

# Risky Business

## An Exercise in Greed



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7<sup>th</sup> & 8<sup>th</sup> Grade  
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# Introduction

## Rationale

When I first began to design this unit, one of the things I wanted to ensure was that what I was making would hit three major areas for the students: 1) the content would be challenging, 2) the concept would be engaging, and 3) the skills they learned would be relevant to the real world. I feel that I have accomplished these goals with this unit.

The content presented in this lesson really pushed the students. The math content is highly dependent on skills they learn in 6<sup>th</sup> and 7<sup>th</sup> grade. Students are required to compute with rational numbers, as well as calculate percentages. While the students may be very proficient in those concepts, but adding a layer of application – the stocks – it added complexity to the content the students were required to learn. They need to know not only how to do these things, but when it is appropriate as well.

The concept presented in this lesson, greed, is something that everyone can relate to. Beyond being relatable, the fact that it is seen as a negative quality seems to add another layer of interest. Understanding the role greed plays in the stock market, can help students understand why people take risks and what provokes some of the decisions people decide to make.

All of the skills the students learn throughout this unit are important beyond the classroom. Understanding money management as well as working collaboratively are things that will help them be successful in the future. Many times, these are the things that are left out in the classroom, but they are also the things that are going to propel students to success in the future.

### Differentiation for Gifted Learners

So many aspects of this unit make it particularly appropriate for gifted learners.

To begin, the entire unit is centered around a simulation. This simulation allows students to take on a role and use their acquired knowledge of particular careers to carry out the task at hand through that lens, as opposed to just purely tracking stocks. This process differentiation happens through the critical thinking and multi-tasking involved in this task that will challenge and engage gifted learners.

The performance task requires students to present to an authentic audience, and it also gives them a chance to choose the presentation type and the information that they believe will be engage and persuade their audience, which allows the teacher to differentiate the product.

However, beyond the simulation, students are differentiated for content-wise by being exposed to text and videos whose intended audience is adults. They are also required to use and understand very content specific language.

Finally, the learning environment in most of this unit is inquiry-based and student-driven. This allows students to make it what they want and have a strong sense of choice.

#### Population of Gifted Children This Unit Is Intended For

Obviously, any student who has a strong interest in the stock market or in making money in general would thrive with this unit. This unit will give students a strong foundation in the basics of the stock market, and will allow them to see how quickly money can grow.

However, as it is rare that students have already developed a love of the stock market at this age, students who have a passion for math, especially computational math, will enjoy the tasks throughout this unit. Students will not only get to continue with those computations, but it will give them an outlet for that interest that can be very fruitful for them in the future.

Students that come from socioeconomic backgrounds in which their families are less likely to have experiences with the stock market may require a little more background knowledge than this unit provides, however, if they are interested in the idea of making more money, they will easily catch on.

# Goals and Outcomes

## Content Goal

Goal 1: To develop an understanding of how the stock market works and how it can be used to develop personal wealth both as an investor and a stockbroker.

*Students will be able to...*

- A. Compute fluently with rational numbers
- B. Calculate percentages.
- C. Identify the components of a stock report.
- D. Identify and analyze changes in stock prices.
- E. Explain how personal financial decisions can impact their quality of life.

## Process Goal

Goal 2: To develop reasoning skills with application to investment decisions.

*Students will be able to...*

- A. Justify their decisions by providing relevant evidence and data.
- B. Make inferences about stock performance from current event.

## Concept Goal

Goal 3: To understand the concept of greed.

*Students will be able to...*

- A. Identify what greed looks like in different situations.
- B. Debate whether or not greed is always a negative trait.
- C. Make connections between greed and risk.
- D. Connect the ideas of greed and risk to the stock market.
- E. Articulate the essential understanding that "greed provokes risk".

## **Assessment Plan**

At the culmination of each mini-lesson, students will be formatively assessed through questioning and journal entries. However, they will have one summative assessment in the form of a performance task at the end of their simulation. This performance task will be scored with a rubric.

### Bruner Lesson – Formative Assessment

Students will participate in a mini stock-tracking simulation allowing the teacher to see if they grasped the basics of a stock report and stock tracking before introducing the simulation. They will also participate in a group discussion at the end, relating the traits of stock broker to greed and risk.

### Taba Lesson – Formative Assessment

Students will be formatively assessed on their understanding of the concept and essential understanding. Students will participate in a whole group discussion with questions about greed, risk, and the relationship between the two.

### Kohlberg Lesson – Formative Assessment

Students will be formatively assessed on their levels of moral development. The teacher will ask questions that will prompt students to think deeper about the reasons behind their answers, and the relationship of those reasons to greed and risk.

## Simulation – Summative Assessment

Students will complete a performance task and will be assessed on this performance task through the use of a rubric. The performance task, as well as the rubric used can be found at the end of this document within the “Student Binder”.

### Performance Task

A wealthy investor is looking to reinvest 1.5 million dollars in the stock market. The investor is tired of the same stock brokerage firms and is unhappy with their investments. The investor is looking to hire a rookie team to manage their portfolio. You will be broken into pairs with one student acting as the financial analyst while the other acts as the stockbroker. Financial analysts will be responsible for researching how companies will perform in the open market based on such factors as current management, financial trends, competition and global events. Stockbrokers will be responsible for using that information in order to create the portfolios, as well as understanding the concepts of diversification, a bear vs. bull market, commissions, and how to get the most bang for your buck. Teams will be provided with an initial \$1,000 to invest over a 2-year period. Each team should track their stocks as well as record the reasons behind each investment choice they make. At the end of the two-year

period, each team will present their information to the investor in the form of a persuasive digital presentation. Your presentation should clearly articulate all of your team’s stock market activity, as well as the details that informed the decisions made. The investor will evaluate your team based on your returns on investments, as well as the reasons that drove your investment decisions. Will your greed provoke you to take risks? Only time will tell.

Presentation Rubric

During your presentation, each team will receive a score from your teacher, as well as the wealthy investor. These scores will be averaged together to create an overall score for your team. Your team will then be compared against the other rookie teams to determine the winner.

	<b>Exceeds Expectations (2 Points)</b>	<b>Meets Expectations (1 Points)</b>	<b>Does Not Meet Expectations (0 Point)</b>	<b>Comments</b>
<b>Professional Presentation (20%)</b>	<input type="checkbox"/> Team was professionally dressed and digital presentation was highly professional	<input type="checkbox"/> Team was professionally dressed and presentation was decently professional	<input type="checkbox"/> Team was not professionally dressed or presentation lacked professionalism.	
<b>Stock Market Activity (30%)</b>	<input type="checkbox"/> Stock market activity was clearly and accurately tracked and communicated.	<input type="checkbox"/> Stock market activity was accurately tracked and/or clearly communicated.	<input type="checkbox"/> Stock market activity was not accurately tracked or clearly communicated.	
<b>Strategy (30%)</b>	<input type="checkbox"/> Team had a clear, impressive strategy for making investment decisions.	<input type="checkbox"/> Team had a clear strategy for making investment decisions.	<input type="checkbox"/> Team had no clear strategy for making investment decisions.	
<b>Returns on Investments (20%)</b>	<input type="checkbox"/> Returns on investments exceeded \$800.	<input type="checkbox"/> Returns on investments were between \$500 and \$800.	<input type="checkbox"/> Returns on investments were less than \$500.	





## Assessment Examples

### Bruner



### Simulation

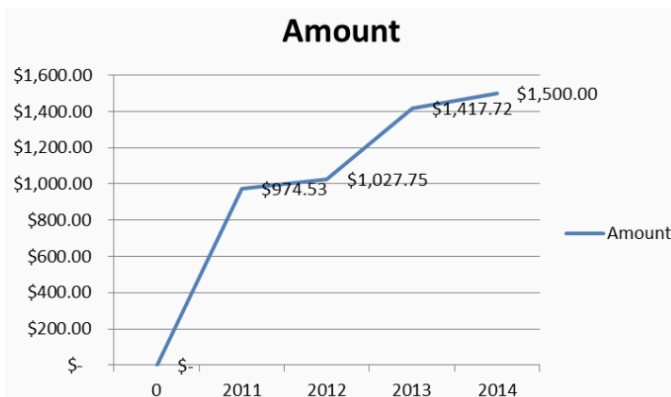
2012 Stock Tracking

Stock Ticker	Shares Owned	2011 Total Cost	2012 Total Cost	Net Gain/Loss	Dividends
WMS	7	452.81	486.36	+33.55	0.00
ATC	4	153.20	177.24	+24.04	0.15
PP	5	347.40	364.15	+16.75	0.00
		2012 Total Investments (Add the total costs of all the corporations you are invested in.)		1027.75	Total Dividends 0.15
		2012 Amount in Savings (Multiply your 2011 Amount in Savings by 1.01 to account for the 1% interest, then add the Total Dividends.)		62.05	
		2012 Commission (Multiply your 2012 Total Investments by .04 to calculate your 4% commission.)		41.11	

*The Div. Payout is per share so you have to multiply it by the # of shares owned.*

*Awesome job!*

## Performance Task



### Summary

- 2014 total amount in Investments: \$1515.08
- 2014 amount in savings: \$55.06

#### Commission-

- 2012 commission: \$43.09
- 2013 commission: \$46.87
- 2014 commission: \$60.60
- Total commission: \$150.56

Total Investment: \$1570.14

Initial Investment: \$1000

Profit: \$419.59

**Well...**

- Lightning Communications:
  - Large Company
  - Low Cost
  - On the rise
- Klein and Smith:
  - Good Info
  - Breakthrough Developments
  - Critically Acclaimed.
- American Postal:
  - World's Largest Delivery Co.
  - Climbing in Value.
- National Bank:
  - Recent Popularity
  - Maximizing Prices On Shares.

TEACHER NAME		Lesson #
Katie Hancock		1
MODEL	CONTENT AREA	GRADE LEVEL
Bruner	Economics/Social Studies	7 <sup>th</sup> /8 <sup>th</sup> Grade
CONCEPTUAL LENS		LESSON TOPIC
Greed		Stock Basics
LEARNING OBJECTIVES (from State/Local Curriculum)		
<p><u>7<sup>th</sup> Grade Math</u>  7.NS.3 – Solve real-world and mathematical problems involving the four operations with rational numbers.</p> <p>7.RP.3 - Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error</p> <p><u>7<sup>th</sup> Grade Social Studies</u>  7.SL.4 – Explain how personal financial decision-making impacts quality of life (e.g. credit, savings, investing, borrowing, and giving).</p> <p><u>8<sup>th</sup> Grade Social Studies</u>  8.E.1.3 – Explain how quality of life is impacted by persona financial choices (e.g. credit, savings, investing, borrowing, and giving).</p>		
THE ESSENTIAL UNDERSTANDING (What is the overarching idea students will understand as a result of this lesson?)		THE ESSENTIAL QUESTION (What question will be asked to lead students to “uncover” the Essential Understanding)
Greed provokes risk.		How does greed provoke risk?
CONTENT KNOWLEDGE (What factual information will students learn in this lesson?)		PROCESS SKILLS (What will students be able to do as a result of this lesson?)
<ul style="list-style-type: none"> <li>• Students will learn about the qualities and skills that a stockbroker must possess.</li> <li>• Students will know the components of a stock report, specifically understanding: <ul style="list-style-type: none"> <li>○ Ticker symbols</li> <li>○ Current price per share</li> <li>○ Range</li> <li>○ 52 week range (52 week high/low)</li> <li>○ Volume</li> <li>○ Earnings per share (EPS)</li> <li>○ Shares</li> <li>○ Percent to earnings ratio (P/E)</li> </ul> </li> <li>• Students will know advance and decline indicators.</li> <li>• Students will know how to calculate net gains and losses.</li> <li>• Students will know the following vocabulary: corporation, stock, gain, loss, ticker, share, 52 week high/low, volume</li> </ul>		Students will be able to... <ul style="list-style-type: none"> <li>• Analyze the skills needed to be successful as a stockbroker.</li> <li>• Analyze stock trends and make investment decisions.</li> <li>• Track stocks and calculate gains and losses.</li> </ul>

### GUIDING QUESTIONS

*What questions will be asked to support instruction?*

*Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding*

Pre-Lesson Questions:	During Lesson Questions:	Post Lesson Questions:
<ul style="list-style-type: none"> <li>• Which of the stocks listed would you like to invest money in?</li> <li>• Why would you choose to invest money in those stocks?</li> <li>• What reasons do you think stockbrokers use to determine which stocks to buy and sell?</li> <li>• How do those reasons differ from the reasons you just used?</li> </ul>	<ul style="list-style-type: none"> <li>• What do stockbrokers do?</li> <li>• What tools do stockbrokers use?</li> <li>• What qualities do you think you must possess to be a good stockbroker?</li> <li>• After watching the video, what do we want to add to our lists?</li> <li>• As you track your stocks, how do you feel?</li> <li>• What do you think makes you feel that way?</li> <li>• How do those feelings provoke some of the choices you're making?</li> <li>• How do you think greed factors into your choices?</li> <li>• How does your greed provoke the risks you're taking?</li> </ul>	<ul style="list-style-type: none"> <li>• What was it like being a stockbroker?</li> <li>• What qualities/traits do you think are important in becoming a successful stockbroker?</li> <li>• What tools does a stockbroker need?</li> <li>• How did your investments do?</li> <li>• Why do you think some students did better than others?</li> <li>• In your investments, do you think it is wiser to go with your brain or your gut? Why?</li> <li>• How did greed provoke some of the decisions you made? Did it provoke or prevent your risks, and why?</li> <li>• Many believe that the stock market centers around two feelings: greed and fear. How did your experience relate to those feelings?</li> <li>• What do you think provokes stockbrokers to take risks and why?</li> </ul>

### DIFFERENTIATION

*(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.*

Content	Process	Product	Learning Environment
The text and videos used in this lesson are designed for adults. Students are required to use and understand content specific advanced vocabulary.	Students must use critical thinking to analyze stock activity and use the information acquired to make decisions.		This activity is inquiry-based and student-centered.

## PLANNED LEARNING EXPERIENCES

*(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)*

**Engage and Connect** - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

As students enter, on the board will be the logo of five prominent companies that the students should know and have personal connections to (potential examples: Apple, Nike, Facebook, etc.). Students will be asked to write their name under the company they would like to buy stock in. When all of the names are written, the teacher will ask the students for the reasons behind their decisions, notating their answers on the board. The teacher will ask the students if they believe that stockbrokers use those same reasons to determine which stocks to buy and sell.

**Explore** - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

### Familiarity of the Discipline

The teacher will then ask the students what they think stockbrokers do. Answers will be written on the board/chart paper. Then students will be asked, "What are the tools that stockbrokers use?" Answers will once again be written on the board/chart paper. Finally, students will be asked, "What qualities must you possess to be a good stockbroker?"

After the list has been compiled, students will watch a YouTube video called "Still in HS, IE Hedge Fund Manager Earns Nickname Wohl of Wall Street" about a 17-year-old stockbroker. When students are done watching the video, the teacher will ask "What do we want to add to our list now?"

**Explain** - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

The teachers will do a short intro to the basics of reading a stock report, specifically covering: ticker symbols, current price per share, range, 52 week range, volume, earnings per share, shares, and percent to earnings ratio. Students will also read through the article on Investopedia entitled "Market Breadth: A Directory of Internal Indicators" to gain information on how to use information on volume, 52 week highs and lows, and advance decline indicators to make sound investment decisions.

**Elaborate** —*Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

### Practicing the Discipline

Students will be given \$1000 to invest in 2 of the 5 possible companies. Students will have to calculate the cost of their shares. The rest of their money will be tracked in a savings account with a 1 percent annual return. The teacher will then give students a stock report and the students must decide within 2 minutes whether to buy, sell, or trade their stocks and must justify their reasoning. This will be repeated 3 times, and in between each session, students will share out their reasoning for their decisions.

**Evaluate:** *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

### Reflecting on the Discipline

At the end of the sessions, the students will share their final amount. The following questions will be posed:

- What was it like being a stockbroker?
- What qualities/traits do you think are important in becoming a successful stockbroker?
- What tools does a stockbroker need?
- How did your investments do?
- Why do you think some students did better than others?
- In your investments, do you think it is wiser to go with your brain or your gut? Why?
- How did greed provoke some of the decisions you made? Did it provoke or prevent your risks, and why?
- Many believe that the stock market centers around two feelings: greed and fear. How did your experience relate to those feelings?
- What do you think provokes stockbrokers to take risks, and why?

<b>TEACHER NAME</b>		<b>Lesson #</b>
Katie Hancock		2
<b>MODEL</b>	<b>CONTENT AREA</b>	<b>GRADE LEVEL</b>
Simulation	Economics/Math	7 <sup>th</sup> /8 <sup>th</sup> Grade
<b>CONCEPTUAL LENS</b>		<b>LESSON TOPIC</b>
Greed		Buying, Tracking, and Trading Stocks
<b>LEARNING OBJECTIVES (from State/Local Curriculum)</b>		
<p><u>7<sup>th</sup> Grade Math</u>  7.NS.3 – Solve real-world and mathematical problems involving the four operations with rational numbers.</p> <p>7.RP.3 - Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error</p> <p><u>7<sup>th</sup> Grade ELA</u>  7.SL.4 - Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.</p> <p><u>7<sup>th</sup> Grade Social Studies</u>  7.E.1.4 - Explain how personal financial decision-making impacts quality of life (e.g. credit, savings, investing, borrowing and giving).</p> <p><u>8<sup>th</sup> Grade Math</u>  8.F.5 - Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.</p> <p><u>8<sup>th</sup> Grade ELA</u>  8.SL.4 - Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.</p> <p><u>8<sup>th</sup> Grade Social Studies</u>  8.E.1.3 - Explain how quality of life is impacted by personal financial choices (e.g. credit, savings, investing, borrowing and giving).</p>		
<b>THE ESSENTIAL UNDERSTANDING</b> <i>(What is the overarching idea students will understand as a result of this lesson?)</i>		<b>THE ESSENTIAL QUESTION</b> <i>(What question will be asked to lead students to “uncover” the Essential Understanding)</i>
Greed provokes risk.		How does greed provoke risk?
<b>CONTENT KNOWLEDGE</b> <i>(What factual information will students learn in this lesson?)</i>		<b>PROCESS SKILLS</b> <i>(What will students be able to do as a result of this lesson?)</i>
<ul style="list-style-type: none"> <li>• Students will gain an understanding of what the stock market is</li> <li>• Students will gain an understanding of how the stock market works</li> <li>• Students will understand the roles of the stockbrokers and shareholders in the investment process</li> </ul>		Students will be able to... <ul style="list-style-type: none"> <li>• Compute with rational numbers</li> <li>• Graph their investments on a line graph and interpret the shape of the graph</li> <li>• Make informed investment decisions</li> <li>• Read a stock report</li> <li>• Create an effective digital presentation</li> </ul>

<ul style="list-style-type: none"> <li>Students will acquire the following vocabulary: stock, stock market/stock exchange, share, corporation, assets, earnings, dividends, diversification, bull market, bear market, shareholder, financial analyst, and stock broker</li> </ul>	<ul style="list-style-type: none"> <li>Justify their investment decisions</li> <li>Work collaboratively in a partnership</li> </ul>
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**GUIDING QUESTIONS**  
*What questions will be asked to support instruction?*  
 Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding

Pre-Lesson Questions:	During Lesson Questions:	Post Lesson Questions:
<ul style="list-style-type: none"> <li>What do you know about the stock market?</li> <li>Why do you think people choose to invest in the stock market?</li> </ul>	<ul style="list-style-type: none"> <li>What factors are driving your investment decisions?</li> <li>How does the role of the financial analyst differ from that of the stockbroker?</li> <li>Do you think it is wiser to hold onto a stock and avoid a commission or trade as you please? Why?</li> <li>How can you tell the difference in a bear versus a bull market?</li> <li>What risks exist for the stockbroker?</li> <li>What risks exist for the financial analyst?</li> <li>What risks exist for the investor?</li> <li>How does greed provoke these risks?</li> </ul>	<ul style="list-style-type: none"> <li>What risks exist in the stock market?</li> <li>What do you think provokes investors to take those risks?</li> <li>What parallels exist between gambling and the stock market? How are they different?</li> <li>Do you think greed is a positive or negative trait in terms of being a stockbroker or investor?</li> <li>What relationship exists between greed and risk in the stock market?</li> <li>When in your life has greed provoked you to take risks?</li> </ul>

**DIFFERENTIATION**  
*(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.*

Content	Process	Product	Learning Environment
	Students have to take on a role and use their acquired knowledge of particular careers to carry out the task at hand through that lens, as opposed to just purely tracking stocks.	Students have to create a digital presentation for a simulated authentic audience. Students have the ability to choose the type of digital presentation they would like to make, as well as most of the information they would like to include.	This activity is predominately student-centered and allows students to take on a role outside themselves.

## PLANNED LEARNING EXPERIENCES

*(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)*

**Engage and Connect** - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

Students will be shown a short clip of what it is like on the floor of the New York Stock Exchange.

### Present the Problem (Day 1)

The teacher will present the problem to the students. There is a wealthy investor that is looking to reinvest 1.5 million dollars in the stock market. The investor is tired of the same stock brokerage firms and is unhappy with their investments and is looking to hire a rookie team to manage his portfolio. The investor has provided \$1,000 for each team to invest over a 2-year period. Each team should track their stocks as well as the reasons behind each investment choice they make. At the end of the two-year period, each team will present their information to the investor in the form of a digital presentation. The investor will evaluate the teams based on the returns on their investments, as well as the reasons that drove their investment decisions.

The teacher will define the roles for this project as the financial analyst and the stockbrokers. Financial analysts will be responsible for researching how companies will perform in the open market based on such factors as current management, financial trends, competition and global events. Stockbrokers will be responsible for using that information in order to create the portfolios, as well as understand diversification, a bear vs. bull market, commissions, and how to get the most bang for your buck.

**Explain** - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

### Instructor Gives Students Information They Need (Day 1)

In a whole class setting, students will receive information on the basics of the stock market as well as learning how to read a stock report through the Bruner lesson that will be taught prior.

Students will then get into pairs. Within their pair, they must decide who will be taking on the role of the financial analyst and who will be the stockbroker. Based on those decisions, the students will receive a binder of information in which some is shared, but other information is specific to the role they have taken. If there are an odd number of students, one group of three will be created. Students in that group will share one of the roles.

**Explore** - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

### Students Take on Their Role (Day 1-4)

Students will begin reading their research and working with their partner to make their investment decisions. After they invest their money, they will begin their presentation by detailing their investments and the reasons behind their decisions. They will continue this process each day until day 4. Each day will be the equivalent of 6 months time. Students will receive new information in their binder each day about what and how the stocks have done over this time, as well as other information about the world at this time that would help them to make a sound decision about investing.

**Evaluate:** *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

### Presentation

Students will present their investments and decisions to our wealthy investor via their digital presentation. The investor and the teacher will evaluate the students using a rubric that judges students on their returns on investments, as well as their decisions about how to invest their money.

**Elaborate** —*Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

### Debriefing

Students will participate in a discussion that will follow the D-FITGA model. Students will first decompress about the activity and what they experienced, then identify the facts and information they learned, then talk about how they inferred and transferred that information to their investments, make any generalizations, and then discuss how this applies and could help them in the real world. Then, the teacher will steer the conversation towards the essential understanding by asking:

- 1) What risks exist in the stock market?
- 2) What do you think provokes investors to take those risks?
- 2) What parallels exist between gambling and the stock market? How are they different?
- 3) Do you think greed is a positive or negative trait in terms of being a stockbroker or investor?
- 4) What relationship exists between greed and risk in the stock market?
- 5) When in your life has greed provoked you to take risks?



<b>TEACHER NAME</b>		<b>Lesson #</b>
Katie Hancock		3
<b>MODEL</b>	<b>CONTENT AREA</b>	<b>GRADE LEVEL</b>
Taba Concept Development	Economics/Language Arts	7 <sup>th</sup> /8 <sup>th</sup> Grade
<b>CONCEPTUAL LENS</b>		<b>LESSON TOPIC</b>
Greed		"The \$72 Million Kid"
<b>LEARNING OBJECTIVES</b> <i>(from State/Local Curriculum)</i>		
<p><u>7<sup>th</sup> Grade ELA</u>  7.RI.2 – Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.</p> <p>7.RI.3 - Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).</p> <p><u>7<sup>th</sup> Grade Social Studies</u>  7.SL.4 – Explain how personal financial decision-making impacts quality of life (e.g. credit, savings, investing, borrowing, and giving).</p> <p><u>8<sup>th</sup> Grade ELA</u>  8.RI.2 - Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.</p> <p>8.RI.3 - Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).</p> <p><u>8<sup>th</sup> Grade Social Studies</u>  8.E.1.3 – Explain how quality of life is impacted by persona financial choices (e.g. credit, savings, investing, borrowing, and giving).</p>		
<b>THE ESSENTIAL UNDERSTANDING</b> <i>(What is the overarching idea students will understand as a result of this lesson?)</i>		<b>THE ESSENTIAL QUESTION</b> <i>(What question will be asked to lead students to "uncover" the Essential Understanding)</i>
Greed provokes risk.		How does greed provoke risk?
<b>CONTENT KNOWLEDGE</b> <i>(What factual information will students learn in this lesson?)</i>		<b>PROCESS SKILLS</b> <i>(What will students be able to do as a result of this lesson?)</i>
<ul style="list-style-type: none"> <li>Students will learn the story of Mohammed Islam who lied about making \$72 million in the stock market while in high school.</li> <li>Students will learn how he was able to fool the journalists.</li> </ul>		Students will be able to... <ul style="list-style-type: none"> <li>Identify and analyze concepts within an article.</li> <li>Gather evidence to support central concepts.</li> <li>Analyze connections between concepts.</li> <li>Work collaboratively in a group.</li> </ul>
<b>GUIDING QUESTIONS</b> <i>What questions will be asked to support instruction?</i> <i>Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding</i>		

<b>Pre-Lesson Questions:</b>	<b>During Lesson Questions:</b>	<b>Post Lesson Questions:</b>
<ul style="list-style-type: none"> <li>• What would you do if you were worth \$72 million dollars in high school?</li> <li>• What would life be like?</li> </ul>	<ul style="list-style-type: none"> <li>• How could you group the ideas in these concepts together?</li> <li>• How are they alike and/or different?</li> <li>• What categories of risk and greed are emerging?</li> <li>• How would you name these categories?</li> <li>• Which of the following names do you think most accurately describes each group and why?</li> <li>• How could you create a category that combines the ideas of risk and greed?</li> <li>• How would it be possible for some of these ideas to belong to more than one group?</li> </ul>	<ul style="list-style-type: none"> <li>• How are the greed and the risks taken by Mohammad and the journalists at New York magazine similar? How are they different? Is one worse than the other?</li> <li>• Using one sentence, how could you describe these categories?</li> <li>• How does greed provoke risk in these articles and videos?</li> <li>• How does greed provoke risk in your life?</li> </ul>

**DIFFERENTIATION**

*(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.*

<b>Content</b>	<b>Process</b>	<b>Product</b>	<b>Learning Environment</b>
The text and videos used in this lesson are designed for adults.	Students engage in in-depth critical thinking s they must analyze the concepts of greed and risk.		This activity is inquiry-based and student-centered.

## PLANNED LEARNING EXPERIENCES

*(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)*

**Engage and Connect** - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

As students enter, on the board will be the question, "What would you do if you were worth \$72 million in high school? What would life be like?" Students will jot down ideas on a notecard. Students will then be grouped into an inner and outer circle. They will rotate counterclockwise to the song "Mo' Money Mo' Problems" (clean version). When the music stops, they will face their partner and discuss the first question. They will rotate once more on the same question. The same procedure will be followed for the second question.

After the students have discussed their responses, the teacher will hand out the following 4 articles to students along with highlighters.

- [http://nymag.com/news/articles/reasonstoloveny/2014/mohammed-islam-stock-trading/?mid=nymag\\_press](http://nymag.com/news/articles/reasonstoloveny/2014/mohammed-islam-stock-trading/?mid=nymag_press)
- <http://www.washingtonpost.com/news/morning-mix/wp/2014/12/16/new-york-magazines-72-million-teenage-stock-picker-says-he-made-it-all-up/>
- <http://money.cnn.com/2014/12/15/media/mohammed-islam/>
- <http://observer.com/2014/12/exclusive-new-york-mags-boy-genius-investor-made-it-all-up/>

The students will read these, as well as watch the videos seen here:

- <http://www.washingtonpost.com/news/morning-mix/wp/2014/12/16/new-york-magazines-72-million-teenage-stock-picker-says-he-made-it-all-up/>
- <http://www.people.com/article/teen-lied-stock-market-72-million>

**Explore** - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

### Listing

While reading the articles and watching the videos, the students will be prompted to use two different color highlighters to identify any instances of greed or risk within the stories about Mohammed Islam. The concepts should be highlighted in different colors. When done reading the articles, students will transfer these ideas to a list. They will then watch the two videos and add any more instances of greed or risk to the list. When the class is finished compiling their individual lists, they will flush out their lists in a small group, and then as a whole group we will create a class list of at least 20 items.

**Explain** - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

### Grouping and Labeling

Students will be asked to examine the list on the board and then work to separate the ideas into groups that are alike in some aspect of greed or risk. Students' groups must meet the following expectations: 1) there are at least 4 different groups, 2) there are at least three items in each group, and 3) you cannot use any item twice.

The teacher will move through the classroom checking in with the students groups. When students finish, the teacher will have students create labels for their newly formed groups. The students will explain their reasoning behind their groupings to the teacher, and the teacher will ask students to identify the similarities and differences among the groups in the class.

**Elaborate** — *Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

### Subsuming, Regrouping, Renaming

Students will be asked to regroup the items, meeting the following expectations: 1) all categories must be new, 2) each category needs at least 3 items, 3) there must be a minimum of 3 different groups, and 4) all categories must have something to do with risk, greed, or both. When the students are finished, the teacher will ask all the groups to share their new categories.

**Evaluate:** *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

The teacher will end the lesson by having a class discussion where students will explain how greed can provoke risk, as well as

how their own greed has provoked them to take risks. When finished, students will move to working on their Simulation.

<b>TEACHER NAME</b>		<b>Lesson #</b>
Katie Hancock		4
<b>MODEL</b>	<b>CONTENT AREA</b>	<b>GRADE LEVEL</b>
Kohlberg's Moral Education Model	Economics/Language Arts	7 <sup>th</sup> /8 <sup>th</sup> Grade
<b>CONCEPTUAL LENS</b>		<b>LESSON TOPIC</b>
Greed		Ponzi Scheme/Bernie Madoff Scandal
<b>LEARNING OBJECTIVES</b> <i>(from State/Local Curriculum)</i>		
<p><u>7<sup>th</sup> Grade ELA</u></p> <p>7.SL.1 - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.</p> <p>7.SL.3 - Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.</p> <p>7.SL.4 - Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.</p> <p><u>7<sup>th</sup> Grade Social Studies</u></p> <p>7.E.1.4 - Explain how personal financial decision-making impacts quality of life (e.g. credit, savings, investing, borrowing and giving).</p> <p><u>8<sup>th</sup> Grade</u></p> <p>8.SL.1 - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.</p> <p>8.SL.3 - Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.</p> <p>8.SL.4 - Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.</p> <p><u>8<sup>th</sup> Grade Social Studies</u></p> <p>8.E.1.3 - Explain how quality of life is impacted by personal financial choices (e.g. credit, savings, investing, borrowing and giving).</p>		
<b>THE ESSENTIAL UNDERSTANDING</b> <i>(What is the overarching idea students will understand as a result of this lesson?)</i>		<b>THE ESSENTIAL QUESTION</b> <i>(What question will be asked to lead students to "uncover" the Essential Understanding?)</i>
Greed provokes risk.		How does greed provoke risk?
<b>CONTENT KNOWLEDGE</b> <i>(What factual information will students learn in this lesson?)</i>		<b>PROCESS SKILLS</b> <i>(What will students be able to do as a result of this lesson?)</i>
<ul style="list-style-type: none"> <li>Students will understand the structure of the Ponzi Scheme (pyramid scheme).</li> <li>Students will understand the effects of the Ponzi Scheme for both the investors and the organization.</li> <li>Students will understand how the Ponzi Scheme</li> </ul>		<p>Students will be able to...</p> <ul style="list-style-type: none"> <li>Provide support for their opinions</li> <li>Summarize main ideas</li> <li>Analyze the reasoning of others</li> <li>Increase their awareness of how they make moral decisions</li> </ul>

<ul style="list-style-type: none"> <li>attracts investors.</li> <li>Students will gain an understanding of how and why the Bernie Madoff scandal was the largest Ponzi Scheme of all time.</li> <li>Students will understand the effect the Madoff scandal had on the U.S. economy.</li> </ul>	<ul style="list-style-type: none"> <li>Work collaboratively in a group</li> </ul>
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**GUIDING QUESTIONS**  
*What questions will be asked to support instruction?*  
 Include both "lesson plan level" questions as well as questions designed to guide students to the essential understanding

Pre-Lesson Questions:	During Lesson Questions:	Post Lesson Questions:
<ul style="list-style-type: none"> <li>What do you know about the Ponzi Scheme?</li> <li>What are some of the factors that drive decisions that you make?</li> </ul>	<ul style="list-style-type: none"> <li>What factors do you think led to Bernie Madoff deciding to carry out the Ponzi Scheme?</li> <li>How did you come to your personal position?</li> <li>How might Bernie Madoff's perspective differ from that of the shareholders?</li> <li>How do you think greed may have provoked some of the risky decisions Bernie Madoff made?</li> </ul>	<ul style="list-style-type: none"> <li>What do you believe Bernie Madoff should have done?</li> <li>What is the most important reason for this action?</li> <li>If the situation would have ended differently, would the risk have been worth it?</li> <li>What do you think provoked Bernie Madoff to take the risk of running the Ponzi Scheme?</li> <li>How do you think greed provokes risk?</li> </ul>

**DIFFERENTIATION**  
*(Describe how the planned learning experience has been modified to meet the needs of gifted learners. Note: Modifications may be in one or more of the areas below. Only provide details for the area(s) that have been differentiated for this lesson.*

Content	Process	Product	Learning Environment
The video students will be watching in the lesson are designed for adults and use advanced vocabulary and concepts.	Students will engage in deep critical thinking while developing their reasoning as well as critiquing the reasoning of others.		This activity is predominately student-centered and allows them to explore their own positions as well as critique others.

## PLANNED LEARNING EXPERIENCES

*(What will the teacher input? What will the students be asked to do? For clarity, please provide detailed instructions)*

**Engage and Connect** - *This phase focuses on piquing students' interest and helping them access prior knowledge. This is the introduction to the lesson that motivates or hooks the students.*

Display a visual of the Ponzi Scheme Pyramid. Ask students to analyze the photo for 1 minute and then on an index card, write down what the potential flaws they see in the Ponzi Scheme.

### Present the Dilemma

Students will be asked if they have ever heard of the Ponzi Scheme. The teacher will give a brief overview of how the Ponzi Scheme works and the history behind it. Students will fill in a pyramid-shaped graphic organizer to visual the basic structure of the scheme. They will then participate in a brief simulation of the scheme to ensure understanding. Students will then watch the History Channel's "Bernie Madoff and the Scamming of America". Prior to watching they will be told that when they finish the video they will need to take a stance on whether or not Bernie Madoff's actions justified a 150-year prison sentence. They will be given a graphic organizer to record their thoughts, details, and pros and cons of actions taken by Madoff and the pros and cons for investors.

### Clarify the Facts and Identify Issues

Upon finishing the video, students will be prompted by the teacher to describe the situation and identify the issues by using the details from their graphic organizer. The teacher will record the clarifying information the students provide on the board.

**Explore** - *In this phase, the students have experiences with the concepts and ideas of the lesson. Students are encouraged to work together without direct instruction from the teacher. The teacher acts as a facilitator. Students observe, question, and investigate the concepts to develop fundamental awareness of the nature of the materials and ideas.*

### Identify a Tentative Position

Students will use the information they gained from the video to decide on their position on the following question: "If you were in Bernie Madoff's situation, would you consider carrying out the Ponzi Scheme?" Students will spend about 10 minutes deciding on their position and developing support for their position. Students should make sure that the information they use to support their position is rich and detailed. This information will be recorded on a journal page in their binder entitled "Pre-Discussion Stance".

**Explain** - *Students communicate what they have learned so far and figure out what it means. This phase also provides an opportunity for teachers to directly introduce a concept, process, or skill to guide students toward a deeper understanding.*

### Small Group Discussions

The teacher will sort the students into groups of 5 based on diverse opinions. Students will share their opinions and support for those opinions. In the groups, students will not be debating what the correct stance is, but rather what the best reasoning is for each position. Students will write these reasons for each position down on chart paper. If the entire class holds the same opinion, the teacher will randomly split the class into even groups and ask one group to support the opposing opinion.

**Elaborate** —*Allow students to use their new knowledge and continue to explore its implications. At this stage students expand on the concepts they have learned, make connections to other related concepts, and apply their understandings to the world around them in new ways*

### Full Class Discussions

Students will move into a large circle. During this time, the teacher will work as a facilitator of a whole group discussion. Each group will share its viewpoints and reasoning, and other groups will be asked to respond. The teacher will keep the conversation focused and encourage participation and interaction by all students. The teacher will ask questions that prompt students to reason at a higher level of moral development.

**Evaluate:** *This phase assesses both learning and teaching and can use a wide variety of informal and formal assessment strategies.*

### Reevaluate Positions Individually

Students will spend about 10 minutes reevaluating their position and identifying the reasons for their position. This information will be recorded on a journal page in their binder entitled "Post-Discussion Stance". When they are finished the students will answer the following questions on the journal page:

1. Did your opinion change after the conversations with your peers? Why or why not?
2. Did the reasons for your opinion change after the conversations with your peers? Why or why not?
3. In what ways did greed impact your decision?

4. In what ways did risk impact your decision?
5. How did greed provoke risk in relation to the Ponzi Scheme?

The teacher will end class by asking a few students to share their responses to the previous two questions.



# Unit Resources

## Videos

### Madoff and the Scamming of America (History Channel)

- This video gives an in depth look at the Ponzi Scheme that Bernie Madoff ran. It is used in Lesson #4 and is particularly useful to help students understand the emotions that often drive the stock market.

## Books

Roman, R. (n.d.). 2012. In *I'm A Shareholder Kit: The Basics About Stocks - For Kids/Teens* (3rd ed.). Gilbert, AZ: Leading Edge Gifts, LLC.

- This book illustrates all of the important components of the stock market in a student-friendly way. It is colorful and easy to read.

Gardner, D., & Gardner, T. (2002). *The Motley Fool investment guide for teens: Eight steps to having more money than your parents ever dreamed of*. New York, NY: Touchstone.

- The authors of this book simplify the stock market by describing and defining mutual funds, banking practices, IRAs, and drip investing. The authors also include numerous quotes from smart teens who detail some of their rookie market moves in an attempt to help their peers steer clear of similar mistakes.

## Websites

### Investopedia

[www.investopedia.com](http://www.investopedia.com)

- This is a site that is dedicated to unbiased education of the stock market. It includes detailed information on every aspect the students could possibly want to know.

### Stock Investing for Dummies Cheat Sheet

[www.dummies.com/how-to/content/stock-investing-for-dummies-cheat-sheet.html](http://www.dummies.com/how-to/content/stock-investing-for-dummies-cheat-sheet.html)

- This site gives students accurate information in a concise format. Helps students to develop strategy for investing.



# Risky Business

An Exercise in Greed



# Task at Hand



A wealthy investor, that wishes to remain anonymous, is looking to reinvest 1.5 million dollars in the stock market. The investor is dissatisfied with his/her current stockbroker and financial analyst and is unimpressed with their investment choices. The investor is looking to hire a rookie team to manage his/her portfolio in the future.

You will be broken into pairs with one student acting as the financial analyst while the other acts as the stockbroker. Financial analysts will be responsible for researching how companies will perform in the open market based on such factors as annual company information and financial trends. Stockbrokers will be responsible for using that information, as well as incorporating information on diversification and commissions. Together, using this information, you will create the your team's portfolio.

Teams will be provided with an initial \$1,000 to invest over a four-year period. Each team should track their stocks as well as record the reasons behind each investment choice they make.

At the end of the four-year period, each team will present their information to the investor in the form of a persuasive digital presentation. Your presentation should be highly professional, and clearly articulate all of your team's stock market activity, as well as the details that informed the decisions made. The investor will evaluate your team based on your returns on investments, as well as the reasons that drove your investment decisions.

Will your greed provoke you to take risks? Only time will tell.

# Presentation

Your presentation should be a highly professional digital presentation. You can use any digital presentation you choose (i.e. Google Slides, Prezi, etc.). Your presentation will be capped at 3 minutes, and all team members should have a speaking role.

## Professional Presentation

- DRESS THE PART
- Streamlined and well organized
- Include only relevant text
  - Remember, you are not reading from it, so you should not have paragraphs typed up on the presentation.
- Background should be very plain or well-themed
- Choose professional colors and fonts
- Use visuals, but ensure that they are professional.
  - Don't use memes or cartoons.

## Professional Components

- Tell your "stock story".
  - Begin by telling us your strategy.
  - Go in chronological order and detail your decisions, the reasons behind those decisions, and the results of those decisions.
    - Every time you buy or sell, you should be giving the reason for that decision.
  - Putting a streamlined version of your data on the presentation and talking about the results can be more effective than putting everything on the presentation.

## Questions

- Be prepared to answer questions regarding your investment decisions from the teacher, as well as the wealthy investor.



# Presentation Rubric

During your presentation, each team will receive a score from your teacher, as well as the wealthy investor. These scores will be averaged together to create an overall score for your team. Your team will then be compared against the other rookie teams to determine the winner.

	<b>Exceeds Expectations (2 Points)</b>	<b>Meets Expectations (1 Points)</b>	<b>Does Not Meet Expectations (0 Point)</b>	<b>Comments</b>
<b>Professional Presentation</b>	<input type="checkbox"/> Team was professionally dressed and digital presentation was highly professional	<input type="checkbox"/> Team was professionally dressed and presentation was decently professional	<input type="checkbox"/> Team was not professionally dressed or presentation lacked professionalism.	
<b>Stock Market Activity</b>	<input type="checkbox"/> Stock market activity was clearly and accurately tracked and communicated.	<input type="checkbox"/> Stock market activity was accurately tracked and/or clearly communicated.	<input type="checkbox"/> Stock market activity was not accurately tracked or clearly communicated.	
<b>Strategy</b>	<input type="checkbox"/> Team had a clear, impressive strategy for making investment decisions.	<input type="checkbox"/> Team had a clear strategy for making investment decisions.	<input type="checkbox"/> Team had no clear strategy for making investment decisions.	
<b>Returns on Investments</b>	<input type="checkbox"/> Returns on investments exceeded \$800.	<input type="checkbox"/> Returns on investments were between \$500 and \$800.	<input type="checkbox"/> Returns on investments were less than \$500.	



# Stock Report Highlights

Stock reports have many important aspects that can help inform your investing decisions. Many parts of the stock report are self-explanatory, however, some of the most important aspects are highlighted and explained below.

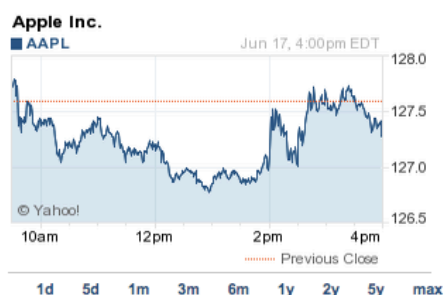
Apple Inc. (AAPL) - NasdaqGS ★ Watchlist

[+ Add to Portfolio](#) [Like](#) 14k

**127.30** ↓ 0.30 (0.24%) 4:00PM EDT

After Hours : 127.00 ↓ 0.30 (0.24%) 4:48PM EDT - Nasdaq Real Time Price

Prev Close:	127.60	Day's Range:	126.75 - 127.88
Open:	127.74	52wk Range:	89.65 - 134.54
Bid:	127.10 x 400	Volume:	29,274,640
Ask:	127.15 x 300	Avg Vol (3m):	46,030,500
1y Target Est:	148.75	Market Cap:	733.38B
Beta:	1.07	P/E (ttm):	15.82
Earnings Date:	Jul 20 - Jul 24 (Est.)	EPS (ttm):	8.05
		Div & Yield:	2.08 (1.60%)



## Ticker Symbol

A ticker symbol abbreviation used to uniquely identify a stock. It is usually found after the corporation's name in the stock report. A stock's ticker symbol may consist of capital letters, numbers or a combination of both.

## Current Price Per Share

The current price per share is the current value a stock is trading for. It is usually found large and bold near the name of the corporation.

## 52-Week Range

The 52-week range represents the lowest and highest value that a particular stock has traded at in the past year. Companies that have been trading less than 52 weeks will still have a range.

### Usefulness:

The 52-week range allows you to compare the stock's current price per share to the range to get a sense of how the stock is doing. This can help you identify how stable the stock is and potentially predict future fluctuations.

## **Earnings Per Share (EPS)**

The earnings per share is a measurement of a company's profit. You find it by taking a company's profit, subtracting the dividends, and then dividing it by the number of shares outstanding a company has.

### **Usefulness:**

EPS tell you how much money is flowing down to stockholders. The higher the EPS is, the more money your shares of stock will be worth because investors are willing to pay more for higher profits. You want your EPS to be increasing each year.

## **Price to Earnings Ratio (P/E)**

The price to earnings ratio is found by taking the current price of a stock and dividing it by the company's earnings per share.

### **Usefulness:**

Generally a high P/E ratio means that investors are anticipating higher growth in the future. Companies with higher P/E ratios are generally stable and are expected to continue to grow. Companies with a lower P/E ratio are considered good values, because you are getting more bang for your buck. Companies that are losing money do not have a P/E ratio. The P/E ratio is most useful when comparing companies for the same market sector, as each sector has much different growth prospects.

For more information on these concepts, go to the dictionary on Investopedia ([www.investopedia.com](http://www.investopedia.com)) and read through the respective sections and watch the videos.



# Role: Financial Analyst



## **Financial Analyst**

### **Analyze Annual Company Information**

**Each year, you will be charged with researching information about each company to ensure your investments are safe or identify any new companies of potential interest. It is imminent you are able to identify events that will affect your investments.**

### **Identify Financial Trends**

**Each year, you will analyze the various market sectors to identify any potential trends. Student should also be able to recognize whether they are in a bear or bull market.**

In both roles, students are responsible for reading the stock reports, collaborating to make investments, tracking and calculating their investments, and detailing the reasons behind their financial decisions.

# Role: Stockbroker



## Stockbroker

### Understand Diversification

Each year, you will help ensure that your investments are diverse based on the information you receive.

### Calculate and Apply Commissions

Each year, you will calculate and apply your annual commission to your investor's balance.

In both roles, students are responsible for reading the stock reports, collaborating to make investments, tracking and calculating their investments, and detailing the reasons behind their financial decisions.

# Role: Stockbroker

## **Diversification**

Diversification is a strategy that helps manage risk in investments.

Diversification involves investing in multiple market sectors to protect your investments from plunging if a particular sector does not perform well.

## **Commissions**

Commission is a service charge, often a percent of the investment, which brokers charge investors for their services. In our case, your firm has decided to charge your investor an annual fee, as opposed to a "per transaction" fee. The annual fee is 2%.

You will be calculating this once a year. After you have calculated your current investments, you will take your annual commission off that price before you buy or sell stocks.

For example, if after tracking my 2011 stocks my investments total \$1,250, to calculate my commission, I would multiply my investments by .04 (4% commission).

$$\$1250 \times .04 = \$50$$

Therefore, your annual commission from that particular investor is \$50. The commissions will just be calculated as you go, and will not be subtracted from your investments until the end of the 4 years. However, real stockbrokers are paid annually either separately or the money is subtracted from their investments.

# Role: Financial Analyst

## **Company Information**

Each year, financial analysts spend time staying up to date on the happenings within the companies they invest in. Certain events may trigger spikes or drops in stock prices. Each year, you will receive a data sheet that details major events that are happening within the companies. You must use that information to help make sound decisions.

## **Financial Trends**

### Bear vs. Bull Markets

Bear market and bull market are terms that are used to describe the overall performance of the stock market. A bull market means that stocks are on the rise. In a bull market, investors typically have faith that the upward trend will continue. A bear market means that stocks are on the decline, and investors believe that the trend will continue.

### Market Sector Performance

Other than identifying bear and bull markets, you will be responsible for identifying when particular market sectors are performing really well or really poorly. This will help you make a sound decision about which companies to invest in. Make sure you are looking at the sector as a whole, and not just one specific company.

# **Market Sectors**

## **Health Services**

Includes: Hospital/Nursing Management, Managed Health Care, Medical/Nursing Services, and Services to the Health Industry.

## **Technology Services**

Includes: Data Processing Services, Information Technology Services, Internet Software/Services, and Packaged Software.

## **Consumer Goods**

Includes: Automotive Aftermarket, Electronics/Appliances, Home Furnishings, Home Building, Motor Vehicles, Other Consumer Specialties, Recreational Products, Tools & Hardware, Apparel/Footwear, Beverages, Consumer Sundries, Foods, Household/Personal Care, and Tobacco.

## **Finance**

Includes: Finance/Rental/Leasing, Insurance Brokers/Services, Investment Banks/Brokers, Banks, and Real Estate.

## **Communications**

Includes: Major Telecommunications, Specialty Telecommunications, and Wireless Telecommunications.

## **Electronic Technology**

Includes: Aerospace and Defense, Computer Communications and Hardware, Electronic Components and Equipment, Semiconductors, and Telecommunications Equipment.

## **Energy Minerals**

Includes: Coal, Integrated Oil, Oil & Gas Production, and Oil Refining/Marketing.

## **Retail Trade**

Includes: Apparel/Footwear Retail, Catalog/Specialty Distribution, Department Stores, Discount Stores, Drugstore Chains, Electronic/Appliances Stores, Food Retail, Home Improvement Chains, Internet Retail, and Specialty Stores.

## **Transportation**

Includes: Air Freight/Couriers, Airlines, Marine Shipping, Other Transportation, Railroads, and Trucking.

# Stock Tracking Cheat Sheet

## Stock Ticker

In this column, you only need to write down the stock ticker for the stock you are tracking.

## Shares Owned

In this column, you will be writing the number of shares you currently own in that particular stock. If you do not remember, you can access this number from your initial investment sheet or the previous year's summary sheet.

## Previous Year's Total Cost

In this column, you will be writing the total cost of a particular stock from the previous year. You can access this information from the previous year's summary sheet.

## Current Year's Total Cost

In this column, you will be writing the total cost of a particular stock for the current year. You can calculate this by taking the Current Stock Price and multiplying it by the number of shares owned.

## Net Gain/Loss

In this column, you will be writing the total amount you lost or gained on a particular stock during the year. To calculate this, find the difference between the previous year's total cost and the current year's total cost. Write the number in the column. If you experienced a gain (current year is higher than previous year), put a positive sign in front of your amount to indicate a gain. If you experienced a loss (current year is lower than previous year), put a negative sign in front of your amount to indicate a loss.

## Dividends

In this column, you will be multiplying the Div. Yield that that particular company paid during the tracking year by the number of shares you own in that particular company.

## Total Dividends

In this column, you will be writing the total of all the dividends earned during the tracking year.

## Current Year's Total Investments

In this row, you will be adding all of the current total costs of the corporations you are invested in.

## Current Amount in Savings

In this row, you will be taking your previous year's amount in savings and multiplying it by 1.01. This mathematically adds 1% interest to your savings, which is our annual interest rate.

## Current Commission

In this row, you will be multiplying your current total investments by .04 to calculate the 4% commission you take on your client's annual investments.



# Buy/Sell Cheat Sheet

## **Stock Ticker**

In this column, you only need to write down the stock tracker for the stock you are working with.

## **Current Price**

In this column, you will be writing the current price that particular stock is selling for.

## **Number of Shares Sold**

In this column, you will be writing the number of shares you are planning to sell-off.

## **Total Sell-Off**

In this column, you will be multiplying the number of shares sold by the current price of the share to calculate the total amount you are selling off.

## **Previous Total Cost (Sell)**

In this column, you will be writing the total cost of that particular stock when you tracked it that year. This amount should be found on the Stock Tracker sheet for the same year.

## **Current Total Cost (Sell)**

In this column, you will be subtracting your total sell-off for that particular stock from the previous total cost. If you are selling off all your shares of that stock, your current total cost will become zero. However, some teams may choose to sell only a portion of their shares, so they may still have some money invested in that stock.

## **Temporary Total in Savings**

In this row, you will be taking the current year's amount in savings (found on the current year's stock tracker sheet) and adding the total of all sell-offs.

## **Number of Shares Bought**

In this column, you will be writing the numbers of shares you wish to buy.

## **Total Buy-In**

In this column, you will be multiplying the number of shares bought by the current price of the share to calculate the total amount you are buying.

## **Previous Total Cost (Buy)**

In this column, you will be writing the total cost of that particular stock when you tracked it that year if you owned any shares previously. If you did not, you will write a zero in this column.

## **Current Total Cost (Buy)**

In this column, you will be adding your total buy-in for that particular stock to the previous total cost.

## **Final Total in Savings**

In this row, you will be subtracting the total buy-ins from your temporary total in savings.