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| <b>Lesson/Unit Title</b> | <b>“Financial Planning: Are You the Next Warren Buffet?”</b>  |
| <b>Day(s)</b>            | 6   |
| <b>Grade Levels</b>      | 10-12   |
| <b>Curriculum Areas</b>  | Economics and/or Personal Finance   |
| <b>Website(s)</b>        | <p><a href="http://philanthropy.ml.com/ipo/volunteer/pdf/level3strategy1.pdf">http://philanthropy.ml.com/ipo/volunteer/pdf/level3strategy1.pdf</a><br/> <b>Thinking Ahead: Developing a Financial Plan</b>--15 strategy worksheet for financial planning by Merrill Lynch:<br/> <i>Strategy 1: Developing a Financial Plan</i><br/> <i>Strategy 2: Budgeting</i><br/> <i>Strategy 3: Risk, Reward and Return</i><br/> <i>Strategy 4: You, Your Job and Your Career</i><br/> <i>Strategy 5: Where’s the Money? Financial Opportunities</i><br/> <i>Strategy 6: Investment Options</i><br/> <i>Strategy 7: Take-Home Pay, Benefits and Taxes</i><br/> <i>Strategy 8: Saving for Education</i><br/> <i>Strategy 9: The Future Value of Money</i><br/> <i>Strategy 10: All You Need to Know About Credit</i><br/> <i>Strategy 11: Homeownership</i><br/> <i>Strategy 12: Economic Factors that Drive Investments</i><br/> <i>Strategy 13: The Benefits of Philanthropy</i><br/> <i>Strategy 14: International Currencies</i><br/> <i>Strategy 15: Leadership: Taking Charge Of Your Life</i></p> <p><b>“Money Math Lessons for Life” Lesson Plans</b><br/> <a href="http://www.publicdebt.treas.gov/mar/marmoneymath.htm">www.publicdebt.treas.gov/mar/marmoneymath.htm</a><br/> <i>Money Math: Lessons for Life</i>—91 pages of downloaded lesson plans incorporating Math and Financial Planning, including link to power point introducing curriculum to educators</p> <p><a href="http://www.publicdebt.treas.gov/mar/marmmath.pdf">www.publicdebt.treas.gov/mar/marmmath.pdf</a><br/> Four in-depth <i>Money Math</i> lessons include:<br/> <b>Lesson 1 The Secret to Becoming a Millionaire</b><br/> Students learn how saving helps people become wealthy. They develop rules to become millionaires as they work through a series of exercises, learning that it is important to (1) save early and often, (2) save as much as possible, (3) earn compound interest, (4) try to earn a high interest rate, (5) leave deposits and interest earned in the account as long as possible, and (6) choose accounts for which interest is compounded often. This lesson assumes that students have worked with percents and decimal equivalents.</p> <p><b>Lesson 2 Wallpaper Woes</b><br/> Students hear a story about Tom, a middle-school student who wants to redecorate his bedroom. They measure the classroom wall dimensions, draw a scale model, and incorporate measurements for windows and doors to determine the area that could be covered by wallpaper. Students hear more about</p> |

Tom's re-decorating adventure, learn about expenses, budget constraints, and trade-offs. This lesson requires that students know how to measure, or a review may be necessary before teaching.

### **Lesson 3 Math and Taxes: A Pair to Count On**

Students examine careers and reflect on how workers use math in their occupations. They study selected occupations, learning about the work skills (human capital) that different workers possess and salaries that those workers earn. Next, students learn how taxes are paid on income that people earn and how income tax is calculated. They learn how the progressive federal income tax is based on the "ability-to-pay" principle.

### **Lesson 4 Spreading the Budget**

Students develop a budget for a college student, using a spreadsheet. They examine the student's fixed, variable, and periodic expenses and revise to adjust for cash flow problems that appear on the first spreadsheet. This lesson is designed to increase student awareness and appreciation of the efficiency of using computer technology in math applications.

[www.fl2010.org/rightnav/customize.cfm](http://www.fl2010.org/rightnav/customize.cfm)

"*Personal Finance in the Economics Classroom.*" Financial Literacy's website allows you to customize FREE downloadable teaching lessons. Go to above website, enter your data, "submit," and download the entire booklet of lessons!

Units relating to Financial Planning include Unit 2: "*Decision Making in Saving and Investing,*" Unit 3: "*Investment Choices and Information,*" and Unit 5: "*Financial Planning.*" Math applications, tables and worksheets are incorporated into many of these units.

[www.econedlink.org/lessons/index.cfm?lesson=EM515&page=teacher](http://www.econedlink.org/lessons/index.cfm?lesson=EM515&page=teacher) "Climbing the Savings Mountain" and other financial planning lesson plans for teachers

[www.orangekids.com/amy/save\\_bm\\_003.htm#](http://www.orangekids.com/amy/save_bm_003.htm#)

Difference between simple & compound interest (site appropriate for elementary/middle school)

### **Online Savings Calculator**

[http://apps.nasd.com/investor\\_information/calculators/saveandinvest/savingscalc.aspx](http://apps.nasd.com/investor_information/calculators/saveandinvest/savingscalc.aspx) Use this online calculator to see how a consistent approach to saving can make your money grow!

### **Savings Bonds**

[www.econedlink.org/lessons/index.cfm?lesson=EM385](http://www.econedlink.org/lessons/index.cfm?lesson=EM385) Buy A Bond, James!

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|  | <p style="text-align: center;"><b>Savings Bonds</b></p> <p><a href="http://www.publicdebt.treas.gov/sav/savkfun.htm">www.publicdebt.treas.gov/sav/savkfun.htm</a><br/>Fun Facts about Savings Bonds</p> <p><a href="http://www.publicdebt.treas.gov/sav/savbond.htm">www.publicdebt.treas.gov/sav/savbond.htm</a><br/>What a Bond Looks Like!</p> <p><a href="http://www.publicdebt.treas.gov/sav/savcalc.htm">www.publicdebt.treas.gov/sav/savcalc.htm</a><br/>What's My Bond Worth? Bond Calculator</p> <p><a href="http://www.publicdebt.treas.gov/sav/sbkwdsch.htm">www.publicdebt.treas.gov/sav/sbkwdsch.htm</a><br/>Savings Bond Word Search game</p> <p><a href="http://www.publicdebt.treas.gov/sav/sbkscram.htm">www.publicdebt.treas.gov/sav/sbkscram.htm</a><br/>Savings Bond Word Scramble game</p> <p><a href="http://www.publicdebt.treas.gov/sav/savkglos.htm">www.publicdebt.treas.gov/sav/savkglos.htm</a><br/>Savings Bond Vocabulary Glossary</p>  |
| <b>Teacher Resources</b>                       | <p><i>Learning, Earning, and Investing</i>, NCEE (National Council on Economic Education.) 2004© ISBN: 1-561983-570-2. Refer to Theme 1 “Basics of Financial Investing” and Theme 3 “Financial Planning” units in Lesson 12 of text (Charlayne vs. Marcus readings on investing)</p> <p><i>Practical Business Math Procedures</i>, 8<sup>th</sup> Edition. Jeffrey Slater, author. McGraw-Hill/Irwin Publishing, 2006© ISBN: 0-07-313308-6 student edition and ISBN 0-07-313267-5 teacher ed.</p>   |
| <b>Unit Overview</b>                           | <p><b>Daily Lesson Overview:</b></p> <p><b>Day 1:</b> Introduce 3 rules for building wealth. Start early!</p> <p><b>Day 2:</b> Compare/contract simple vs. compound interest</p> <p><b>Day 3:</b> Buying and holding investments</p> <p><b>Day 4:</b> Diversifying your investments</p> <p><b>Day 5:</b> Differentiate between “risk” vs. “return on investment”</p> <p><b>Day 6:</b> Guest speaker</p>   |
| <b>Nebraska Frameworks Essential Learnings</b> | <p><b>BE 12.2 Communication Essential Learning</b></p> <p><b>Example Indicators:</b></p> <p>Discussion—participate in and lead group discussions</p> <p>Listening—demonstrate active listening</p> <p>Research Writing—use relevant, reliable print and electronic resources to create necessary notes, outlines and reference citations</p> <p><b>BE 12.3 Computation Essential Learning</b></p> <p><b>Example Indicators:</b></p> <p><i>Savings and investments</i>—use mathematical procedures to calculate the purchase price of stock and bond transactions, compute interest and compare rates of return on investments</p> <p><b>BE 12.4 Computer Applications Essential Learning</b></p> <p><b>Example Indicators:</b></p> <p><i>Application software</i>—use application software (word processing)</p> <p><i>Technology research</i>—use effective online information resources to support research</p> <p><b>BE 12.5 Economics/Personal Finance Essential Learning</b></p> <p><b>Example Indicators:</b></p> <p><b>Personal Finance:</b></p> |

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|   | <p><i>Banking and Financial Services</i>—identify financial services and resources (financial accounts, electronic banking)</p> <p><i>Risk Management</i>—summarize choices available to consumers for protection against risk and financial loss</p> <p><i>Saving and Investing</i>—evaluate saving and investment options to meet short-and long-term goals, including knowledge of presents and future value of money</p>   |
| <b>Link to Nebraska Standards</b>                     | <p><b>12.4.25</b> Students will explain the impact of monetary and fiscal policy in achieving local, state, and national economic goals.</p> <p><b>12.4.27</b> Students will discuss, develop, and implement a plan for making informed personal economic decisions.</p>   |
| <b>NBEA Curriculum Standards</b>                      | <p><b>Personal Finance:</b></p> <p><b>II. Personal Decision making</b>—Achievement Standard: Use a rational decision-making process as it applies to the roles of citizens, workers, and consumers.</p> <p><b>IV. Saving and Investing</b>—Achievement Standard: Evaluate savings and investing to meet short-and long-term goals.</p> <p><b>VI. Banking</b>—Achievement Standard: Evaluate services provided by financial deposit institutions to transfer funds.</p>   |
| <b>National Economics Standards</b>                   | <p><b>Standard 2: Marginal costs/marginal benefits</b>—Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something: few choices are “all or nothing” decisions.</p> <p><b>Standard 10: Role of economic institutions</b>—Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.</p> <p><b>Standard 12: Role of interest rates</b>—Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.</p> |
| <b>National Personal Finance Standards</b>            | <p><b>Standard 4: Saving and investing</b>—Achievement Standard: Evaluate savings and investment options to meet short-and long-term goals.</p>  |
| <b>Nebraska Math Standards</b>                        | <p><b>12.2.1</b> Students will solve theoretical and applied problems using numbers in equivalent forms, radicals, exponents, scientific notation, absolute values, fractions, decimals, and percents, ratios and proportions, order of operations, and properties of real numbers.</p>  |
| <b>Teaching Strategies, Procedures and Activities</b> | <p><b>Day 1</b> Students will understand the advantages of saving early.</p> <p><b>Step 1:</b> Bellringer: Introduce “3 rules for building wealth”</p> <p><b>Step 2:</b> Use Visuals 2 &amp; 3 (Pg 149-150) of <u>Learning, Earning &amp; Investing</u> to show accumulated wealth. Begin discussing compound interest.</p> <p><b>Step 3:</b> Use Activity 1 (Pg 166-172) of <u>Learning, Earning &amp; Investing</u> to explain why saving early is important.</p>  |

**Step 4:** Students use Merrill Lynch worksheet to set financial goals for themselves. Discuss those together.

**Day 2** Students will demonstrate their understanding of the difference between simple and compound interest by satisfactorily completing interest problems mathematically

**Step 1:** Review 3 steps as bell ringer. Review how Charlayne became a millionaire over time (Chapter 12 of Learning, Earning & Investing).

**Step 2:** Discuss Marcus' situation. (Visuals 5 & 6, Pg 152-153 of Learning, Earning & Investing). Why he didn't accumulate wealth like Charlayne?

**Step 3:** Use Practical Business Math Procedures text (Pg. 303-04) to explain difference between simple & compound interest.

**Step 4:** Students use website to learn the difference between simple & compound interest

[www.orangekids.com/amy/save\\_bm\\_003.htm#](http://www.orangekids.com/amy/save_bm_003.htm#)

**Day 3** Students will explain why "buying and holding" are important in long-term investing.

**Step 1:** Review 3 steps for bell ringer and review simple vs. compound interest.

**Step 2:** Begin 2<sup>nd</sup> step—"Buy and Hold." Use Visual 7 and Activity 1-Rule 2 of Learning, Earning & Investing to explain.

**Step 3:** Discuss Visual 8 "Stock Market Roller Coaster" of Learning, Earning & Investing to encourage students to invest for long term.

**Day 4** Students will explain/discuss why diversifying investments is important in building wealth

**Step 1:** Review 1<sup>st</sup> and 2<sup>nd</sup> step in building an investment.

**Step 2:** Focus on step 3—diversity.

**Step 3:** Finish Activity 1 with Rule 3.

**Step 4:** Use visual 9 to show students different types of investments. Activity 2 has the benefits & downfalls of different types of investments. Discuss savings accounts, cd's, bonds, stocks, real estate.

**Step 5:** Use Visual 10 (Pg 157) of Learning, Earning & Investing along with Activity 2 to look at the types of investments

**Day 5** Students will explain, compare and contrast "risk" vs. "return on investments." Which is more important when investing?

**Step 1:** Look at Visual 12 (Risk Pyramid) from Lesson 12 (Pg 159) of Learning, Earning & Investing. Discuss risk pyramid and what it means for investors. Again, compare the pyramid with financial goals.

**Step 2:** Discuss mutual funds.

**Step 3:** Discuss benefits of investing in mutual funds and how investors can become more diverse.

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|                                 | <p><b>Day 6</b> Guest speaker -- Ameriprise<br/> <b>Step 1:</b> Discuss small cap investments vs. large cap stocks.<br/> Students should have prepared questions to ask speaker.</p>  |
| <p><b>Assignments</b></p>       | <p><b>Assignment 1:</b> Students should take the time to sit down and figure out what they want out of their financial future. We all want to make a lot of money. Some of us want it in the short-term, others are looking more in the future. Students will use worksheet to set financial goals for themselves. Students will see that saving for the future includes using all 3 steps that we will be discussing.</p> <p><b>Assignment 2:</b> Figure simple vs. compound interest. Use <a href="http://www.orangekids.com/amy/save_bm_003.htm#">www.orangekids.com/amy/save_bm_003.htm#</a> to examine differences between simple and compound interest. Students will also calculate a saving worksheet. They will see how saving just a little at a time will add up. (Pg.6 at Merrill Lynch website)</p> <p><b>Assignment 3:</b> Students will research the forms of saving that are mentioned in the assignment. They need to look at the risk of the investment vs. the rate of return. Students will also compare the types of saving with their financial goals.</p> <p><b>Assignment 4:</b> Use Pg. 7 of the Merrill Lynch website for a family interview worksheet. Students will use worksheet to interview a family member.</p> |
| <p><b>Math Applications</b></p> | <ul style="list-style-type: none"> <li>• <b>“Understanding Risk and Return” Worksheet</b> (attached) to calculate risk of investments. Students will use initial investment and multiply it by the percent it receives.</li> <li>• Students may also use worksheets from <i>Practical Business Math Procedures</i> text to compare simple interest with compound interest. There will be uses of multiplication with percents and addition to figure the differences.</li> </ul>  |

| Assessment     | Lesson/Unit Evaluation Criteria   |  | Points     |
|----------------|---|--|------------|
|                | <b>Fill out financial goal sheet</b> -- use Pg 27 from <a href="http://philanthropy.ml.com/ipo/volunteer/pdf/level3strategy1.pdf">http://philanthropy.ml.com/ipo/volunteer/pdf/level3strategy1.pdf</a> website) NOTE: Each question is worth 5 points for complete answers  |  | 0-30       |
|                | <b>Research and explain the 5 forms of saving:</b><br>1. Students list each form (1 pt each) =5<br>2. Students define each form (1 pt each) =5<br>3. Students cite at least 1 advantage of each (1 pt each) =5<br>4. Students cite at least 1 disadvantage of each (1 pt each) =5<br>5. For each form, students should state whether it's a long-term or short-term investment (1 pt each) =5 |  | 0 - 25     |
|                | <b>Compare forms of saving with financial goals</b><br>(Students should look at the 5 forms of saving to see how each could work for them compared with their goals)  |  | 0 - 20     |
|                | <b>Questions from each student for guest speaker</b><br>(Students should write at least 5 questions for the guest speaker; each worth 2 points)   |  | 0 - 10     |
|                | <b>Interview worksheet</b> (Pg. 7 from Merrill Lynch website; each question is worth 5 points)  |  | 0 - 25     |
|                | <b>Unit Possible Points</b>   |  | <b>100</b> |
|                | <b>Grading Scale:</b><br><b>A = 90-100</b><br><b>B = 80- 89</b><br><b>C = 70- 79</b><br><b>D = 60- 69</b><br><b>F = 0- 59</b><br><br><b>Instructor comments:</b>  |  |            |
| <b>Teacher</b> | Diana Davis   |  |            |
| <b>School</b>  | Wayne High School   |  |            |

## Understanding Risk and Return Source: www.MoneyInstructor.com

Before investing your money, you will have to understand the important concept of **risk and return**. Risk and return means that the returns you will get when investing your money will vary. You may even lose money! However, no matter what you do with your money, you are always taking some amount of risk. If you keep your money at home, you risk that it could be lost or stolen. If you place your money in a bank account, you risk that the returns that you get will not be high enough.



Risk and return also means that if you take greater risks, you should expect to get greater returns. If you want the possibility of getting greater returns, you need to invest your money in more risky investments, for example bonds or stocks. Different bonds and stocks even have different degrees of risk. So how much risk should you take with your money? That depends on many different factors including your age, risk tolerance, and investment objectives. No matter where you invest your money, you first should understand the investment's risks and potential rewards.

**EXERCISE:** You have been given the option to invest in either a safe investment, or one that has more risk. The safe investment will give you a return of 6%. The risky investment's return will vary. Finish filling in the following table, and answer the questions that follow:

**SAFE INVESTMENT:** Here is the return for the safe investment. It always give the same return.

| Money to Invest | Return | Gain(Loss) | Total      |
|-----------------|--------|------------|------------|
| \$1,000.00      | 6%     | \$60.00    | \$1,060.00 |

**RISKY INVESTMENT:** The risky investment's return will vary, and may be one of the following. Finish filling in the following table. Round each calculation to the nearest penny.

|    | Money to Invest | Return | Gain/Loss  | Total   |
|----|-----------------|--------|------------|---------|
| 1. | \$1,000.00      | 18%    | \$180.00   | \$_____ |
| 2. | \$1,000.00      | -19%   | (\$190.00) | \$_____ |
| 3. | \$1,000.00      | 23%    | \$230.00   | \$_____ |
| 4. | \$1,000.00      | -11%   | (\$110.00) | \$_____ |
| 5. | \$1,000.00      | 3%     | \$30.00    | \$_____ |
| 6. | \$1,000.00      | -19%   | (\$190.00) | \$_____ |

**Should you choose the safe investment or the risky investment? Why?**

### ANSWERS

|    | Beginning Savings | Interest Rate | Interest   | Savings in one year |
|----|-------------------|---------------|------------|---------------------|
| 1. | \$1,000.00        | 18%           | \$180.00   | <b>\$1,180.00</b>   |
| 2. | \$1,000.00        | -19%          | (\$190.00) | <b>\$810.00</b>     |
| 3. | \$1,000.00        | 23%           | \$230.00   | <b>\$1,230.00</b>   |
| 4. | \$1,000.00        | -11%          | (\$110.00) | <b>\$890.00</b>     |
| 5. | \$1,000.00        | 3%            | \$30.00    | <b>\$1,030.00</b>   |
| 6. | \$1,000.00        | -19%          | (\$190.00) | <b>\$810.00</b>     |