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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Finance |
| **Course Name** | Securities and Investments |
| **Lesson/Unit Title** | Savings |
| **TEKS Student Expectations** | **130.184. (c) Knowledge and Skills**  (3) The student describes investment analysis and selection processes.  (A) The student is expected to describe types of investment objectives  (B) The student is expected to consider the nature of investment risk  (D) The student is expected to understand factors to consider when selecting investments |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | **Performance Objective**  Students will understand the importance of saving and investing.  **Specific Objective**   * Students will understand the differences between saving and investing. * Students will understand the concept of compounding to increase investment returns. * Students will identify components of SMART goals as related to setting financial goals. |
| **Rationale** | This lesson introduces students to the importance of saving and investing. Through this lesson, students will identify the differences between saving and investing, explore the concept of compounding to increase investment returns, and identify components of SMART goals as related to setting financial goals. |
| **Duration of Lesson** | 3-4 class periods |
| **Word Wall/Key Vocabulary**  *(ELPS c1a,c,f; c2b; c3a,b,d; c4c; c5b) PDAS II(5)* | * Security‐a financial instrument that has value * Savings‐an amount saved for shorter‐term use such as for emergencies * Investing‐amount of money saved typically for long‐term use such as college, house purchase, or retirement * SMART goals‐a method of goal‐setting including the SMART acronym components of specific, measurable, attainable, realistic, and time‐bound * PYF (Pay Yourself First)‐a term used in setting financial goals to set aside money on a regular basis for saving * Short‐term‐a term of generally one year or less * Long‐term‐a term greater than one year * Time value of money‐the concept that the value of money in the present time is higher than the same amount invested in the future because of its ability to earn interest for a longer period of time * Inflation‐the rate of increase in general prices which causes money to be less valuable * Interest‐money paid for the use of money; borrowers pay interest, those who lend money are paid the interest * Principal‐an amount of money invested * Simple interest‐a percent multiplied by a principal amount * Compound interest‐interest that is calculated on a principal amount plus interest * Rule of 72‐the number of years that it would take for an investment amount to double given a certain interest rate * Liquidity‐ the ease of converting an investment into cash * Mutual funds‐a grouping of different stocks into a fund in which investors can purchase shares, has less risk than individual stocks, may include fees by someone to manage the fund * Bond‐basically a loan that a government entity or corporation makes with investors purchasing the bond with the issuing entity promise to pay back the money with interest |
| **Materials/Specialized Equipment Needed** | **Instructional Aids**   * Lesson Presentation * Instructor Computer/Projection Unit * Online Websites |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | **Ask** students if they know the differences between short‐term and long‐term goals.  **Ask** students if they know how short‐and long‐term goals can apply to their financial goals.  **Ask** students if they know the differences between saving and investing. |
| **Direct Instruction \*** | 1. Saving    1. Also means “Pay Yourself First”    2. Usually meant for short‐term financial needs       1. Shopping       2. Minor emergencies    3. Easy to get to in the event of an emergency 2. Common Savings Instruments (**NOTE:** Ask students where they think the easiest, most convenient place for their money is so it is available when they need it. They may say “under a mattress, in a piggy bank, or in a jar”. Are these places safe and secure? Will their money grow? The instructor is encouraged to go to the following website: [www.treasurydirect.gov/indiv/tools/tools\_moneymathsecret.pdf](http://www.treasurydirect.gov/indiv/tools/tools_moneymathsecret.pdf) and use some of the questions and worksheets for math practice on calculating simple interest and compound interest. \*\* Have students work together to solve some problems.)    1. Safe places for your money, usually short‐term, lower interest rates, easily accessible (**NOTE:** Because financial institutions know that people may need to have easy access to their money in the event of emergencies, interest rates are much lower than for investments. They can be lower than inflation rates (an average rise in prices for many products) which is another reason saving is mainly for short‐term use.)    2. Savings accounts‐low deposit, very low interest rates, can deposit and withdraw as much as you want    3. Money market accounts‐higher minimum deposit to open, slightly higher rate, maximum amount of withdrawals    4. Certificates of Deposit‐one initial deposit for a set period of time with no withdrawals (unless there is a penalty), sometimes higher interest with a higher amount 3. Investing (**NOTE:** Investing is for longer‐term financial goals, so if time is on your side, your money has a chance to earn more interest or, in the case of stocks and mutual funds, the odds of the stock prices increasing over the long term are much higher. Explain that these types of investments are not as quickly converted to cash when needed compared to savings instruments. The list at the left from #1‐6 ranks instruments from less risky to riskier as well as from more liquid (converted to cash more easily) to less liquid.)    1. Not the same as saving    2. Usually for long‐term (longer than one year) needs    3. Riskier than a regular savings account    4. Potential for higher returns on your money 4. Common Investment Instruments (**NOTE:** Explain these benefits to investing as opposed to saving. Usually interest rates are higher than inflation rates so you can be protected from price increases with long‐term investing. \*\* Have students either participate in an online stock market simulation or a very simple version of your own by tracking one stock for several weeks and comparing your earnings results with what you could have earned in a savings account for the same principal invested. \*\*)    1. Riskier than savings, long‐term, higher interest rates, not as liquid    2. Less risky to riskier:       1. U.S. Treasury Securities       2. Government Bonds       3. Corporate Bonds       4. Mutual Funds       5. Individual Stocks       6. Real Estate 5. Benefits to Investing    1. Financial security for many years    2. Time can be on your side‐a longer period to invest can mean higher earnings on your investment    3. Can help with inflation if your rate of return (interest rate) is higher than the inflation rate    4. If investing in stock, you can become part owner of a company 6. SMART Goals (**NOTE:** Explain to students that what you do with your money will depend upon your financial needs and goals. SMART goals can help students get used to setting specific goals and creating a plan to achieve them. Walk the students through the process and the example SMART goal in the presentation. You can also create a goal on the board or document camera by having students provide their responses.)    1. Specific ‐ what you would like to achieve or earn    2. Measurable ‐ a total amount of money needed to meet the financial goal    3. Attainable ‐ how the plan to achieve the goal is possible (e.g., a breakdown of the specifics needed to meet the goal)    4. Realistic – a reasonable plan of exactly how to raise the money (e.g., a certain amount per week or month)    5. Time bound – a specific date or deadline for the goal to be accomplished (e.g., February 1st as opposed to ‘spring’) 7. Simple vs. Compound Interest (**NOTE:** The easiest way to demonstrate this mathematical concept is to show students page 1.22 of the Basics of Saving and Investing 2020 guide which compares investing early and the benefits of compounding. You can also mention the concept of the time value of money while you are explaining this.)    1. Simple interest $100 x 5% = $5 interest $100 x 5% = $5 interest, so you earned $5 interest so far.    2. Compound interest $100 x 5% = $5 interest, but now your principal is $105, so $105 x 5% = $5.25, so the new principal is $110.25, so you earned $10.25 interest so far. ‐also called “interest on interest” 8. Time Value of Money    1. Money is worth more now than later if it is invested now rather than later.    2. The investment has more time to grow the earlier it is invested.    3. Present Value versus Future Value 9. “Rule of 72” Explained (**NOTE**: Because many people who are investing their money want to know what the earnings potential is at some point in the future, the “Rule of 72” can provide answers. It can help you estimate how long it will take to double your money.)    1. Shows how compounding can increase your money more rapidly than simple interest    2. A formula that calculates how long it will take your money to double    3. 72 divided by the interest rate (say 6% as an example) = 12, meaning it will take approx. 12 years to double your investment. |
| **Guided Practice \*** | In pairs, have students create a list of goals that they each have, regardless of whether they involve money or not. Then, have the pairs circle the items that involve money. Of those, ask students to label whether their goals are short‐term or long‐term. Then have them identify each one as either a savings goal or an investment goal. Divide the board into a “Saving” side and an “Investing” side. Write down the pairs’ responses as to which ones should be written on each side and have a class discussion about the differences between the items on each list.  Next, ask students how money can be earned. A student should write the responses on the board, which may include part‐time jobs, babysitting, garage sales, selling stocks, and any other responses that students mention. Discuss which ones are the easiest to rely upon and which ones may be more unstable as an income source. Then lead into a discussion of which types of income are short‐term or long‐term.  Conduct the S & I Bingo Game #1 to reinforce vocabulary concepts. Write the words on the board or document camera for students to fill in on the blank cards located later in this lesson. |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | * Have students go online and play the “Gen i Revolution” game for practice with simple and compound interest. * Students can write an exit ticket stating something they learned about how to prevent a fraud or scam. |
| **Lesson Closure** | **Review**  Ask students the following questions on exit tickets or using a matching activity.  **Question #1:** Savings is primarily for long‐term financial goals.  **Answer #1:** False. Savings is usually for short‐term goals. Investing is for long‐term goals.  **Question #2:** What is the time frame for short‐term goals?  **Answer #2:** One year or less.  **Question #3:** What is the time frame for long‐term goals?  **Answer #3:** Long‐term is considered one year or longer.  **Question #4:** Simple interest is also known as “interest on interest”.  **Answer #4:** False. Compound interest is “interest on interest” because interest is calculated on the principal and previously‐earned interest.  **Question #5:** What is the purpose of the “Rule of 72”?  **Answer #5:** The “Rule of 72” is a mathematical tool to determine how long it will take for an investment to double based on the interest rate of the investment. |
| **Summative / End of Lesson Assessment \*** | **Informal Assessment**  All the following can be used as informal assessments :   * Exit tickets with vocabulary * Pair‐share activities * Class discussion and participation   **Formal Assessment**   * **SMART Goal Assignment #1** : Decide on a financial goal you would like to achieve, one that is short‐term (less than one year) and one that is long‐term. Create a SMART goal explaining each component of the SMART acronym for each of your two goals. Include an appropriate graphic or diagram to enhance this word‐processing document. * **Basic Savings Chart Assignment #2** – Students will conduct online research to discover interest ratesfor at least three different types of accounts at three different financial institutions. They may create a table in a word‐processing program or on a poster board. * **Saving vs. Investing Comic Strip Assignment #3** – Students will use either an online comic strip creatorprogram or poster board to create a comic strip depicting a conversation among individuals where one is telling the other one the differences between saving and investing, listening to the goals of the other character, and then recommending to that character which actions to take with his or her money. |
| **References/Resources/**  **Teacher Preparation** | * *Investing in Your Future*. (2nded.). (2007.) Stamford, CT: Cengage Learning.      * Bureau of Public Debt, The. (2012). Retrieved from [www.treasurydirect.gov/indiv/tools/tools\_moneymathsecret.pdf](http://www.treasurydirect.gov/indiv/tools/tools_moneymathsecret.pdf) * U.S. Currency Education Program. (n.d.). * Arizona Corporation Commission. (2012). Investor resources. Retrieved from [www.azinvestor.gov/Youth\_and\_Educators\_Teaching\_Guides\_and\_Videos.asp](http://www.azinvestor.gov/Youth_and_Educators_Teaching_Guides_and_Videos.asp) * U.S. Securities and Exchange Commission. (n.d.). Tools and games. |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication**  **90 Second Speech Topics** |  |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) | Have students interview a CFP, Certified Financial Planner, with questions from a prepared list. Questions can include: 1) What type of savings vehicle is the most popular with his or her clients? 2) What is his or her best advice for a teenager regarding how much to save and what type of account to use? 3) What is his or her recommendation on interest your investments should earn so you can have $1,000,000 when you (the student) retires? The student can then prepare a one‐page report detailing the findings. |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | FBLA, BPA |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)