# **Investment Portfolio**

SUBMITTED BY: Nina Hoe, University of Pennsylvania

SUBJECT(S): Computation

GRADE LEVEL(S): 9, 10, 11, 12

# $\equiv$ OVERVIEW:

In this project lesson, students apply what they have learned about different investment strategies and opportunities to create three comprehensive investment strategies for high, middle, and low risk desiring individuals. Students must calculate projected returns and write clearly to justify their different strategies.

# $\equiv$ RELATED ARTICLES:

- "What Are Your Investment Choices? From Condos to Gold to Plain Cash"
- "The Investor Lifecycle: Changing Priorities, Changing Portfolios"
- "Research Strategies for New Investors"
- "Portfolio Managers: The Challenge Is Picking More than One Winning Stock"
- "Portfolio Management: Making Decisions about Your Investments"
- "Of Deals and Dolls: Entrepreneurs Train for the Real Thing"
- "Keeping Fear, Frustration and Joy Out of Your Stock Portfolio"
- "Career Insight: Jerrold Fine on What It Takes to Succeed on Wall Street"
- "Alibaba's Jack Ma: Lessons in Corporate Governance"
- "10 Terms New Investors Should Know"

## Standards:

- WGYP:
- Mathematical Foundations

- Number Relationships
- Patterns, Functions, and Algebra
- Problem Solving

# Common Core:

N-Q.1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

N-RN.1. Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.

**Objectives/Purposes:** The purpose of this project lesson is for students to apply what they have learned through designing specific comprehensive investment strategies. Students are asked to think critically, weigh options, and write clearly.

# Knowledge@Wharton Articles & Sources:

- "A Simple Solution to Stock Market Woes: Kill the Corporate Dividend Tax"
- "Why Stock-price Volatility Should Never Be a Surprise, Even in the Long Run"
- "Stocks Revisited: Siegel and Shiller Debate"
- "Falling Prices, Foreclosures and Fear: What's Next for the Housing Market?"
- "Real Estate's Future: 'It Depends on What Degree of Risk You Are Looking For'"
- "Tentatively and Sporadically, Real Estate Investing Makes a Comeback"
- "Where the Deals Are: Real Estate in Emerging Markets"
- "Taking a View: Corporate Speculation, Governance and Compensation"
- "Everything from Oil to Silver: Are Speculators Causing Too Much Volatility?"

# **Other Resources/Materials:**

- Calculators
- Computers with Microsoft Excel

# Whole Class Discussion: (5 mins)

#### Student Worksheet

- 1. Do all people invest in the same ways?
- 2. Why might people choose to invest in different ways or use different strategies? (Make a list on the board of factors people might take into consideration – comfortability with risk, length of time money can be invested, time commitment)

## Small Group/Pair Activity: (25 mins)

#### Students split into three teams.

- Develop comprehensive investment strategies for 3 different investors each with \$1,000,000. Each investor must be defined in several ways: (1) level of risk s/he is comfortable with – high, medium, low (have 1 group doing each); (2) the amount of time the money can be invested – anywhere from 1 year to 40 years; (3) how s/he wants the money to be managed (i.e. has a lot of time and/or interest in researching stocks, maintaining real estate, etc.) Students can choose between CDs, savings accounts with different interest rates, real estate, rentals, stocks, dividends, etc. Students should choose specific stocks and real estate in specific locations.
- 2. Carefully layout your investment strategies and calculate the expected yield in each case.
- 3. Additionally, consider and calculate the worst-case scenarios.
- 4. Write a paragraph for each describing your strategy and what you hope to accomplish. Justify all decisions made.

## Tying It All Together:

## Whole Class Discussion: (15 mins)

- 1. Have the groups present their strategies.
- 2. Ask students to be constructively critical of one another.

## What Worked and What I Would Do Differently: