What is Risk?

Suggested Grade

Grades 6-8

Suggested Time

45- 50 minutes

Teacher Background

Before students can become informed investors, they must understand that every investment carries some level of risk. Risk is defined as the "exposure to a chance of loss." Each investor must decide what level of risk is acceptable to them. This is called "risk tolerance." Once a person's level of risk tolerance is understood, they can build their portfolios to match their risk level. Most investments fall into three categories:

- 1. **Conservative**—Investment-grade bonds and preferred stocks are considered conservative.
- 2. **Moderate**—Include growth stocks, which are stocks that pay little or no dividends because the company is investing all of its earnings in its rapid growth, particularly young companies with great potential.
- 3. **Speculative**—Stock investments are volatile and can lead to large profits or severe losses.

Vocabulary

Risk: The chance of losing all or part of the value of an investment.

Risk Tolerance: An individual investor's ability to accept loss of some or all of the money they have invested. A person's risk tolerance is based on a number of factors including age, financial stability, amount of time before the invested funds are needed for other purposes, etc.

Volatility: Indicates how much and how quickly the value of an investment, market, or market sector changes.

Performance Objectives

Students will be able to:

- Examine companies and determine the risk involved in investing in these companies.
- Compare two stock companies and decide the level of risk their Stock Market Game team would take if they invest in these companies.



• Write a persuasive letter motivating or discouraging an investor from purchasing stocks in a company they researched.

Materials

Activity Sheet 1: Conservative, Moderate or Speculative? Activity sheet 2: How Much Risk Can You Stand? Activity sheet 3: Research Guidelines

Springboard Activity

Mark, Mathew and Gwen are great friends, but very different. They are all in the same history class in 11th grade. Mark studies for weeks before every test. Gwen studies for two to three hours, just enough time to review everything the teacher covered in class. Mathew reviews his notes the night before the test and hopes he remembers what was covered.

Ask

- 1. Who has the greatest risk of failing the most tests?
- 2. Who do you predict will have the highest average?
- 3. Why?

Define "risk" for the students by giving the definition or having them define it. According to Random House College Dictionary, Risk is "exposure to the chance of injury or loss."

As a class, rank the risk each student in the scenario has of failing the class:

Procedure

Provide students the definition of each type of risk and discuss from the teacher background. Explain that when people invest money there always some risk of losing it. There are three types of financial risk:

- 1. **Conservative**: Little to no risk of loss.
- 2. Moderate: Slight risk of loss.
- 3. **Speculative:** High risk of loss.

Novice and Apprentice Levels:

Divide the class into their SMG teams and have each team complete *Activity Sheet 1*, rating the investments as conservative, moderate or speculative. Afterwards, ask the students share their answers with the class and explain the reasons for their ratings.

Master and Grand Master Levels:

Divide the class into their SMG teams and have each student in the group complete *Activity Sheet 1.* Once completed, have the group members discuss answers and reach a consensus on the responses.



Assessment

Novice and Apprentice Levels:

The purpose of this lesson is to have the students understand that there is risk in all investments. Some investments have greater risk than others. To assess the students' understanding of risk, have each SMG team (or individual) write a paragraph or two explaining what type of investors they will be and why? Will they take high risks? Or will they take few risks?

Master and Grand Master Levels:

Either in SMG teams or individually, students research up to three stocks: one conservative risk, one moderate risk and one speculative risk. Where do they feel more comfortable investing and why?

Application

Novice Levels:

Ask each SMG team member to answer the following:

• Given what you know about personal risk tolerance levels, how risky are the stocks in your SMG team portfolio? Explain

Completing Activity Sheet 2, "How Much Risk Can You Stand", may help them explain their portfolio's risk.

Apprentice and Master Levels:

Ask each SMG team to select a stock for purchase and using what they know about risk explain the risk involved in purchasing that stock.

Grand Master Level:

Ask each SMG team member to select a stock for purchase and using what he or she knows about risk explain the risk involved in purchasing that stock.

Enrichment Activities

Novice and Apprentice Levels:

Have students write a business letter to a potential investor to encourage the investor to purchase shares in a particular company. This company can be high risk with great potential for success, or a low risk company that will provide a steady income.



Master Level:

Student teams plan a comparative presentation based on two companies they have researched. In this presentation they should note the positive and negative aspects of both companies and explain which company may be the most beneficial to invest in and why. They should discuss risk factors of investing in each company. *Activity Sheet 3: Research Guidelines*, will be helpful.

Grand Master Level:

Teams should develop a sales pitch for convincing an investor to invest in one company and not another based on risk factors.

Answer Key

Activity Sheet 1

Investment 1: Low. Utilities are considered lower risk stocks. The current dividend provides steady gain on the investment. The company has been growing steadily in the past couple of years and seems to be stable.

Investment 2: Without other information this would be a higher risk stock purchase. There is no way to tell what kind of side effects the drug would have because there is no information on whether the drug has been tested and there could be seriously harmful effects to the children who are given the drug. The company doesn't appear to have a strong, good reputation as a drug manufacturer because you have never heard of them. The reliability of the company and the product haven't been proven so an investment would be risky.

Investment 3: This is a moderately risky stock. The product would probably sell very well if successful but there is a lot of research and testing to be done so the company would be putting a lot of it's profit back into research and development for awhile.

Investment 4: High. Fashion trends change quickly. They're not something that remain strong and steady such as people's needs for gas and electricity in their homes. The price of this stock appears volatile. If the company proves successful there could be profits in an investment as stock prices rise. But, there could be big losses if Britney Spears starts wearing clothes from a different company next year!!!!

Activity Sheet 2

- 1. His risk tolerance is H.
- 2. Her risk tolerance is L.
- 3. Bill's risk tolerance is L.
- 4. Tasha's risk tolerance is H.
- 5. Their risk tolerance is M.

- 6. His risk tolerance is M.
- 7. Blair's risk tolerance is M.
- 8. Sam's risk tolerance is L.
- 9. Her risk tolerance is H.
- 10. Henry's risk tolerance is L.



Activity Sheet 1: Conservative, Moderate or Speculative?

Directions: Decide if the following investments are conservative, moderate or speculative.

Investment 1: Jax Company provides gas and electric to your area. Its stock has risen slowly and steadily over the last two years. It pays an annual dividend of \$4 per share per year. You own 200 shares, so the company pays you a yearly dividend of \$800. What type of risk are you taking by investing in Jax Company? Explain

Investment 2: Watching the news, you learn a new drug is coming out that supposedly makes children smarter. You've never heard of the drug manufacturer, but you decide to invest in this company. Why wouldn't we want our children smarter? If you have no other information and plan to invest in this drug company, what kind of risk are you taking? Explain.

Investment 3: Interior Electric announces it is creating an all-electric car, but it hasn't come out yet. Based on the news, its stock price has increased 20% in one month. If you buy the stock now, what type of risk are you taking? Explain.

Investment 4: ALLON Clothing Company's profits have almost doubled this year. The price of the stock has gone up from \$48 to \$56 over the same period. If you were to invest in this stock, what degree of risk would this investment present? Explain.



Activity Sheet 2: How Much Risk Can You Stand?

Risk is a personal thing. It's based on factors such as age, salary, financial obligations, and family situation. People's risk tolerances vary greatly.

Below are descriptions of individuals who are thinking about investing in the stocks. What do you think is the risk tolerance of each one?

L=low M=moderate H=high

- 1. Teddy is 26 and has just gotten a new job at a much higher salary. He is single, has no loans and will get a raise within six months. He wants to invest some of his newfound wealth. His risk tolerance is
- 2. Juanita is a single mother with two children, ages 10 and 12. She wants them to go to college and is putting aside money to help pay for their educations. It will be six years before she needs money to help her first child with college. Her risk tolerance is
- 3. Bill is 62. His health is good. His wife has a low paying job, but their children are grown and off on their own. Bill and his wife will retire in three years. Bill's risk tolerance is
- 4. Tasha is 8. Her mother and father want to start a small investment portfolio for her to use for college or to help buy a home someday. Tasha's risk tolerance is
- 5. Monique and Harrison are in their forties and have three children. They have a mortgage and some credit card bills, but they have put aside a small amount of money to invest for retirement. They hope to retire when they are 65. Their risk tolerance is
- 6. Devon is also in his forties. He has paid for his home, makes a good salary and has no children. He has a good job and wants to invest money so he can buy a condo at the beach in 10 years. His risk tolerance is
- 7. Blair is 20. She is almost finished college. Her parents have paid all of her college costs and have promised to buy a small house for her when she graduates and starts her first job. Blair works on the weekends and during the summer; she has saved several hundred dollars, which she wants to invest. Blair's risk tolerance is
- 8. Sam works in a fast-food restaurant as a cook. He barely makes enough money to pay the rent and buy groceries for his wife and baby. Sam is 35. His grandmother died and left him \$2,000, which Sam wants to invest. Sam's risk tolerance is
- 9. Lisa is 27 and has a good job and few bills. She wants to invest so that in five years she can take a year off to travel in Europe. She has \$5,000 to invest and will need \$25,000 to take the trip of her dreams. Her risk tolerance is
- 10. Henry is 68 and retired. The company he retired from recently dissolved its pension fund and sent him a check for \$20,000. Henry is very healthy and expects to live at least another 20 years He gets Social Security and has a small amount of savings. Henry's risk tolerance is



Activity Sheet 3: Research Guidelines

Directions: Each member of your Stock Market Game team is responsible for conducting research on two publicly held companies you have considered for your team portfolio.

Group Members Completing Research:	
Names of the two Companies Researched:	

Research Sources List:

- 1.
- 2.
- 3.

Date: _____

	Company 1	Company 2
Name		
52- week High		
52- week Low		
P/E Ratio		

What product(s) or	
services does it provide	
Are there new products it	
plans to introduce to the public?	
What impact does the	
products or services?	
What type of risk do you think you are taking	
when you invest in it?	
Why would you recommend this	
company for your team's	
Why would you be hesitant to invest in this	
company?	



Name of Company 2	
What product(s) or services does it provide	
Are there new products it plans to introduce to the public?	
What impact does the economy have on its products or services?	
What type of risk do you think you are taking when you invest in it?	
Why would you recommend this company for your team's portfolio?	
Why would you be hesitant to invest in this company?	

