these investments over Sessions Two and Three. They will see how economic events will affect stock prices and their investments.

Below is a sample chart of how a student might make their initial portfolio.

<table>
<thead>
<tr>
<th>Stock Symbol</th>
<th>Share Price</th>
<th>Number of Shares Purchased</th>
<th>Total Cost of Stock (Share price multiplied by number of shares purchased)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHA</td>
<td>$23.00</td>
<td>200</td>
<td>$4,600</td>
</tr>
<tr>
<td>TTO</td>
<td>$12.40</td>
<td>100</td>
<td>$1,240</td>
</tr>
<tr>
<td>FRB</td>
<td>$14.50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BBP</td>
<td>$6.70</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ISL</td>
<td>$34.90</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RAG</td>
<td>$29.40</td>
<td>100</td>
<td>$2,940</td>
</tr>
</tbody>
</table>

**Total Stock Purchases** (add up all $ from “Total Cost of Stock”) **$8,780**

**Remaining Cash ($10,000-Total Stock Purchase)** **$1,220**

**Total Assets** **$10,000**

Walk around as the class is filling out their worksheets for their initial portfolio. Once everyone is finished, ask if anyone made any big purchases or sales and ask what drove them to that decision.

Tell the students they will now see how the investments they selected have performed after “a period of time.” New stock prices are indicated on the chart on the next page (page 13). Write the NEW PRICE of each stock on the board and ask the students to turn to page 5 of their Student Workbooks. Ask for a student volunteer to read “Price Changes” on page 5.

**Price Changes**: Time has passed since you purchased the stock to make up your portfolio and stock prices have changed (as indicated on the chart below). The amount of cash and number of shares of stock you own will remain the same but the value of the shares of stock has changed. Calculate the new value of your portfolio using the chart below. Fill in the number of shares of stock that you purchased in the last activity, and multiply by the new share price. Consider these questions:

- **Have you made or lost money?**
- **Is it time to sell existing stock or buy a new stock?**

**HOT TIP!** For teams competing in the JA Stock Market Challenge, each team may purchase stocks for their portfolio in advance. They may also hold all of their initial investment capital in cash. Team members can obtain a portfolio statement from Help Desks to keep track of their stocks, but teams are limited to a maximum of 5 portfolio statements from the Help Desk over the course of the simulation.

**Presenting Tip:** Minimum amount you must invest when using a broker is usually $500.
Have the students calculate the new value of their portfolio. Direct the class to **Session One Worksheet 2: MARKET ANALYSIS** on page 5 of their Student Workbooks. A sample of what their new portfolio may look like is below:

<table>
<thead>
<tr>
<th>Stock Symbol</th>
<th>NEW Share Price</th>
<th>Number of Shares Owned (same number purchased in Worksheet One)</th>
<th>Total Value of Stock (NEW share price multiplied by number of shares owned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ</td>
<td>$29.29</td>
<td>175</td>
<td>$5125.75</td>
</tr>
<tr>
<td>GHA</td>
<td>$27.70</td>
<td>200</td>
<td>$5,540</td>
</tr>
<tr>
<td>TTO</td>
<td>$10.30</td>
<td>100</td>
<td>$1,030</td>
</tr>
<tr>
<td>FRB</td>
<td>$14.70</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BBP</td>
<td>$3.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ISL</td>
<td>$47.40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RAG</td>
<td>$30.10</td>
<td>100</td>
<td>$3,010</td>
</tr>
</tbody>
</table>

**Total Dollar Value of Stock** (add up all amounts from Total Value of Stock Column) $9,580

**Cash on Hand** (same amount left from Session One Worksheet 1) $1,220

**Total Assets** (Cash on hand plus your Total Dollar Value of Stock) $10,800

Once everyone has finished calculating their new portfolios, ask for a student volunteer to read “Market Events” on page 5 of their Student Workbook.

**Market Events:** What happened to affect the prices of these stocks? Oil prices dropped slightly, which was good for the airline industry but not so good for the oil and gas industry as a whole. There was an outbreak of salmonella at Burger Bell Palace, causing sales to decline sharply. The company also announced that they would be closing their stores overseas and concentrating on the US market. The new COO of Globehopper Airlines was featured in a news article which was favorable. Insta-snap-link stock soared after a new app went viral.

**Reality Check...**
Tell students that in the real stock market, companies like Google often have 3 million shares bought and sold every day. In real life, a transaction of only 100 shares won’t move the market.
After the volunteer has read “Market Events,” ask the following questions to the class:

1. Did you have any stock that you were heavily invested in lose in value dramatically? How did this affect your overall wealth?
2. Did you have any stock that you were heavily invested in gain in value dramatically? How did this affect your overall wealth?
3. Are there any companies you would like to sell stocks in now? Why?
4. Are there any companies you would like to buy stocks in now? Why?

**Summary and Review**

Tell the class that during your next visit they will be able to buy and sell stock. Encourage them to think about how some of their stocks performed and what decisions they may make based on those performances. Collect their Team Workbook and Table Tents for use in Session Two.

**Extended Learning Opportunity**

Pages 42 and 43 of the Guide for Volunteers and Teachers and pages 19 and 20 in the Student Workbook contain a supplemental activity that will allow students to follow an actual stock on the New York Stock Exchange for a period of time.
SESSION TWO (Volunteer-led)
STOCK TRADING

OVERVIEW
In the second session of Take Stock in Your Future, students learn how to read a stock table and explore how market events affect share prices.

OBJECTIVES
The students will:

- Analyze stock in real and/or fictitious companies
- Learn to read a stock table
- Explore how supply and demand impact the stock market

PREPARATION

- Make sure the teacher has access to the internet and a projector to access the website www.futurefinanciers.com.
- Review the session objectives, key terms, and activities.

RECOMMENDED TIME
This session typically takes 45 minutes to complete. Ask the teacher to help you keep track of the time.

MATERIALS

- Student Workbooks
- Table Tents/Name Tags
- Pens and/or Pencils (not included)
- Calculators (not included)
Introduction
Greet the students and distribute the Table Tents. Ask the students to share ideas and definitions around the key terms discussed from Session One.

- Stocks
- Public versus private Dividends
- Bull versus Bear Markets
- Stock Exchange
- companies
- Risk

Ask the students if they remember what is important to look for when researching a company for potential investment purposes. Answers may include:

- Stock price
- Expert opinions about future of product or service
- Projected earnings
- How old is the company
- The amount of debt the company has
- The size of the company
- Background of corporate officers

Search engines, such as Yahoo Finance, provide a snapshot of the above information. If available in the classroom, visit https://finance.yahoo.com and view a company with the class. Lead the class in the activity below to demonstrate analysis when choosing whether to buy stock in a company.

Would You Put Your Money Into This Stock?
Read the following Scenario out loud, and ask the class if they would invest in this company. Why or why not? Discuss for 3-5 minutes.

Scenario
Big Burger Company only has stores in Colorado. They want to expand to Arizona and build at least five new locations. It will take $1 million to build each new location, so they are planning to issue $5 million in stock. Each share of stock will be sold at a starting price of $100, so the company will issue 50,000 shares. The company has done research and believes their new locations in Arizona will be successful because people who live in Arizona are similar to those who live in Colorado. Ask the following questions to the class and ask for volunteers to share ideas and feedback.

- As a group of prospective stock holders, would you invest your money in this company?
- What questions would you want to ask the company if you could?
  1. How is the company going to manage the stores in Arizona?
  2. How are you going to build awareness of your company in Arizona?
  3. How are you going to choose locations for the new stores?
  4. How long has the company been in business?
  5. What is their current market share in Colorado?
  6. What is the five year stock price trend?

Supply and Demand
Explain that supply and demand impact the price of a stock. Ask the following questions:

1. What happens when there is a large number of people who would like to buy a stock? (Answer: The price goes up. This is called demand.)
2. What happens when a large number of people sell a stock? (Answer: The price falls.)
Reading Stock Tables

One of the ways people figure out if they are going to buy stock in a company is to read stock tables. Ask if anyone has ever seen a stock table. Pass out the Student Workbooks and ask the class turn to page 6 to view an example of a stock table. Stock tables contain much of the information investors use to make decisions about buying and selling stocks, such as the current price of the stock and the highest and lowest price paid. Pose the following questions to the class about the stock table:

1. What parts of the stock table would tell an investor about the opportunity to earn dividend income with the purchase of this stock? (Answer: 6; Div & Yeild)
2. What parts of the stock table would tell an investor about the opportunity to earn capital gains with the purchase of this stock? (Multiple Answers: 2; Open, 10; 52wk Range, 11; Day’s Range)
3. Is this stock near it’s 52-Week High or Low? (Answer: High)
4. Which two pieces of information shown on this stock chart would you consider most important for people to find out before purchasing the stock of a company? (Answer: 2 and 10; Open and 52wk Range) Why? (This will tell you the current price plus what the past year’s lowest and highest price was.)

See page 37 for number descriptions within stock table.
**Activity**
Tell the class that now they will be able to buy and sell stock in their own portfolio. Ask for a volunteer to read “BUY, SELL, HOLD” on page 7 of their Student Workbook.

**BUY, SELL, HOLD:** Now you must decide what to do: BUY, SELL, or HOLD stocks in your current portfolio. Should you sell stock that has performed poorly? If you do, you might risk selling low and losing money. Should you sell stocks that performed well and lock in the capital gains? Consider what you think might happen from here and decide whether to BUY, SELL, or HOLD what you currently own.

Direct the class to **Session Two Worksheet 2: BUY, SELL, HOLD** on page 8 of their Student Workbooks. Explain to the class that considering market events and price changes, they now have the opportunity to BUY, SELL, or HOLD their stocks. Utilizing their portfolios from **Session One Worksheet 2: MARKET ANALYSIS**, ask the students to review their portfolio and make changes they would like to their holdings. Walk around as students are making these changes. A sample of what their new portfolio may look like is below:

### Summary and Review
Ask if anyone made any big purchases or sales and what drove them to that decision. Encourage students to share their answers. Let the students know we will see how their new stock purchases performed during the next session. Collect the Student Workbooks and Table Tents for use in Session Three.
SESSION THREE (Volunteer-led)
INITIAL PUBLIC OFFERINGS AND DIVIDENDS

OVERVIEW
In this session about the stock market, students learn how to make decisions regarding initial purchase offerings. They will also see how dividends can be a benefit to their investment strategy and why companies may or may not issue them to stockholders.

OBJECTIVES
The students will:

- Use critical thinking to make decisions
- Communicate effectively with one another
- Explore how current events impact the stock market

PREPARATION
- Make sure the teacher has access to the internet and a projector to access the website www.futurefinanciers.com.
- Review the session objectives, key terms, and activities.
- Research examples of when news impacted the prices of stocks.
- Research a few current events that are having an affect on stock prices.

RECOMMENDED TIME
This session typically takes 45 minutes to complete. Ask the teacher to help you keep track of the time.

MATERIALS
- Student Workbooks
- Table Tents/ Name Tags
- Pens and/or Pencils (not included)
- Calculators (not included)
Introduction
Greet the students and distribute their Table Tents. Remind the students about the concepts you reviewed in the last two sessions: reading a stock table, how news impacts prices of stocks, and choosing to buy, sell, or hold stocks based on news and price fluctuations.

Share some current events that are affecting stock prices.

Use this space to write your examples:

Ask students why do they think these current events are having an impact (either positive or negative) on stock prices.

Let the students know that today we will be discussing two other factors impacting the decision to buy or sell stock.

Pass out the Student Workbooks to the class.

INITIAL PUBLIC OFFERINGS (IPOs)
An Initial Public Offering is the very first sale of a stock by a company that had been privately held but is now going to become a public company. An IPO is an exciting time for both the company and investors. Ask the class why this may be good for the company and for investors.

**Company:** IPOs mean getting a large influx of cash. This money can be used to reward employees who were critical to a company's success, pay off loans (retire debt), invest in the company, or some combination of each.

**Investors:** IPOs allow a new opportunity to invest in. There are many stories of investors who invested early with a company and made millions of dollars as a result.

Have volunteers read the “Examples in History” from page 9 in their Student Workbooks.

- **In July, 2011, Dunkin' Donuts (NASDAQ: DNKN) had an IPO with an initial price of $19. By the end of the first day, it closed at $27.85, a gain of $8.85 per share, or 47%! Someone investing in 1,000 shares would have a profit of $8,850 in just one day! In December 2015 each share was worth $42.67.**

- **Some IPOs don’t make a huge impact the first day but end up having a long history of success. In March, 1986, Microsoft (NASDAQ: MSFT) had an IPO with an initial price of $21. By the end of the first day, it closed at $27.75, and while not as much of a single-day gain as Dunkin' Donuts, over time the price has more than doubled. In December 2015, each share was worth $55.35.**
IPOs - No guarantees
While there have been many headline-grabbing IPO success stories, an IPO is not an automatic money-maker for investors. Have a student volunteer read “Real-Life IPOs” from their student workbooks.

- Zynga (December 2011) (NASDAQ: ZNGA) develops online games like CityVille, FarmVille, CastleVille and Mafia Wars which reach hundreds of millions of users every month. It is quickly on its way to being one of the fastest high-tech companies to earn over $1 BILLION annually. How can it miss? Launching their IPO on December 16, 2011 at $10 per share, within hours it had dropped 12%! A brief rally brought the price back up to $9.00 by the end of the day. Yet just 7 months later in July, 2012, Zynga was trading at just $3.00 a share - a 70% loss!

- Facebook (May 2012) (NASDAQ: FB) is the largest social media company in the world with over 845,000,000 users. How could it miss? It set its IPO price at $38 a share, raising 16 BILLION dollars. Despite some technical glitches, the stock quickly rose to $45 - an 18% return in just a few hours. However, the excitement began to wear off and by the end of the day the stock was down to $38.23 - a profit of just 23 cents per share. More bad news was to follow. The stock continued to fall and 9 days later was selling for just $27.72 per share - a loss of $10.28 per share and only about 25% of its original value.

IPOs - Things to look for
What should be considered when deciding if an IPO is for you? Have a few student volunteers read “IPOs - Things to look for” from page 10 their student workbooks.

1. **Profitability**: Warren Buffet (one of the most successful investors in history) says, "It’s far better to buy a wonderful company at a fair price than a fair company at a wonderful price." and by wonderful, he means profitable. If a company has a history of profitable operations, how likely is it to become unprofitable with more money?

2. **Long-term Growth Potential**: Is a company able to continue to grow? For example, a recent IPO had already signed almost 10,000 customers. Analysis showed that there was only a total of about 25,000 to 30,000 possible customers in the country. If the company was able to sell to every single customer, it could only triple in growth. Compare this to a company like Starbucks or Dunkin’ Donuts which can open many more locations or Walmart which can expand and offer a wide array of products.

3. **How is the money to be used?** What is the company going to be using the money for? Typically companies use the influx of money from an IPO to reward employees and executives, pay off loans, invest in operations, and acquire other companies. A company that is using more money to pay off loans and pay employees and executives is paying for past performance compared to a company that is using the money to expand new products. Which is better for investors to see?

4. **Company Management**: Some people are better at starting small companies than running big ones. Steve Jobs is an excellent example - he was an innovator but he had difficulty his first time at Apple. Is management up to the task of handling a large company? What is the reputation of its management (a brash CEO may make for exciting headlines - until he gets sued). A good company has good management.
DIVIDENDS
Remind the class about dividends from Session One. Ask if any students recall what a dividend is. When a company makes a profit, it can do two things with the money.

1. Reinvest it in the business for buying new equipment, paying off loans, or saving it for later uses. This is called retained earnings - money that the company is retaining for its use.
2. Share the profits among the stockholders. Stockholders are paid these profits (dividends) based upon the number of shares they own.

Do all companies pay Dividends? (Answer: No) Share the following examples with the class:
- Coca Cola (NYSE: KO) pays dividends four times per year (Source: Coca-Cola's Dividend Schedule). Coca Cola has paid a dividend each year since 1920 (Source: Coca-Cola Owner's Guide)
- Apple, Inc. (NASDAQ: AAPL) pays them VERY rarely (and never while Steve Jobs was in charge), instead opting to retain their earnings for future use. This strategy led to a point where during the summer of 2011 Apple, Inc. had more cash ($76.2 billion) than the United States government ($73.77 billion)! (Source: CNN, Wall Street Journal).
- Other companies do not pay them at all. Berkshire Hathaway (NYSE: BRKA) has never paid a dividend, instead reinvesting their profits. In July of 2012, the stock of Berkshire-Hathaway was selling for over $125,000 FOR ONE SHARE.

Types of Dividends
1. Cash Dividends: pays the owner of shares a certain dollar amount per share owned.
2. Stock Dividends (scrip dividends): pays owner in additional shares of stock.

Dividend Dates
There are three very important dates to consider with dividends. Ask for student volunteers to read “Dividend Dates” from page 10 of their Student Workbooks.

1. Declaration Date: the date when a company announces it is paying a dividend. It announces the amount per share (for example $3), as well as the Ex-Dividend Date and Payment Date, both of which are typically at least a week or two later.
2. Ex-Dividend Date: the day in which purchases of shares must be purchased BEFORE. Anyone purchasing stock before this date, and holding it until on or after this date, will receive the declared dividend.
3. Payment Date: the date when shareholders receive their dividend. A stockholder does not need to own the stock at the time of the Payment Date in order to receive their dividend. So long as they own the stock before the Ex-Dividend Date, they will receive the dividend.

Tell the class that they will now get the opportunity to see how a portfolio will change because of dividend payouts. Have students turn to page 11 of their Student Workbooks. Explain to the class that this is an example of a portfolio someone might have. Some of the stocks are going to be distributing dividends. Utilizing the already provided information, the class will work together to determine how much they will earn in dividends.
Ask for volunteers to answer the following questions:

1. Which companies will be paying dividends in the form of cash?
2. Which companies will be paying dividends in the form of stocks?

Point out to the class that some dividends are paid in stocks and they will need to add that to their current stock holding and determine how that positively impacts their portfolio based on the current stock price. Some dividends are paid in cash based on how many shares they already own and they will need to add that to their cash on hand balance.

As a class, complete Session 3 Worksheet 1: Dividends Pay. Ask for volunteers to share the answers as you go.

**CURRENT CASH ON HAND: $3892**

<table>
<thead>
<tr>
<th>Stock Symbol</th>
<th>Current Price of Stock</th>
<th>Dividend Payout</th>
<th>Current # of Stocks Owned</th>
<th># of Stocks Received for STOCK Payouts</th>
<th>Value of Shares Owned (add shares distributed as dividend)</th>
<th>$ Amount Received for CASH Payouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHA</td>
<td>$29.10</td>
<td>$1.43 per share owned</td>
<td>200</td>
<td>0</td>
<td>$5,820</td>
<td>$286</td>
</tr>
<tr>
<td>TTO</td>
<td>$10.45</td>
<td>2 Shares</td>
<td>100</td>
<td>102</td>
<td>$1,065.90</td>
<td>0</td>
</tr>
<tr>
<td>FRB</td>
<td>$15.05</td>
<td>NONE</td>
<td>175</td>
<td>0</td>
<td>$2,633.75</td>
<td>0</td>
</tr>
<tr>
<td>BBP</td>
<td>$7.25</td>
<td>3 Shares</td>
<td>200</td>
<td>203</td>
<td>$1,471.75</td>
<td>0</td>
</tr>
<tr>
<td>ISL</td>
<td>$47.30</td>
<td>$2.91 per share owned</td>
<td>370</td>
<td>0</td>
<td>$17,501</td>
<td>$1,076.70</td>
</tr>
<tr>
<td>RAG</td>
<td>$27.60</td>
<td>NONE</td>
<td>105</td>
<td>0</td>
<td>$2,898</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total $ of Stock Owned</strong> (add ALL “Update $ Value of Shares Owned)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$31,390.40</td>
<td></td>
</tr>
<tr>
<td><strong>Cash on hand</strong> (add ALL “Cash on Hand Added” to “Current Cash on Hand”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,254.70</td>
<td></td>
</tr>
<tr>
<td><strong>Total Assets</strong> (add “Total $ Stock Owned” and “Cash on Hand”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$36,645.10</td>
<td></td>
</tr>
</tbody>
</table>

After the class has worked together to complete the Dividends Pay Worksheet, conduct a discussion utilizing the following questions. Ask for several volunteers to share their thoughts.

1. Were you surprised at the amount of any of the dividend payouts? Were they larger or smaller than you expected?
2. Would you rather get paid in cash dividends or stock dividends? Why?

**Activity**

Students will now see how their investments have continued to perform. New stock prices are indicated on the chart on the next page, as well as on page 12 of their Student Workbooks. Ask for a student volunteer to read the “Market Events” from page 12 of their Student Workbooks.
Market Events

• Burger Bell Palace (BBP) The new Tex-Mex burger has proved to be a big hit, and it would seem that the company made the right decision by closing stores in Europe. The stock has rebounded.

• Globehopper Airlines (GHA) Leisure travel seems to be increasing, and a busy holiday travel season is expected.

• Texas Tea Oil Company (TTO) Oil prices have remained mostly unchanged.

• Rags, Inc. (RAG) Rags was accused of taking advantage of unfair labor practices in China, and has come under heavy criticism for possible human rights violations.

• Insta-snap-link (ISL) The new Insta-snap-link app is still going strong, but there has been little new growth. It appears to have reached market saturation.

Write the NEW PRICE of each stock on the board and instruct the class to determine their new portfolio values by completing Session Three Worksheet 2: Stock Prices. A sample of their new portfolio is below.

Once students have calculated their new portfolio amounts, ask the class the following questions:

1. Did you have any stock that you were heavily invested in lose in value dramatically? How did this affect your overall wealth?
2. Did you have any stock that you were heavily invested in gain in value dramatically? How did this affect your overall wealth?
3. Are there any companies you would like to sell stocks in now? Why?
4. Are there any companies you would like to buy stocks in now? Why?
5. Why do you think the market events made an impact, either positive or negative, on some of the stock prices?

Summary and Review

Thank the students for their work on these portfolios over the last three sessions and determine which student or students ended with the highest net worth. Ask them to share with the class what decisions they made and why.

Collect their Student Workbooks and Table Tents for use in Session Four.
SESSION FOUR (Teacher or Volunteer-led)
RISK, RETURN & GOAL SETTING

OVERVIEW
This activity is designed to ensure students understand the concepts of risk and return when investing in the stock market and setting personal financial goals. This activity can be led by the JA volunteer or the classroom teacher.

OBJECTIVES
The students will:

- Identify the three asset classes and assess the risk of each
- Set SMART personal financial goals

PREPARATION
- Review the examples and goal-setting methods.
- Consider examples of SMART goals you have set that you can share with the class.
- Make sure the teacher has access to the internet and a projector to access the website www.futurefinanciers.com.
- Review the session objectives, key terms, and activities.

RECOMMENDED TIME
This session typically takes 45 minutes to complete. Ask the teacher to help you keep track of the time.

MATERIALS
- Student Workbooks
- Table Tents/ Name Tags
- Pens and/or Pencils (not included)
Introduction
Greet the students and distribute Table Tents and Student Workbooks. Tell the class that today you will discuss the concepts of risk, reward and set S.M.A.R.T. financial goals.

Risk Management
Explain that risk management is the process of minimizing the adverse or negative effects of losses upon a person or organization. Inform them that high risks can but do not always come with high rewards. Pose the following questions:
1. How can you apply the concept of risk management to your every day life?
2. How can you do your best to maximize a good return on investment in the stock market?

Asset Class
Explain to the class that diversification is not just about owning different stocks. It is about keeping your investments in different forms of money as well. Direct the students to the Asset Class chart on page 13 of their student workbooks. Explain that an asset class is a way of classifying financial assets such as cash, bonds, and stocks into groups that perform similarly in the market. Refer to the chart below. Explain that certain asset classes have a greater potential for reward but often carry greater risk. Others have lower potential for financial gain or rewards and carry less risk. Every investor must learn to manage their risk of loss and keep their financial goals in mind when managing his/her money.

Risk and Reward
People invest in stocks because the return on their investment is generally higher than the amount of interest they can earn on a savings account. The return is higher because the risk is greater. For example, savings accounts are insured by the federal government up to $100,000 and investments in the stock market are not insured at all. If an investor’s shares of stock lose value, they are losing money in their investment. Ask the class which asset class is a saving account in versus the asset class for stocks.

Define a financial goal as the end towards which effort is directed. When deciding what to do with their money, students should have goals to guide them. If we “begin with the end in mind” our daily activities should support our goals. There are three types of financial goals that will be discussed for this session: short term, intermediate, and long term.
Types of Goals
A short-term goal is one that can be reached within one year. Ask students to brainstorm a list of their current short-term goals (i.e. new clothes, video game, etc.).

Ask students how long do they think an intermediate goal might take to achieve? An intermediate goal is one that can be reached within one to three years. Ask students to brainstorm a list of their current intermediate goals (i.e. vacation, phone, etc.).

Ask students what they think the length of a long term goal might be. A long-term goal is one that takes more than three years. Ask students to brainstorm a list of their current long-term goals (i.e. car, college tuition, etc.).

The amount of risk that you can tolerate and the length of time that you have to invest are determining factors in the level of risk that you select for your investments.

Risk versus Reward Investment Triangle
Share with the class that there are four levels of investments risk. Draw a large pyramid on the board with four levels. Explain that as the potential for reward increases in each level, so does the risk of loss. Have the students brainstorm potential investments in each categories.

<table>
<thead>
<tr>
<th>LEVEL 4</th>
<th>LEVEL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Collectibles (coins, stamps, art, comics, )</td>
<td>▪ Income real estate (i.e. apartments)</td>
</tr>
<tr>
<td>▪ Precious metals and gems</td>
<td>▪ Conservative stocks</td>
</tr>
<tr>
<td>▪ Aggressive stock growth</td>
<td>▪ Mutual funds</td>
</tr>
<tr>
<td>▪ Undeveloped real estate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 2</th>
<th>LEVEL 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Savings bonds</td>
<td>▪ Cash and savings accounts</td>
</tr>
<tr>
<td>▪ Government bonds</td>
<td>▪ Treasury bills</td>
</tr>
<tr>
<td>▪ Corporate bonds</td>
<td>▪ Money market funds, Certificates of deposit</td>
</tr>
<tr>
<td></td>
<td>▪ Insurance</td>
</tr>
</tbody>
</table>

Ask the students if they currently have any of the investments items listed on the board (example: savings, coins, comics, etc.). Next, ask for a few volunteers to raise their hands and share which level (1 to 4) they would feel the most comfortable investing in. Ask them to explain why.
**Activity: Financial Goals**

Explain that you would like to help them set their own financial goals. Ask the students to give you four or five quotes about money. Answers may include:

1. You have to have money to make money.
2. Money is the root of all evil.
3. Money makes the world go round.
4. Money can’t buy me love.

While money cannot buy you happiness, managing it well can improve your quality of life. It is important to have short-term, intermediate, and long-term savings for different types of needs (i.e., emergencies, education, vacations, medical, and retirement).

Some people say that it does not matter how much money you make, only what you do with that money. It is recommended that you save at least 10% of all money you earn for retirement and 10% for your short-term financial goals. Let the students know that today we will write three financial goals: a short-term, intermediate, and long-term goal. Define **savings** as the money that is left over after expenses have been paid.

**Setting a Goal**

A goal defines the current state, the desired state, and a timeline. Clear goals help us achieve what we want in life. Write **SMART Goals** on the board and ask for a student volunteer to read “S.M.A.R.T. Goal” from page 14 of the Student Workbook.

**S. M. A. R. T. Goal:**

- **Specific:** Be specific in your details and what you are targeting.
- **Measurable:** Include an indicator of progress.
- **Attainable:** Is your goal able to be achieved?
- **Realistic:** Are the end results and time frames within your reach?
- **Time Frame:** Have a timeline to reach your goal or milestones by.

Share the following example goals with the class:

- Alexis needs $400 to pay for her June graduation trip. She has a part-time job and is paid twice monthly. Alexis’ goal is “I will put $28.00 per paycheck in my savings account from November through May and eat at home more often to help reach my goal.”
- A goal can be written simply by including “from where to where, by when.” For example: Alexis writes, “I will start saving $28.00 per paycheck so I have $400 for my trip in June.”
- “Start contributing towards my retirement income at age 18, even if it is just $10.00 per month.”
- Obtain a part-time job and save $100 per month for 15 months to buy a used car.

Ask students to use the space on page 14 of their Student Workbooks to write their 3 goals: one short term, intermediate, and long-term **savings** goal. Let them know that you will walk around to help them write their S.M.A.R.T. goals.

Ask for volunteers to share their goals. Tell students to keep these goals and review them often to make decisions that will help them reach their goals.
Summary and Review
Tell the students that when you are young and saving your money wisely, you can use time to maximize your returns. It may mean that you spend less on things that are not needed such as expensive clothes or eating out. Even though you may not have a lot to save, your smart choices combined with your youth will give you a great advantage over older people who may have more to save each month.

Ask the students to remember that with interest, beginning to save early will allow their money to grow faster and larger than if they wait to begin saving. Save as much as you can over time so your savings will grow. Once you turn 18, you can open a retirement account and move some of your earnings into it each month. Having financial goals can help you make good daily decisions and manage your money well.

Final Visit
If this is your final visit, tell the students you enjoyed your time with them. Thank the students for their participation. Share what you learned or will remember from your time with the students and invite students to relate their JA experience. Let the class know that in the next and final session, they will be able to apply all that they have learned to a simulation of the stock market in their class. They will be competing in small teams to see who can earn the most money through investing in a fictitious stock market.
SESSION FIVE (Teacher or Volunteer-led)  
BEST IN CLASS: In-Class Competition

OVERVIEW
In this session, students use an online simulation to put their knowledge to use. Students attending the JA Student Stock Market Challenge will review rules and roles for the event.

OBJECTIVES
The students will:

- Use critical thinking to make decisions
- Communicate effectively with one another
- Explore how current events impact the stock market

PREPARATION
Log in, and review the steps for setting up an In-class competition on www.futurefinanciers.com. Familiarize yourself with the website and simulation. Review the what to expect section on www.futurefinanciers.com and familiarize yourself with the screens students will see at the JA Student Stock Market Challenge.

Ask the teacher to gain access to a computer lab with internet and to ensure that www.futurefinanciers.com is on the approved list of websites for their school/district websites.

RECOMMENDED TIME
This session typically takes 45 minutes to complete. Ask the teacher to help you keep track of the time.

MATERIALS
- Table Tents
- Future Financiers Guide for Volunteers and Teachers
- Student Workbooks
- Computer lab or computers or tablets for each team of students.
Preparing for In-Class Simulation
Follow these instructions to facilitate the in-class simulation.

In-Class Simulation Set-up Instructions:
1. Break up your students into teams of 2 or 3 students each.
2. Open web browser and go to: www.futurefinanciers.com
3. Click on the Login tab located in upper right corner
4. To log in Username and Password is jagmteacher
5. Enter your Access Code provided by your JA Education Manager: T._____.
6. Write down the Student Access Code: C.________
7. Under Teacher/Volunteer Menu, click on “Administer Practice Game”
   Note: You may be asked to enter your access code from step 5 again.
8. If you are resuming a game already started, proceed to step 13 and click the “Resume Game” button.
9. Select “Setup New Game”. This will clear all previous data and start a new simulation.
10. Select which practice level you want to use (we recommend 2 for High School) Note: The other practice sessions may be run on follow-up trips to the classroom to provide students additional challenges.
11. Scroll to the bottom and enter how many student teams you will have.
12. Once you enter the number of teams, in a new screen you will receive a list of access codes assigned to each of the teams selected. Write down these Access Codes below and on individual pieces of paper for each team. You will need to provide each team their unique access code when you start the simulation. Close this window when complete.
13. Click on “Control Panel”. This will open a new window to run the game.
   Note: The timer is for advisory purposes only, the game will NOT advance turns until you click the Next Turn button! This is useful if you wish to address the classroom during the practice without turns advancing.
14. OPTIONAL: If you have a projector, switch windows back to the menu, open “Display Screen” and move that image to your projector.
Facilitating the In-Class Simulation

The simulation will not be able to begin until the in-class simulation set up has been completed online on the previous page.

Before beginning the simulation, hand out the Student Workbooks and have each student turn to page 15. Ask for a volunteer to read the introduction.

You will now participate in an exciting simulation of the stock market. With you and your team making decisions, you will be buying and selling stocks in an attempt to obtain the highest net worth at the end of the simulation. Be sure to pay attention to news flashes at the bottom of your screen and the highs, lows, and changes of the stock prices. With each transaction you make, your team will pay a 1.25% transaction fee. This will be automatically deducted from the transaction. Good Luck!

Once completed, review steps 1-16 of Student Login and Game-Play Instructions with the class (see next page). These steps are also located on page 15 of the Student Workbooks.

Advance the turns using the “Next Turn” button until you reach the end of the simulation. If your classroom time ends before the simulation is complete, you can hit the “Pause Game” button allowing you (or the teacher) to resume it from where you left off.

Tips:

- Give the students an extra minute or two before starting the game to get in an initial stock trade or two to get used to the process.
- Read the news items, but don’t give away what they mean. Encourage students to think about what the news means and its impact.
- Randomly question students about news items, ask them whether they think it is good or bad, and how good or bad it may be.
- If students appear to be struggling, take time to review instructions and take questions. Remember, the game doesn’t advance until you hit the Next turn” button!
- Following the event, encourage the winning team to share what strategies they followed.
Student Login and Game-Play Instructions:
(from the student workbook)

1. Sit together in teams around a computer, open a browser and go to the Future Financier’s website: www.futurefinanciers.com/
2. Click on the Login tab in the upper-right corner.
3. Type Username and Password jagmstudent.
4. Enter your student access code given by the teacher (C._____)
5. Under the classroom Menu, select “Practice Game” to open a new window.
   Note: If a window does not open, you may need to enable pop-ups on your browser.
6. On this menu, select “Play Simulation”. This will open a new pop-up. Do not close the other window—you will need it to logout at the conclusion of the event, though you can minimize it to save screen space.
7. The left portion of the screen shows stocks, their current price, the change in price since the previous day, and their all-time highs and lows.
   Tip: You may click on the stock symbol to read more information about a company.
8. The middle portion of the screen shows the team standings.
9. The right portion of the screen shows the trades that have taken place over the past several turns.
10. Click on the “Open Transaction Screen” link at the top of the page. This is where you will enter your transactions.
   Tip: Resize your transaction and information screens to fit your screen so you can flip easily back and forth.
11. Select your team number from the drop down menu.
12. Enter your unique PIN given to you by the teacher. Do not share this outside your team.
   Tip: If you leave this screen open, you will not need to re-enter your PIN.
13. To make a transaction, choose “Buy”, “Sell”, “Buy All”, or “Sell All” from the drop down. Then select the stock to be traded and enter in dollar amount. (The 1.25% transaction fee will be deducted after trade is made)
14. Click “Submit” once team has entered transaction details
15. If the box underneath remains green, your trade went through. Note the information it gives you.
16. If the box turns red, there was a problem with your trade and it did not go through. It will tell you why the transaction failed.
For students participating in JA Student Stock Market Challenge

Review with the class that the JA Student Stock Market Challenge is a very fast-paced game. Each day lasts 60 seconds. It is hectic and loud, just like an actual trading floor would be. It is very exciting and filled with energy. Remember to read the newsletters at the event and listen to the tips that the Emcee is sharing. They will give you important information so you can make informed decisions on whether to sell or buy.

Plan on:
- Dress professionally. Dress code is strictly enforced.
- Decide on your team member roles, team names, and stock picks. Team names cannot have abbreviations and must be appropriate.
- Return JA’s permission slip and photo release form. Students without these will NOT be allowed onto the trading floor.

Review the rules for the competition:
- Shorts, jeans, and immodest attire are not acceptable.
- Every team of students begins with $1,000,000. They can make commission–free purchases before the event.
- Teams must be comprised of students only; teachers and classroom volunteers are not allowed on the trading floor. Coaching is permitted during the 15 minute break only. Any team that receives coaching during the simulation will be disqualified.
- Stocks include fictitious and real names and 3-letter stock symbols. A brief description will be provided to enable teams to identify the stocks available.
- Three large screens display the following: each team’s net worth, daily changing stock prices, and graphical depictions of stock performance.
- Floor traders with tablets come to the tables to take trading orders. Traders serve 3-4 teams. Students can ‘call out’ to attract the attention of a trader, but trades must occur at your table. Please be courteous to your trader.
- To track progress, portfolio statements and trading history may be obtained from the help desks.
- You may also obtain portfolios on your smartphones by scanning the QR Code located on your table.
- Initial stock picks are based on information provided in the Stock Information section at www.futurefinanciers.com. Stock picks must be chosen online at least 2 weeks prior to the event by submitting them to your teacher/volunteer. If you do not submit your initial team stock picks by the deadline, your team will begin with only cash.
- All trades made after the initial stock picks will be subject to a trading commission of 1.25%, which will be automatically deducted from the team’s total.
- Throughout the simulation, students will receive updates on world events and industry developments. This news will affect stock values and will challenge participants to think on their feet. These news items will appear on the central screen News Ticker.
- Newsletters will be delivered directly to the students’ tables on specific trading days.
- There are 60 total trading days.
- Trading commences with the ringing of a bell and will continue for 30 “days”. After a 15 minute break, trading resumes for another 30 days and finishes at the ringing of the bell.
- Each trading day is 60 seconds long.
- For the safety of all participants, running is not permitted.
JA Student Stock Market Challenge Team Member Roles:
At the JA Student Stock Market Challenge, teams must work together quickly in order to succeed. Organize your roles as a team before the event. Decisions must be made fast—remember that you only get 60 seconds in a trading day! Disputes must be resolved in seconds, not minutes, and in a way that’s fair to all members of the team. It is important that each member of your team knows their responsibilities. Here are some team member roles, responsibilities, and the skills required. There is no requirement on how you organize your team. After all, this is your team!

The Asset Manager role: The Asset Manager has the answer to the three most critical questions every team has: (1) How much cash do we have? (2) What stocks do we own? (3) How many shares do we own of them? As prices change, a good Asset Manager can quickly tell the team how much (in dollars) is invested in any given stock. Since these prices change every 60 seconds, this is a lot of work.

The Market Analyst role: The Market Analyst tracks the market and news affecting the market. They will spend most of their time watching the screens. Did a pharmaceutical company announce a miracle drug? Did a company CEO resign unexpectedly? A good market analyst is on top of all this important information, and most importantly, communicating it.

The Portfolio Manager: Every team must decide which stocks to buy, when to buy them, when to hold them, and when to sell them. This is the job of the Portfolio Manager. While the Portfolio Manager makes these decisions, it isn't done alone. Without information from the Market Analyst and Asset Manager, the Portfolio Manager is doing little more than flipping a coin. Some teams use a single Portfolio Manager making the decision. Some use a teamwork approach with the Asset Manager, Market Analyst and Portfolio Manager each having a vote.

Trade Execution Specialist: Regardless of how your team decides what trade to make, it does not matter until it is handled by a floor trader. The Trade Execution Specialist's job is to make sure the team's trade is processed correctly. Each floor trader is surrounded by a sea of others trying to get their trades executed. Your Trade Execution Specialist must be able to get the trader's attention, give them the order clearly and concisely, and report the results back to the team. Sometimes a trade cannot go through. Perhaps the price has risen and the team cannot buy as many shares of a stock as they thought. The Trade Execution Specialist must be able to adapt quickly to make sure the team is able to purchase the stock, even if isn't for as many shares as hoped.

Placing Transactions: Tips & Strategies
1. Get in front of the trader - it is loud and many people are trying to get his/her attention. The traders may not hear you unless you are in front.
2. Use the stock symbols. Traders know the stocks by their three-letter symbol, not by company name.
3. Write your transaction down. Traders will not wait for you to remember and will move on to the next person.
4. Give the Trader the transaction in order: BUY / SELL, Symbol, Amount
5. Always give sell orders first so you have the money for your buy orders.
6. If you are selling all your shares, say, "SELL ALL" as the first words - it saves traders time.
7. Buy and sell in even amounts - it will be easier to remember.
8. It is OK to buy and sell in dollar amounts instead of shares, but you must say "DOLLARS".
9. Be sure to find out how many shares your team has purchased.
10. After a trade, the trader can tell you how much free cash you have if you ask.
11. Don't walk away until the trader has confirmed your trade.
COMPETITION BASICS

This pre-event curriculum is a pre-requisite for all students attending the Junior Achievement (JA) Student Stock Market Challenge event. This program also provides an engaging tool to get students interested in learning more about free enterprise and economics. The JA Student Stock Market Challenge is an event during which high school students compete against each other in teams of four to grow a mock stock portfolio, with the goal of creating the highest net worth in a simulated stock market environment. Basic information:

- The competition is divided into two trading periods, which simulate two months of trading. There are 60 turns or “days”, with each day lasting 60 seconds. Each trading day will last for 60 seconds. The fast paced atmosphere ensures the trading is urgent and intense to simulate a real trading floor.
- Fictitious company names, 3-letter stock symbols, and a brief description are provided to enable teams to identify the stocks available.
- Throughout the game, floor traders enter a team’s trades into handheld computers and the information is immediately transferred to big screens for all participants to see.
- Students will receive “Newsletters” and “Stock Tips” regarding world events and industry developments throughout the event in print and/or on screen. This news will affect stock values and will challenge participants to think on their feet.
- To track progress, portfolio statements may be obtained from any of the on-site Help Desks.
- Students will have three large screens at the front of the room and three small screens in the back.
  - Screen 1: rotating line graphs of stock performance.
  - Center screen: displays the trading day, daily stock prices, and a news ticker.
  - Screen 3: Leader board with team net worth and standings.

RULES

1. Each school may bring up to six teams of four students (24 students total), space permitting. Team names should not have the school name in them nor be letter/number combinations or acronyms/abbreviations. Every team of four students will begin with $1,000,000 in fictitious money.
2. Junior Achievement’s business dress code is strictly enforced, and a professional attitude is expected at all times. For the safety of all, no running is permitted.
3. All participating students must submit a Junior Achievement Consent Form and photo release form to attend.
4. Floor traders with handheld computers come to tables to take trading orders. These volunteers must be treated with respect at all times. If students have concerns, they should send a representative to report to JA volunteers (they will be wearing visors) immediately.
5. Initial stock picks are submitted to Junior Achievement prior to the event and are based on information entered into the www.futurefinanciers.com website. Teams will have the ability to make changes until one week prior to the event date.
6. All trades made after the initial stock picks will be subject to a trading commission of 1.25%, which will be automatically deducted from the team’s total.
7. Coaching by volunteers or teachers during active trading, or the appearance of coaching at these times, will be cause for disqualification. Coaching is only permitted prior to the ringing of the bell and during the 15 minute break when trading pauses.
Reading Stock Tables

1. **Previous Close**: Closing price of the previous trading day
2. **Open**: Opening price of the current day
3. **Next Earnings Date**: Day announced by the company where they will report last Quarter’s results.
4. **Average Volume (3m)**: Average daily volume traded in the past 3 months
5. **Market Cap**: The total value of the shares outstanding of a publicly traded company.
6. **Dividends & Yield**: If the company is paying dividends, the first number will show how much the company is paying per share. Number in ( ) shows a dividend yield and it would be presented as a percentage. Dividend yield tells you what percentage of your purchase price the company will return to you in dividends. Example: If a stock pays an annual dividend of $2 and is trading at $50 a share, it would have a yield of 4%.
7. **EPS**: Earnings Per Share is a ratio that tells you how much the company is earning per single common share. Example: If the company’s Net Income is $10M and there is 5M shares outstanding—EPS would be 2 ($10M/5).
8. **P/E**: Price to Earnings is a ratio that compares company’s current stock price to its per share earnings. Example: if a company is currently trading at $100 a share and earnings over the last year were $4 per share, the P/E ratio for the stock would be 25 ($100/$4).
9. **Volume**: The number of shares traded on the market daily.
10. **52Wk Range**: A range showing the lowest and highest stock price during the last 52 weeks.
11. **Day’s Range**: Daily price range of the stock.
Pre-Event Preparation—Live Event Only

Prior to the live event, the classroom teacher is responsible for building teams from the students base on the limit set by JA, distributing a list of stocks to be traded in the event and entering student data into the website.

Good teams have a diverse set of skills. Each team should have a student with solid math fundamentals, a student who can facilitate discussion without dominating and quickly steer the team to making decisions, a student who can multi-task well, process lots of information and analyze what it means. Remind teams that with so many good teams, what separates the great teams from the good teams is teamwork and communication!

Distribute the stock listings to the students. Remind them that IPO stocks cannot be traded before the date shown on the listing. If time permits, engage the students asking them identify the real-life companies that the fictitious stocks are based upon. While some have multiple (eg: “Skyways Airlines could be anyone”), it’s a pretty easy to figure out who “Webflix” and “Popchat” might be. Tip: Remind students that the purpose of this event is to teach about real-life investing, so what happened in real life could very well repeat itself in the live simulation.

Instruct students to read page 21 in their handbooks.

Teams may choose their own team names. Encourage them to come up with creative, clever and fun team names (within the bounds of good taste, naturally). Remind them as well that there are many other teams participating, and that if another team has already selected their team name, they will need to find another.

Teams can choose to make initial stock picks. Advise students that this allows them to be involved in the market at the opening bell, and that otherwise they might have to wait a few turns before they can get a trader, missing valuable opportunities.

The deadline for submitting the student information and initial stock picks is TWO WEEKS PRIOR to the live event date. Please remind students they should submit their materials in advance of this deadline to allow you to process it.
Data Entry — Live Event Only

To enter student information and team names
1. Login to the website (see page 31, steps 1—5)
2. Click on “Select Event”, choose the live event, and click Select.
3. In the Teacher/Volunteer Menu, select “Team Setup”.
4. Select the team to edit in the drop down and click Choose.
5. Enter the team name, the number of players
6. Ignore the Cell #1 and Cell #2 fields
7. Enter the player name and Year (grade).
   Only use the other fields if specifically instructed by JA.
8. Click Update Entry.
9. Repeat steps 4—9 for each team.

To enter student teams’ initial stock picks
1. Follow steps 1 and 2 above.
2. In the Teacher/Volunteer Menu, select “Initial Stock Picks”
3. You may enter up to five initial stock picks.
   These picks are traded commission-free.
   Teams may elect to start with no initial stocks and all cash.
   Teams may not choose IPO stocks (they will not appear on this screen)
4. Confirmation of the purchase is given when you hit “Save Entry”.
5. If students attempt to invest in more stocks than they have cash for, it will ignore all
   transactions following the one that exceeded their limit.
6. If students wish to change their initial picks, re-enter using this screen.
   Anything entered on this screen replaces that team’s previous selections.
7. Students will receive a print-out of their initial picks when they arrive at the live event.
**Post-Event Review—Live Event Only**

**Introduction**
If everything went well, you and your students had a good time at this unique and exciting educational event. If everything went great, there were photos of one of your teams up there holding a trophy shortly after the closing bell rang!

On the Monday following your event, data from the event is uploaded to the website for students to review. This is a great opportunity to evaluate their thinking while it is still fresh in their minds.

Instruct your students to turn to page 22 of their Student Workbook and go through the exercise together. Circulate among the teams, questioning how they interpreted the data and compare it against how the simulation ran. Ask how the team dynamic worked out. Were they working together and communicating effectively? Was the workload distributed? Did everyone have an opportunity to participate in decision-making?

*Excerpt from the Student Workbook.*

Tip: Google Chrome and Microsoft Internet Explorer work best with the simulation.

**Student Login and Review Instructions:**

1. Sit together in teams around a computer, open a browser and go to the Future Financier’s website: [www.futurefinanciers.com/](http://www.futurefinanciers.com/)
2. Click on the Login tab in the upper-right corner.
3. Type Username and Password **jagmsstudent**.
4. Enter your student access code given by the teacher (C.____.____)
5. Under the classroom Menu, select “Review Event” to open a new window.
6. Choose your team in the drop down menu and choose Select.
   
   *Be patient—it is loading thousands of transactions and can take a few seconds.*
   
   **Note:** If a window does not open, you may need to enable pop-ups on your browser.
7. The screen will start on Turn 0.
   
   The left columns show the current stock prices for that day.
   
   The middle columns show the team standings for that day (selected team appears in red)
   
   The right column shows a summary of all transactions that day.
8. Use the Prev Turn button to go back one turn.
9. Use the Next Turn button to advance to the next turn.
10. Use the Change Team button to see what another team was doing that turn.
## Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset Class:</strong></td>
<td>A way of classifying financial assets such as cash, bonds, or stocks into groups that perform similarly in the market.</td>
</tr>
<tr>
<td><strong>Bear Market:</strong></td>
<td>The trend of the stock market going down over a number of months.</td>
</tr>
<tr>
<td><strong>Broker:</strong></td>
<td>Acts as a go-between for the buyer and seller of stocks.</td>
</tr>
<tr>
<td><strong>Bull Market:</strong></td>
<td>The trend of the stock market rising over a number of months.</td>
</tr>
<tr>
<td><strong>Capital:</strong></td>
<td>Wealth in the form of money or other assets owned by a person or organization or available or contributed for a particular purpose such as starting a company or investing</td>
</tr>
<tr>
<td><strong>Diversification:</strong></td>
<td>Owning different stocks in various industries that perform differently under a variety of economic conditions.</td>
</tr>
<tr>
<td><strong>Dividend:</strong></td>
<td>A percentage of profits that are paid periodically to stockholders.</td>
</tr>
<tr>
<td><strong>Goal:</strong></td>
<td>The end towards which effort is directed; an aim or intention.</td>
</tr>
<tr>
<td><strong>Initial Public Offering:</strong></td>
<td>The very first sale of a stock by a company that had been privately held but is now going to become a public company.</td>
</tr>
<tr>
<td><strong>Intermediate goal:</strong></td>
<td>A goal that can be reached within one to three years.</td>
</tr>
<tr>
<td><strong>Long-term goal:</strong></td>
<td>A goal that takes more than three years to reach.</td>
</tr>
<tr>
<td><strong>Mutual Fund:</strong></td>
<td>A managed collection of stocks.</td>
</tr>
<tr>
<td><strong>Partnership:</strong></td>
<td>A company owned by a small group of people.</td>
</tr>
<tr>
<td><strong>Portfolio:</strong></td>
<td>A grouping of financial assets such as stocks, bonds, and cash equivalents.</td>
</tr>
<tr>
<td><strong>Private Company:</strong></td>
<td>A company owned by an individual or a small group of individuals.</td>
</tr>
<tr>
<td><strong>Publicly Owned Companies:</strong></td>
<td>A company owned by stockholders or shareholders.</td>
</tr>
<tr>
<td><strong>Risk:</strong></td>
<td>The probability of making a profit or losing money on one’s investments.</td>
</tr>
<tr>
<td><strong>Risk Management:</strong></td>
<td>A process involved with making and implementing decisions that minimize the adverse effects of accidental losses upon a person or organization.</td>
</tr>
<tr>
<td><strong>Savings:</strong></td>
<td>The money left over after expenses have been paid.</td>
</tr>
<tr>
<td><strong>Short term goal:</strong></td>
<td>A goal that can be reached within one year.</td>
</tr>
<tr>
<td><strong>SMART goal:</strong></td>
<td>Specific, Measurable, Attainable, Realistic, Time Frame.</td>
</tr>
<tr>
<td><strong>Stock:</strong></td>
<td>A share of the ownership of a company.</td>
</tr>
<tr>
<td><strong>Stock Exchange Floor:</strong></td>
<td>The location in which stocks are bought and sold.</td>
</tr>
<tr>
<td><strong>Stock Index or Average:</strong></td>
<td>A group of companies in different industries whose performance represents the market trends and is tracked to gauge the movement of the market.</td>
</tr>
<tr>
<td><strong>Stockholder / Shareholder:</strong></td>
<td>Individuals who have purchased a share, or many shares, of stock in a publicly owned company.</td>
</tr>
</tbody>
</table>
Supplemental Activity, Student Worksheet 1

Name: ________________________________

Go to www.nyse.com and look for Symbol Lookup in the top right corner. Here you can look up companies you are interested in that are publicly traded (if they are not public, you will not be able to look up their symbol). Complete the worksheet filling in the blanks for each company. You can review these options after several weeks to determine your return on investment. You have $1000 to invest in each company.

**Company #1**

Name: ________________________________

Symbol: ____________  Price per Share: ____________  Investment: __ $1000

What product or service does the company provide? ________________________________

What do you think the future outlook is for this product or service? Why?

____________________________________________________________________________

**Company #2**

Name: ________________________________

Symbol: ____________  Price per Share: ____________  Investment: __ $1000

What product or service does the company provide? ________________________________

What do you think the future outlook is for this product or service? Why?

____________________________________________________________________________
Supplemental Activity, Student Worksheet 2

Name:______________________________

Revisit www.nyse.com to learn the current price of the stocks that you originally selected. Using the formulas below, determine if your investment has grown in value.

**Company #1**

Name: _____________   Symbol: _______   Current Price per share=___________

A. Total Number of Shares= $1000/Original Price per share_______

B. Current Value= Current Price per share x Number of Shares - Total Investment  ($1000)

What do you think the future outlook is for this product or service?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

**Company #2**

Name: _____________   Symbol: _______   Current Price per share=___________

A. Total Number of Shares= $1000/Original Price per share_______

B. Current Value= Current Price per share x Number of Shares - Total Investment  ($1000)

What do you think the future outlook is for this product or service?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________