# YOUR FINANCIAL ROAD MAP: WHERE DO YOU WANT TO GO?

# DAY: 12

# TITLE: YOUR MONEY: Savings and Investments

**TARGET COMPETENCY:** Understand the concept of the time value of money and how to apply it to their personal financial planning

# **OBJECTIVES:**

- Differentiate between saving and investments
- Assess the time value of money
- Compare investment options
- Compare the relationship between risks and returns related to savings and investments
- Recommend ways to integrate savings and investing strategies into financial planning

# HANDOUTS/MATERIALS

- NEFE Unit 3
  - Student Guide
  - PPT slides for Unit 3
- Compounding Interest Calculator: http://www.econedlink.org/interactives/index.php?iid=2
- Student calculators (or cell phones) for exercises
- Activity: Risk-Return Timeline

# LESSON SUMMARY:

In high school, students often think they don't have enough money to invest. While their incomes may be limited at the time, they do have a greater amount of one resource not than they will have at any other time in their lives – TIME! Even small amounts of money can grow substantially over time.

One way students can get even more out of money is to save or invest it. The focus of the next two units is to examine the distinction between savings and investments; specifically that savings is usually for short-term goals, while investing is generally for long-term goals. This unit is to help students understand both in order to achieve their financial goals faster and more effectively.

# LESSON OUTLINE:

MINUTES	CONTENT
5	Intro: Savings and Investments
	Explain that savings are and investing are not the same. Savings usually relates to short-term goals, while investing means you're setting aside

	money for long-term goals.
	Review What Do You Think statements (p. 28) as a class, and then follow- up with PPT slides 3-A. Underscore the importance of starting early by reviewing The Advantages of Staring Early (p. 29 in the Student Guide).
	You can also discuss that it's OK, even encouraged, to start small. <b>ASK:</b> What would you rather have, a penny doubling every day for a month or a million dollars? Why? Explain that they'd rather have the doubling penny because it'd be worth more than \$5 million at the end of the month.
	Doubling a penny: Day 1 - \$0.01 Day 15 - \$163.84 Day 20 - \$5,242.88 Day 25 - \$167,772.16 Day 28 - \$1,342,177.28 Day 30 - \$5,368,708.80
20	Impact of Interest
	<ul> <li>Explain the importance of interest in long-term wealth creating with three important concepts (using PPT slides 3-B through 3-G and the Student Guide pp. 30-32):</li> <li>The Time Value of Money</li> <li>Compounded Interest. Use this online excellent online calculator to illustrate: http://www.econedlink.org/interactives/index.php?iid=2</li> <li>The Rule of 72</li> </ul>
	Exercise 3C: Ask the students to use the Rule of 72 to calculate the answer to the questions (p. 32). Discuss your answers as a class.
15	Risk
	<ul> <li>Use the following questions to introduce the concept of every day risk.</li> <li>Record the answers on a white board: <ul> <li>How would you describe risk on playing sports? (<i>Injury, that you lose, even possible death, time lost from other pursuits, etc</i>)</li> <li>How would you describe the risks of driving a car? (<i>Wreck, repair, traffic tickets, etc</i>).</li> <li>Does the person know these outcomes are possible? <i>Yes, but they don't think it will happen to them.</i></li> </ul> </li> </ul>

Underscore to your students: Risk is the possibility of loss or injury.
Show the PPT slide 3-J to discuss the potential risk and rewards of various types of investments. Review pages 33-34, pointing out the positive relationship between risk and reward (see Pyramid on pg. 33).
<b>Exercise 3D:</b> Risk versus Reward – Break into pairs to complete the exercise; review together as a class.
Assign Homework: Read pages 34-39 for tomorrow's class.
Risk-Return Timeline
Activity: Risk-Return Timeline (see handout). Ask for six volunteers to "portray" different investment mechanisms. At the end of the "twenty- year journey," leave all six volunteers in place and use them as discussion points for observing group members to see the risks and rewards over a long timeline. Remind students that the best tools for growth over the long timeline may not be the best to use if you have a shorter time period, such as five years to save for a house. For shorter terms, it is better to stick with 100% safe investments like savings accounts, savings bonds, and CDs.
<ul> <li>Assessment</li> <li>Briefly answer the following: <ul> <li>Use the Rule of 72 to answer the following questions:</li> <li>If you save \$500 in an account that pays 3% annual interest, how many years will it take for your savings to double in value? A: 24 years.</li> <li>Your aunt gave you \$4,000 for your 10<sup>th</sup> birthday. You decide to save it to buy a car when you're 18, but by then you think you'll need about \$8,000. What interest is required to allow you to reach your goal? A: 9% annual interest</li> <li>Explain the relationship between risk and reward in investments.</li> <li>Explain the relationship between risk and reward in investments.</li> </ul> </li> </ul>

# HOMEWORK:

- Exercise: Risk and Return Case Studies from Building Wealth, Lesson 8. http://www.dallasfed.org/educate/pubs/wealth\_classroom/08\_lesson.pdf
- Read pages 34-39 in NEFE Student Guide for tomorrow's class.

# ADDITIONAL RESOURCES:

# Lesson plans from Econedlink.org

# The Five Stages of Investing

http://www.econedlink.org/lessons/index.php?lid=707&type=educator This lesson walks students through the stages of investing, demonstrating why that sort of sequential order is important. At the end of the lesson, students are asked to serve as financial advisors and give advice to people considering investments at different stages of the investment ladder.

# Developing a Financial Investment Portfolio (advanced students)

http://www.econedlink.org/lessons/index.php?lid=566&type=educator Students act as financial advisors and develop a financial investment portfolio for three different "clients" using internet references as they analyze various saving options. The internet web sites assist students by providing information regarding their choices for the portfolios. Students may track the portfolio over several weeks to assess their investment strategies.

Video Game: Gen I Revolution - Mission 1: Building Wealth Over the Long Term http://www.econedlink.org/interactives/index.php?iid=102&type=educator In this game, students must convince Angela to invest in a 401(k) plan now to build wealth over the long term (about 30 min.). This is one unit of several in the Gen I Revolution series.

Market Mechanics: A Guide to U.S. Stock Markets (advances students) http://www.nasdaq.com/about/MarketMechanics.stm

# The Stock Market Game (requires computer access)

http://www.stockmarketgame.org/

A real-life simulation of using the stock market; teams compete and competition motivates students to research actual stocks.

# Save a Million Calculator

# http://www.practicalmoneyskills.com/calculators/calculate/saveAMillion.php?calcCategory =saving

This and other useful online calculators are available at Practical Money Skills. Building Wealth – Federal Reserve Bank of Dallas

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# http://www.dallasfed.org/ca/wealth/index.cfm

This financial education series provides a strong collection of lessons focusing on the basics of financial education, which include teachers' plans, student visuals, a handbook, and online video and tools.

#### Lesson 5: Stocks - Owning a Part of a Company

http://www.dallasfed.org/educate/pubs/wealth\_classroom/05\_lesson.pdf

#### Lesson 6: Bonds – Lending Your Money http://www.dallasfed.org/educate/pubs/wealth\_classroom/06\_lesson.pdf

# Lesson 8: The Rise and Fall of Risk Return

http://www.dallasfed.org/educate/pubs/wealth\_classroom/08\_lesson.pdf

#### Treasury Direct.Gov

# http://www.treasurydirect.gov/

Individuals can learn more about government securities, such s as savings bonds, Treasury bonds, bills and notes, as well as establish an online account to buy, convert, sell or redeem securities. There are no fees to establish an account or purchase securities directly from the U.S. Treasury, and you can establish regular purchase through direct deposit.