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| **How Your Money Can Grow** | |
| Making regular payments to yourself, even in small amounts, can add up over time. The amount your money grows depends on the interest earned and the amount of time you leave it in the account.  **Interest**  Interest is an amount of money banks or other financial institutions pay you for keeping your money on deposit with them. Interest is expressed as a percentage and is calculated based on the amount of money in your account.  **Compound Interest**  Compounding is how your money can grow when you keep it in a financial institution that pays interest. When the bank compounds the interest in your account, you earn money on the previously paid interest in addition to the money already in your account. But not all savings accounts are created equal. This is because interest can be compounded daily, monthly, or annually. | |
| **Annual versus Daily Compounding**  The more frequently interest compounds, the faster it grows.   |  |  | | --- | --- | | Annual Compounding | Daily Compounding | | Start with $1,000.00 at 1% compounded annually.  At the end of the first day, you still have $1,000.00.  At the end of the year you have $1,010.00 (i.e., $10.00 or 1% of $1,000.00 added to the original deposit). | Start with $1,000.00 at 1% compounded daily.  At the end of the first day, you have $1,000.03.  On the second day, add the interest earned (i.e., $.03, and compound the total amount—$1,000.03…)  At the end of the year, you have $1,010.05 from compounding each day’s interest rate added to $1,000.00. | | Total: $1,010.00 | Total: $1,010.05 |   **Compounding Interest Over Time**   |  |  |  | | --- | --- | --- | |  | 5 years | 10 years | | Mattress compounding—NO interest! | $1,000.00 (unless stolen or lost) | $1,000.00 (unless stolen or lost) | | Annual compounding at 1% | $1,051.01 | $1,104.62 | | Monthly compounding at 1% | $1,051.25 | $1,105.12 | | Daily compounding at 1% | $1,051.27 | $1,105.17 |   Five cents adds up over time when compounded daily! |

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| **Saving Money**  Saving 50 cents a day:   |  |  |  | | --- | --- | --- | |  | No interest | 2% Daily Compounding | | Year 1 | $182.00 | $184.00 | | Year 5 | $912.00 | $957.00 | | Year 10 | $1,820.00 | $2,014.00 | | Year 30 | $5,460.00 | $7,480.00 |   Saving $1.00 a day:   |  |  |  | | --- | --- | --- | |  | No interest | 2% Daily Compounding | | Year 1 | $365.00 | $368.00 | | Year 5 | $1,825.00 | $1,914.00 | | Year 10 | $3,650.00 | $4,029.00 | | Year 30 | $10,950.00 | $14,960.00 |   Saving $5.00 a day:   |  |  |  | | --- | --- | --- | |  | No interest | 2% Daily Compounding | | Year 1 | $1,825.00 | $1,838.00 | | Year 5 | $9,125.00 | $9,569.00 | | Year 10 | $18,250.00 | $20,144.00 | | Year 30 | $54,750.00 | $74,798.00 | | | |
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|  | | **Annual Percentage Yield**  Annual Percentage Yield (APY) reflects the amount of interest you will earn on a yearly basis. It is expressed as a percentage.  The APY includes the effect of compounding. The more often your money compounds, the higher the APY and the more interest you will receive.  When comparing different accounts, you should compare the APYs of the savings products not the interest rates. | | |
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|  | | **Savings Products**  A savings account allows you to make money by earning interest. The bank pays you interest for the opportunity to use your money. A savings account also ensures that your money is safe and that you have easy access to it.  Two other common savings products include: money market deposit accounts and certificates of deposit (CDs).  Money market deposit accounts tend to offer higher interest rates than savings accounts and often give you check-writing privileges. Money market deposit accounts may also require a higher minimum balance (e.g., $1,000.00). Do not confuse money market deposit accounts, which are generally insured by the Federal Deposit Insurance Corporation (FDIC) with money market mutual funds because they are not federally insured.  CDs are an account in which you leave your money for a set period of time (e.g., 6 months or 2 years). This period of time is called a term. You usually earn a higher rate of interest than with a regular savings account. The longer you promise to keep your money in the account, the higher the interest rate. These accounts require a minimum deposit (e.g., $500.00 or $1,000.00). You will have to pay a fee called an “early withdrawal penalty” if you withdraw your money before the term has ended. | | |
|  | | With savings products, you will likely receive a statement from your financial institution. Remember to always check your bank records and statements to be sure they are accurate. | | |
|  | | While some investment products are sold at banks, they are not the same as deposit accounts because the money you invest is not federally insured. When you invest money, there is also a greater risk of losing it than if you put your money in a savings or other deposit account.  In fact, you might lose the entire amount you invest if the investment does not perform well. On the other hand, your investment may earn and grow more than a regular savings account because of the risk you take when you invest your money.  In general, the higher the risk the higher the expected rate of return on the investment. You make money on investments by selling them for more than you paid for them, or by earning dividends and interest. The money you earn is considered income, and you may have to pay taxes on it. | | |
|  | | **Types of Investment Products**  More popular types of investment products that you can buy include:  Stocks, Bonds, Mutual funds, U.S. Treasury securities, Retirement investments  **Stocks**  When you buy a stock you own part of the company, called a share. When the company does well financially, you may periodically receive dividends or a portion of the company’s profits.  The value of your investment changes according to the stock market. When you sell the stock, you may either earn additional money or lose money.  **Bonds**  When you buy a bond you are lending money to a corporation or government entity for a certain period of time, called a term. The corporation or government promises to repay the amount of money you are lending it on a specified date in the future or by making regular interest payments to you. You may lose money if the corporation fails to honor its promises.  U.S. Savings Bonds are a long-term investment option backed by the full faith and credit of the U.S. Government. There are two types of savings bonds: I and EE bonds. These bonds can be purchased at a financial institution for as little as $25.00 or through payroll deductions.  I Bonds are purchased at face value, which is the amount printed on the bond. In other words, a $50.00 bond will cost $50.00.  I Bond interest rates consist of a fixed rate plus an inflation rate, which may change every 6 months. Interest is added to the bond monthly and is paid when the bond is cashed.  I Bonds must be held for 1 year before they can be cashed.  If an I Bond is cashed within the first 5 years, there is a 3-month interest penalty.  EE Bonds are normally purchased at half their face value, so a $50.00 bond will cost $25.00.  If you buy EE bonds electronically via [www.TreasuryDirect.gov](http://www.TreasuryDirect.gov), they are sold at face value.  All EE Bonds purchased after May 2005 earn a fixed rate of interest.  EE Bonds must be held for at least 1 year before they can be cashed.  If an EE Bond is cashed within the first 5 years, there is a 3-month interest penalty.  **Mutual Funds**  Mutual funds are offered by companies that combine money from many investors to purchase numerous separate investments. The investment products in a mutual fund are managed by a professional and typically include numerous stocks and bonds. Like stocks, mutual funds may pay dividends and they may also gain or lose money over time.  By combining your money with the money of other investors, you can diversify even a small investment. Diversification is the concept of “do not put all of your eggs in one basket.”  Diversification reduces the risk that you will lose your money because you spread the risk of loss across many savings and investment options. Investors hope that if one investment loses money, the other investments will more than make up for those losses.  **U.S. Treasury Securities**  Treasury securities are unique from the other types of investment products because they are backed by the full faith and credit of the U.S. Government. Treasury securities include:  Treasury bills or T-bills are sold at a discount from their face value and range in terms from a few days to 6 months. When a T-bill matures, you will be paid the face value. They pay interest every 6 months.  Treasury notes or T-notes pay interest every 6 months and are issued in terms of 2, 3, 5, and 10 years.  Treasury Inflation-Protected Securities (TIPS) provide protection against inflation, with an interest rate tied to the Consumer Price Index. TIPS pay interest twice a year.  Treasury bonds, or T-bonds, pay interest every 6 months and range in terms from 10 to 30 years.  The minimum purchase price for these products is $100.00. Buying U.S. Treasury Securities and Savings Bonds is a safe investment because your money is backed by the U.S. Government. Savings bonds may be purchased through a payroll deduction, through your financial institution, and at [www.TreasuryDirect.gov](http://www.TreasuryDirect.gov).  **Retirement Investments**  Several investment products are designed to help you save toward retirement:  Individual retirement arrangements (IRAs), 401(k) and 403(b) plans, Variable annuities  **IRAs**  An IRA, also known as an Individual Retirement Account, is the most basic sort of retirement arrangement. With an IRA, you deposit money into an account, which may include a combination of stocks, bonds, mutual funds, or Treasury securities.  These types of accounts are tax exempt and generally designed to help ensure adequate income for retirees. Though an IRA generally grows over time due to interest earned and your contributions, it may lose value depending on the stock market and your investment choices. You should talk to an experienced investment professional for help in making the best investments for you.  **Types of IRAs:**  A traditional IRA is a personal savings plan that gives you tax advantages for saving for retirement. Contributions to a traditional IRA may be tax deductible, based on the amount of your contribution and your income. The earnings on the amounts in your IRA are not taxed until they are distributed (you withdraw them). A traditional IRA can be established at many different financial institutions including banks, insurance companies, and brokerage firms.  A Roth IRA is also a personal savings plan, but operates somewhat the reverse of a traditional IRA. For instance, contributions to a Roth IRA are not tax deductible while contributions to a traditional IRA may be deductible on your annual income tax return. However, while distributions (including earnings) from a traditional IRA may be included in income, the distributions (including earnings) from a Roth IRA are not included in income. For both IRA types—traditional and Roth—earnings that remain in the account are not taxed. A Roth IRA can be established at the same types of financial institutions as a traditional IRA.  Under a payroll deduction IRA, an employee establishes an IRA (either a traditional or a Roth IRA) with a financial institution. The employee then authorizes his or her employer to transfer a certain amount, or percentage, of their pay into the IRA.  **401(k) and 403(b) Plans**  A 401(k) plan is a retirement savings plan established by an employer that lets its employees set aside a percentage of their pay for retirement before taxes are taken out. This can help lower your tax bill.  A 403(b) plan is a retirement savings plan for employees of public schools and certain tax-exempt organizations.  **Characteristics of 401(k) and 403(b) plans include:**  A maximum contribution limit each year—you can invest up to a certain amount of your own money, not counting interest earned  A penalty, or fee, on early withdrawal before age 59½, except in special circumstances  Portability—you can move the money into an IRA (called rolling over), or roll it over into a new 401(k) plan if you change employers  Choices—generally, you get to choose how to invest the money in your plan  Your employer may match a certain percentage of the money you invest in the retirement plan; not taking advantage of this match is like leaving free money on the table  **Variable Annuities**  A variable annuity is an insurance contract that invests your premium in various mutual fund-like investments. It is usually sold by financial brokers and insurance agents as an investment toward retirement. The brokers and agents earn a commission on the annuity sold, and may be motivated to sell you something that may not be best for you financially.  Variable annuities can be very costly. You should hold the annuity for at least 10 to 20 years to justify the fees. | | |