What is Diversification?

Suggested Grade

Grades 9-12

Suggested Time

45 minutes

Teacher Background

Since it is very difficult to accurately predict how a company will perform over time, diversification is a strategy that helps to protect your portfolio. It is a widely used and highly successful way to reduce risk. Most financial planners agree with the admonition "don't put all your eggs in one basket. By investing in different types of stocks, bonds, and/or mutual funds, the value of your entire portfolio should not be wiped out if one investment fails.

The Stock Market Game is a great way for students to learn about diversifying by analyzing the stocks in their portfolio. In this lesson students learn to diversify their SMG portfolios by investing in companies from different industries. Students will use a financial website to complete this lesson.

Vocabulary

Diversification: An investment strategy in which you spread your investment dollars among industry sectors.

Index: Reports changes, usually expressed as a percentage, in a specific financial market. Each index measures the market from a specific starting point. Some indexes are: Dow (NYSE), S&P 500 (NYSE), Russell (NASDAQ), etc.

Industry: A group of companies that make the same products, i.e. pharmaceutical companies

Portfolio: A collection of investments owned by one individual or organization.

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.



Sector: A group of stocks, often in one industry. The performance of any single stock in a sector can be measured against the performance of the group. Pharmaceutical companies are considered in the health care sector for example.

Performance Objectives

Students will be able to:

- Create a diversified portfolio selecting stocks from at least six industries
- Conduct internet research on investment options, write a summary of their findings and present their findings to the class
- Interpret company and industry charts to determine which investments their SMG team should make
- Define diversification, risk tolerance, industry, index

Materials

Activity Sheet 1: How diversified are these Portfolios?

Activity Sheet 2: Industry/Sector Research

Activity Sheet 3: How Diverse is Your SMG Portfolio?

Springboard Activity

Share the phrase: "A Balanced Diet."

Ask your students if they are familiar with this phrase. If they are, ask them what it means. If they are not, tell them that it is what nutritionists believe you should eat to maintain a healthy body. A balanced diet includes fresh fruits, fresh vegetables, legumes (like peas, chickpeas, and beans), nuts, and lean proteins (like chicken and beef).

Ask your students if they have a favorite food and where it might fit in a balanced diet? Spend some time discussing the responses to the questions above before explaining that it just like a balanced diet is important for their physical health a balanced investment portfolio is important to their financial health.

A diversified financial portfolio means it is invested in different asset classes (stocks, bonds, and mutual funds) in different industries and sectors. For example, in The Stock Market Game, a team with a diversified portfolio might keep some of their \$100,000 in cash, invest some of it in technology stocks, consumer goods stocks, municipal bonds, and growth mutual funds.

Diversified investments protect a portfolio from "getting sick" or losing money during industry downturns. For example, if the stock market underperforms, investments in bonds may go up.











Procedure

Distribute the Activity Sheet 1: How Diversified Are These Portfolios?

Have students work independently or in SMG teams to develop guidelines that their SMG team should follow to build a diversified portfolio. Afterwards, work as a class to develop a set of "Rules for Diversification."

Elicit rules such as:

- Select investments from at least three industries;
- Buy different financial products such as stocks, preferred stock, and mutual funds;
- Diversify holdings even within an industry. (This means that if investing in the entertainment industry, for example, invest in the stock of high cap company such as Disney to balance an investment in a start-up, low cap, animation company that appears to have potential for growth.)

Novice Level:

Have students discuss the findings from *Activity Sheet 1: How Diversified are These Portfolios?*

Ask your students:

- 1. How many different industries are represented in each portfolio?
- 2. Can a portfolio be diversified based on the quantity of shares?
- 3. What do you notice about the portfolios? Are any "heavy" with one particular industry?

Have students complete *Activity Sheet 2: Industry/Sector Research* and meet in their SMG teams to review their current SMG Account Holdings page or plan investments.

Distribute Activity *Sheet 3: How Diverse is your SMG Portfolio*? and have each team complete side one.

Apprentice Level:

Have SMG teams build a diversified portfolio using Yahoo financial tools. They should chart the industries they research in Excel and create a pie chart illustrating the percentage of each industry represented in their portfolios.

Master and Grand Master Levels:

Most professional money managers specialize in one industrial sector. This allows professional money managers to become experts on the companies in their sector.



Have the members of each SMG team choose one industry sector to study so he/she becomes an expert in a sector for his/her SMG team. Have each student research five stocks in their industry sector and present his/her findings to the team.

Assessment

Using the data from their research, have students create a PowerPoint presentation on diversification with a minimum of five slides and a maximum of ten. The slides should include:

- a pie chart showing distribution of the team's current or planned investments
- a list of the three industries team members think will help fulfill their goals for diversification and growth
- a list of at least two rules the team plans to follow to assure that their portfolios remain diversified.
- other slides, at the team's discretion, that enhance or illustrate the concept of diversification.

Novice and Apprentice Levels:

To reinforce what students learned in the lesson on risk, have them describe the stocks they have selected, explain the risk tolerance of each and discuss the diversification of the team's portfolio in an oral or written presentation.

Master and Grand Master Levels:

Have each student research his/her assigned industry sector and create a presentation that convinces investors to invest in companies in that sector. Have students include growth statistics and economic factors that affect the sector they have researched.

Application

Novice and Apprentice Levels:

Have students review their current SMG portfolios to determine if they are diversified. If a team decides their portfolio needs diversification, they must explain how they will go about creating diversification in it. If they feel their portfolio is diversified, they must present their reasons for reaching that conclusion.

Master and Grand Master Levels:

Form industry sector workgroups composed of experts from the SMG teams. Have these expert workgroups develop and deliver presentations to the entire class on



why SMG teams should invest in their sectors. These presentations must include sector growth statistics and the economic factors that affect the sector.

Enrichment Activities

Homework: Based upon the work completed in class, have students develop a tipsheet to help investors diversify their financial portfolio. Make sure that they address how investors can maintain diversification when they have a specific investment strategy like socially responsible investing or investing only in companies that are less than five years old.

Teams should answer the question: If you have narrowed your investment options by deciding to follow a particular strategy, does this mean that you cannot now have a diversified portfolio? Explain your answer.

Answer Key

Activity 1

Answers may vary. The goal of the exercise is to encourage students to think more deeply about their responses. Generally speaking, Portfolio A is considered very diversified since it contains stocks from a variety of industries, including health services, Insurance, chemicals, and financial services. Portfolio B is not as diversified because it contains several technology related companies. Portfolio C is not as diversified because it contains several companies that sell or create personal luxury items or consumer goods.

Activity 3

Answers may vary. Please explain for the purposes of the worksheet that the smaller the company, the greater the risk, because smaller companies tend to be newer and more volatile in price. However, this is not always the case. Large companies can be as volatile as small companies depending on a variety of external like political elections and climate and internal factors like the company's leadership or recalls.











Activity Sheet 1: How Diversified are these **Portfolios**

From the financial portfolios listed below which one is the most diversified? Explain.

PORTFOLIO A		PORTFOLIO B		PORTFOLIO C	
Symbol/ Quantity	Industry	Symbol/ Quantity	Industry	Symbol/ Quantity	Industry
FISV 100	Business Software	JPM 200	Bank	SBUX 500	Specialty: eateries
TD 100	Bank	AAPL 150	Personal computer	TIF 200	Jewelry
ADES 100	Specialty Chemicals	INTC 200	Semi- conductor	BK 100	Banks
NYT 100	Publishing Newspaper	GOOG 100	Internet search service	GOOG 100	Internet search service
ALL 100	Insurance	MSFT 300	Software	CSK 100	Paper products
CI 100	Health Care	SBUX 150	Specialty: eateries	NCC 100	Banks
RAIL 100	Railroad	DELL 300	Personal Computer	UNS 700	Electric: Utilities
MSFT	Software	HD 250	Home Improvement	WMT 300	Discount: Variety









Now it's your turn. Select a portfolio listed above and, using the table below, diversify its holdings. You cannot diversify just by adding more companies to the portfolio. Assume all stocks in the portfolios are the same price. After you sell 700 shares of a holding, you can buy 300 shares of another company's stock and 400 of another. Explain all changes you make.

Symbol	Quantity	Industry











Activity Sheet 2: Industry/Sector Research

Grouping stocks into sectors and industries makes it easier for investors to evaluate stocks within the same industry and assess the economic strength of that industry. Go to a stock research website and find a stock in each industry listed below and record the specified information

SECTOR	COMPANY NAME	TICKER	PRICE PER SHARE	PRODUCTS/SERVICES
	Marriott International, Inc	MAR	129.43	Marriott International, Inc. operates, franchises, and licenses hotel, residential, and timeshare properties worldwide.
Basic Materials				
Consumer, Cyclical				
Consumer, Non- cyclical				









Energy		
Financial		
Healthcare		
Industrial		









Technology		
Telecommunications		
Utilities		









Activity Sheet 3: How Diverse is Your SMG Portfolio?

On the table below list your SMG team's portfolio or planned portfolio. Use market cap to determine risk tolerance – A **Small Cap** company: Less than \$1 billion; a **Mid Cap** company: \$1 billion to \$5 billion; a **Large Cap** company: Over \$5 billion.

SMG ACCOUNT HOLDINGS					
Ticker Symbol	Shares Held	Company	Risk Tolerance		

On a scale from 5 to 1 where 5 is the most diverse, rate your SMG portfolio:

5 4 3 2 1



ACTION PLAN:

List the steps your team will take to diversify your SMG Portfolio. Review the SMG Account Holdings table you just completed and discuss your findings with your team and decide on a team investment strategy. List your account holdings below; indicate any changes you are making in your account to diversify its contents and minimize your risk.

Investment Type • Stocks • Mutual Fund	We selected this investment based on: • It's performance compared with other companies • It's market capitalization • Potential for moderate and sustained growth • Other: specify	Risk Level High Medium Low	Ticker Symbol/ # Shares Owned







