FLIP TEACHER'S GUIDE

Full Companion Curriculum to

"50 Things You Shouldn't Learn the Hard Way: A Teen's User Manual for Money"

by Deniz Yaveroglu

Published by YEI Press, developed through the Financial Literacy Introduction Program (FLIP)
at the Youth Economics Initiative (YEI)

Prepared by: Windsor Kiang, Curriculum Developer, YEI

PURPOSE OF THIS GUIDE

This guide is designed to help teachers use "A Teen's User Manual for Money" as an active classroom resource rather than an independent reading assignment. Each of the six chapters in this guide corresponds to a chapter of the handbook and includes learning objectives, key takeaways, discussion questions, one to two classroom activities or case studies, and an optional exit ticket. Teachers may use the full sequence across a semester, assign individual chapters as standalone lessons, or adapt sections for shorter class periods.

This guide is intended for use in middle school and high school classrooms, EconClubs, and FLIP-affiliated community workshops. It assumes no prior finance background from either students or instructors. All content is formatted for direct classroom use and may be copied into handouts or slides as needed.

HOW TO USE THIS GUIDE

Each chapter follows the same five-part structure:

1. **Learning Objectives:** What students should be able to do by the end of the lesson.
2. **Key Takeaways:** A short summary of each concept, suitable as a teacher reference or student handout.
3. **Discussion Questions:** Prompts to open class conversation or structure small-group discussion.
4. **Activities and Case Studies:** One to two hands-on exercises that apply the chapter's concepts.

5. **Optional Exit Ticket:** A short, low-stakes check for understanding to close the lesson.

Suggested pacing: One chapter per week over a six-week unit, or one chapter per class period for a condensed six-day sequence. Each chapter is designed to fit within a single 50-minute class period, with options to split into two shorter sessions where noted.

GUIDE AT A GLANCE

Chapter	Title	Core Concepts
1	The Basics of Value	Money as a tool, the 50/30/20 rule, opportunity cost, inflation, assets vs. liabilities, the time value of money
2	Earning and Employment	Gross vs. net income, pay stubs, FICA, the W-4, W-2 vs. 1099, minimum vs. living wage, tax brackets, filing taxes, direct deposit
3	Banking and Spending	Checking and savings accounts, FDIC insurance, overdraft protection, payday loans, zero-based and envelope budgeting, unit pricing, subscriptions, emergency funds
4	Credit and Debt	Credit vs. debit, FICO scores, credit reports, APR, minimum payments, secured cards, co-signing, BNPL, auto loans, good vs. bad debt, bankruptcy
5	Education and Housing	FAFSA, student loans, grants and scholarships, trade

Chapter	Title	Core Concepts
		schools and apprenticeships, renting, renter's insurance
6	Investing and Wealth Building	Compounding and the Rule of 72, stocks vs. bonds, the stock market, index funds and ETFs, Roth IRA, 401(k) matching, risk vs. reward, the wealth mindset

CHAPTER 1

THE BASICS OF VALUE

What money actually is, why time is a student's biggest financial asset, and how every financial decision carries a hidden cost.

Suggested time: One 50-minute class period, or two 25-minute sessions

HANDBOOK CONCEPTS COVERED

1. Money as a Tool
2. The 50/30/20 Rule
3. Opportunity Cost
4. Inflation
5. Assets vs. Liabilities
6. The Time Value of Money

LEARNING OBJECTIVES

By the end of this chapter, students should be able to:

- Explain why money functions as a tool rather than a goal in itself.
- Apply the 50/30/20 rule to a sample budget.
- Identify the opportunity cost in a simple financial or time-based decision.
- Describe how inflation affects purchasing power over time.

- Distinguish between an asset and a liability using real-world examples.
- Explain why money today is worth more than the same amount of money in the future.

KEY TAKEAWAYS

1. **Money as a Tool:** Money itself has no inherent value. Its worth comes from what it lets a person do: save, spend, invest, or exchange for goods and services.
2. **The 50/30/20 Rule:** A basic budgeting framework where 50 percent of income goes to needs, 30 percent to wants, and 20 percent to savings or debt repayment.
3. **Opportunity Cost:** Every choice involves giving up the next best alternative. There is no such thing as a free decision.
4. **Inflation:** The general rise in prices over time, which reduces how much a fixed amount of money can buy in the future.
5. **Assets vs. Liabilities:** An asset puts money in a person's pocket over time, while a liability takes money out.
6. **The Time Value of Money:** A dollar today is worth more than a dollar in the future because it can be saved, invested, or grown in the meantime.

DISCUSSION QUESTIONS

1. If money is a tool, what is it a tool for? What might change if students thought of money this way instead of as a goal?
2. Using the 50/30/20 rule, how would a student divide a 200 dollar monthly allowance or paycheck? What counts as a "need" versus a "want" at your age, and where do people disagree?
3. Describe a recent decision you made that involved an opportunity cost, even if it was not about money. What did you give up?
4. Why might a candy bar that cost 50 cents in 1990 cost over 2 dollars today? Who is most affected when prices rise faster than income?
5. Give one example of an asset and one example of a liability from your own life or your family's life. Can the same item be both, depending on how it is used?
6. Would you rather receive 100 dollars today or 100 dollars in five years? Why does the answer reveal something about the time value of money?

ACTIVITY 1: BUILD YOUR OWN BUDGET (50/30/20 RULE)

Format: Individual or pairs, 15 minutes
Instructions: Give each student a sample monthly income (suggested range: 150 to 800 dollars, representing an allowance, part-time job, or gig income). Students sort a provided list of expense categories (phone plan, transportation, clothing, savings, entertainment, school supplies, food) into "needs," "wants," and "savings/debt," then calculate what 50 percent, 30 percent, and 20 percent of their income would be.
Debrief: Have two or three students share their breakdowns and defend one categorization choice that classmates might disagree with (for example, is a phone plan a need or a want?).
Materials: Printed or digital worksheet with income scenarios and expense categories.

ACTIVITY 2 / CASE STUDY: THE OPPORTUNITY COST OF A DECISION

Format: Small groups (3 to 4 students), 15 minutes
Case study prompt: "Mia has 300 dollars saved. She is deciding between buying a used gaming console now or putting the money into a savings account that earns 4 percent interest per year, which she plans to use for a car in three years."
Instructions: In groups, students list what Mia gains and gives up with each choice, estimate roughly how much the 300 dollars would grow in three years at 4 percent (approximately 337 dollars, using a simplified estimate), and decide which option they would recommend, explaining their reasoning in terms of opportunity cost and the time value of money.
Debrief: Groups present their recommendation in one minute. Highlight that there is no single correct answer; the goal is to identify the trade-off clearly.

OPTIONAL EXIT TICKET

1. In one sentence, explain the difference between an asset and a liability.
2. Name one thing you would need to give up (the opportunity cost) if you spent 20 dollars today instead of saving it.
3. On a scale of 1 to 5, how confident do you feel explaining the 50/30/20 rule to a friend?

NOTES FOR TEACHERS

- Encourage students to use real numbers from their own lives where appropriate, but never require students to disclose specific personal or family financial details.
- The handbook's Chapter 1 TL;DR page can be assigned as a short recap reading before or after this lesson.

- **Vocabulary to preview with younger or ELL students:** asset, liability, inflation, opportunity cost, interest.

CHAPTER 2

EARNING AND EMPLOYMENT

Paychecks, taxes, pay stubs, and what nobody tells students about their first job offer.

Suggested time: One 50-minute class period, or two 25-minute sessions

HANDBOOK CONCEPTS COVERED

7. Gross vs. Net Income
8. Understanding Your Pay Stub
9. FICA Taxes
10. The W-4 Form
11. The W-2 vs. 1099
12. Minimum vs. Living Wage
13. Income Tax Brackets
14. Filing Taxes (The 1040)
15. Direct Deposit

LEARNING OBJECTIVES

By the end of this chapter, students should be able to:

- Distinguish between gross income and net income, and explain why financial decisions should be based on net income.
- Read and interpret the major sections of a sample pay stub.
- Explain the purpose of FICA taxes and the W-4 form.
- Compare the tax responsibilities of W-2 employment versus 1099 independent contract work.
- Explain why a job's wage should be evaluated against the local cost of living, not assumed to be sufficient.
- Describe, at a basic level, how tax brackets and filing a 1040 work.
- Explain the benefits of direct deposit over paper checks.

KEY TAKEAWAYS

1. **Gross vs. Net Income:** You cannot spend what you do not receive. Always base financial decisions on net income, not gross income.
2. **Understanding Your Pay Stub:** A pay stub explains where every dollar of a paycheck goes, and reviewing it regularly helps with accurate planning.
3. **FICA Taxes:** A mandatory federal payroll tax deducted from paychecks to support Social Security and Medicare.
4. **The W-4 Form:** A form completed when starting a job to ensure the correct amount of federal income tax is withheld from each paycheck.
5. **The W-2 vs. 1099:** The flexibility of 1099 contract work comes with added tax responsibility. Knowing your work status helps protect your cash flow.
6. **Minimum vs. Living Wage:** Never assume a job's pay covers your expenses. Always calculate whether it meets the cost of living in your area.
7. **Income Tax Brackets:** Earning more money never reduces take-home pay. A raise always increases net income, even if it pushes part of that income into a higher bracket.
8. **Filing Taxes (The 1040):** Filing taxes is about accuracy, not punishment. It ensures payments align with what is actually owed.
9. **Direct Deposit:** Direct deposit is faster, safer, and more reliable than paper checks.

DISCUSSION QUESTIONS

1. If a job advertises a 20 dollar hourly wage, why might your actual take-home pay be noticeably less? What gets taken out before you see it?
2. Why do you think FICA taxes are mandatory rather than optional, even for a first part-time job?
3. If you were offered two jobs, one with a W-2 and one with a 1099, which would you choose, and what would you need to research before deciding?
4. How would you find out whether a given wage counts as a living wage in your area? What would you need to know about your own expenses first?
5. A classmate says, "I don't want a raise because it will push me into a higher tax bracket and I'll take home less money." What is wrong with this reasoning?
6. Why might someone prefer a paper check over direct deposit, and why does the handbook argue this is usually the wrong choice?

ACTIVITY 1: READ THE PAY STUB

Format: Individual or pairs, 15 minutes
Instructions: Provide students with a sample, anonymized pay stub showing gross pay, FICA deductions, federal and state withholding, and net pay. Students identify and label each section, then calculate what percentage of gross pay was withheld in total.
Debrief: Discuss as a class why the gap between gross and net pay often surprises people starting their first job.
Materials: Sample pay stub handout (can be created using realistic but fictional figures).

ACTIVITY 2 / CASE STUDY: W-2 VS. 1099, AND IS THE WAGE ENOUGH?

Format: Small groups (3 to 4 students), 20 minutes
Case study prompt: "Jordan is offered two summer jobs. Job A pays 16 dollars an hour as a W-2 employee at a retail store. Job B pays 20 dollars an hour as a 1099 freelance tutor, but Jordan is responsible for setting aside money for taxes."
Instructions: Groups calculate approximate take-home pay for each option, using a simplified assumption such as setting aside 20 to 25 percent of 1099 income for taxes. Groups then research or estimate a rough living wage benchmark for a young adult in their region using a reputable source, such as the MIT Living Wage Calculator, and decide which job offer is more attractive, explaining their reasoning.
Debrief: Groups share their recommendation and the factors that mattered most to their decision, such as consistency of income, flexibility, or tax complexity.

OPTIONAL EXIT TICKET

1. In one sentence, explain the difference between gross and net income.
2. Name one reason a 1099 job requires more financial planning than a W-2 job.
3. On a scale of 1 to 5, how confident do you feel reading a pay stub?

NOTES FOR TEACHERS

- This chapter pairs well with a guest speaker from a school counseling or career center office, if available.
- Consider using the Bureau of Labor Statistics or the MIT Living Wage Calculator for local wage benchmarking during Activity 2.

- **Vocabulary to preview:** gross income, net income, withholding, FICA, W-4, W-2, 1099, tax bracket.

CHAPTER 3

BANKING AND SPENDING

Checking accounts, budgeting methods, and how to build a first emergency fund.

Suggested time: One 50-minute class period, or two 25-minute sessions

HANDBOOK CONCEPTS COVERED

16. Checking Accounts
17. Savings Accounts
18. FDIC Insurance
19. Overdraft Protection
20. Check Cashing and Payday Loans
21. Zero-Based Budgeting
22. Envelope System Budgeting
23. Retail vs. Unit Prices
24. Free Trials and Subscriptions
25. The Emergency Fund

LEARNING OBJECTIVES

By the end of this chapter, students should be able to:

- Explain the basic purpose of checking and savings accounts.
- Describe what FDIC insurance protects and up to what amount.
- Explain why overdraft protection and payday loans are expensive forms of borrowing.
- Compare zero-based budgeting and envelope system budgeting as two approaches to managing spending.
- Calculate and compare unit prices to evaluate value.
- Identify the risk of unmanaged free trials and recurring subscriptions.
- Explain the purpose of an emergency fund.

KEY TAKEAWAYS

1. **Checking Accounts:** A checking account is needed for day-to-day money management.
2. **Savings Accounts:** Savings grow best when they are automatic, kept separate from spending money, and earning a competitive interest rate.
3. **FDIC Insurance:** FDIC insurance protects deposits against a bank failure, for up to 250,000 dollars per depositor, per bank.
4. **Overdraft Protection:** Overdraft protection is a form of expensive borrowing and should be avoided whenever possible.
5. **Check Cashing and Payday Loans:** In personal finance, convenience often comes at a high cost.
6. **Zero-Based Budgeting:** This method prevents money from disappearing by deciding in advance where every dollar will go.
7. **Envelope System Budgeting:** Slowing down spending, often by physically separating cash into categories, leads to better spending decisions.
8. **Retail vs. Unit Prices:** Always compare unit prices. Value matters more than package size or sticker price.
9. **Free Trials and Subscriptions:** Regular reviews of recurring charges keep small expenses from becoming larger, unnoticed problems.
10. **The Emergency Fund:** An emergency fund turns a financial emergency into a manageable issue rather than a crisis.

DISCUSSION QUESTIONS

1. Why might a bank require a separate savings account instead of letting customers keep all their money in checking?
2. If FDIC insurance covers up to 250,000 dollars per depositor per bank, why does this limit matter for someone with multiple accounts or a family business?
3. Why do you think payday loans and check-cashing services are often located in neighborhoods with fewer traditional banking options? What does this suggest about who is most affected by their costs?
4. Which budgeting method, zero-based or envelope system, would work better for your own spending habits, and why?
5. Describe a time you bought a larger package assuming it was a better deal. Was it

actually cheaper per unit?

6. How many subscriptions do you think the average teenager or young adult has active without realizing it? Why does this happen?

ACTIVITY 1: UNIT PRICE SHOWDOWN

Format: Individual or pairs, 15 minutes
Instructions: Provide students with several pairs of products (for example, a 12-pack and a 24-pack of the same snack, or two brands of the same item in different sizes) along with total prices. Students calculate the unit price for each option and determine which is the better value.
Debrief: Discuss cases where the larger package was not actually the better deal, and why retailers might price items this way.
Materials: Printed or digital worksheet with product sizes and prices (real or representative).

ACTIVITY 2 / CASE STUDY: BUILD AN EMERGENCY FUND PLAN

Format: Small groups (3 to 4 students), 20 minutes
Case study prompt: "Alex earns 150 dollars a month from a part-time job and currently has no savings. Alex's car recently needed a 400 dollar repair that had to be paid for with a high-interest payday loan."
Instructions: Groups design a plan for Alex to build a small emergency fund going forward. They decide on a monthly savings target, identify which budgeting method (zero-based or envelope system) would help Alex stick to the plan, and estimate how many months it would take to reach a reasonable first goal, such as 300 to 500 dollars.
Debrief: Groups share their savings targets and reasoning. Discuss why even a small emergency fund can prevent reliance on costly short-term borrowing.

OPTIONAL EXIT TICKET

1. In one sentence, explain why FDIC insurance matters to someone choosing a bank.
2. Name one subscription or recurring charge you or your family currently pays for. Do you know its exact monthly cost?
3. On a scale of 1 to 5, how confident do you feel calculating and comparing unit prices?

NOTES FOR TEACHERS

- Real receipts or screenshots of unit pricing from grocery store websites can make Activity

1 more concrete.

- This chapter connects naturally to the 50/30/20 rule from Chapter 1. Consider referencing it when discussing where emergency fund savings fits into a budget.
- **Vocabulary to preview:** FDIC, overdraft, payday loan, zero-based budgeting, unit price, emergency fund.

CHAPTER 4

CREDIT AND DEBT

Credit scores, APR, minimum payments, and the common traps that catch first-time borrowers.

Suggested time: One 50-minute class period, or two 25-minute sessions

HANDBOOK CONCEPTS COVERED

26. Credit vs. Debit
27. The Credit Score (FICO)
28. Credit Reports
29. Annual Percentage Rate (APR)
30. Credit Card Minimum Payments
31. Secured Credit Cards
32. Co-Signing a Loan
33. Buy Now, Pay Later (BNPL)
34. Auto Loans
35. Good Debt vs. Bad Debt
36. Bankruptcy

LEARNING OBJECTIVES

By the end of this chapter, students should be able to:

- Explain the fundamental difference between credit and debit cards.
- Describe what a FICO score measures and what behaviors improve or harm it.
- Explain the purpose of a credit report and why it should be reviewed regularly.
- Calculate the cost difference between paying a credit card balance in full versus making only the minimum payment.
- Evaluate when a secured credit card, co-signing, or Buy Now Pay Later may be

appropriate or risky.

- Distinguish between good debt and bad debt.
- Explain why bankruptcy should be treated as a last resort.

KEY TAKEAWAYS

1. **Credit vs. Debit:** Debit cards use a person's own money, while credit cards borrow money that must be paid back later.
2. **The Credit Score (FICO):** FICO scores reward consistency. Paying bills on time and keeping balances low improves a score naturally over time.
3. **Credit Reports:** Reports from all three major credit bureaus should be reviewed at least once a year, with errors disputed immediately.
4. **Annual Percentage Rate (APR):** Paying a balance in full avoids interest entirely. Paying only the minimum keeps debt expensive and long-lasting.
5. **Credit Card Minimum Payments:** Minimum payments are structured to protect the lender, not the borrower.
6. **Secured Credit Cards:** A secured credit card allows a person to prove reliability before being trusted to borrow unsecured funds.
7. **Co-Signing a Loan:** A loan should never be co-signed unless the co-signer is fully prepared to repay the entire balance personally.
8. **Buy Now, Pay Later (BNPL):** If a purchase cannot be afforded in full today, it is worth reconsidering before using a BNPL plan.
9. **Auto Loans:** Total cost matters more than the size of the monthly payment.
10. **Good Debt vs. Bad Debt:** Borrowing is worthwhile only when it strengthens future finances rather than weakening them.
11. **Bankruptcy:** Bankruptcy should be used only when debt cannot realistically be repaid through any other plan.

DISCUSSION QUESTIONS

1. Why might someone choose to use a credit card instead of a debit card, even knowing it involves borrowing money?
2. What are two specific habits that would improve someone's FICO score over a year?
3. If you found an error on your credit report, what do you think the process of disputing it might involve?

4. Explain, in your own words, why paying only the minimum payment on a credit card can cost far more over time than paying the full balance.
5. Would you ever co-sign a loan for a close friend or family member? What would need to be true for you to feel comfortable doing so?
6. What is the difference between good debt and bad debt? Give one example of each from a young adult's life.

ACTIVITY 1: THE COST OF MINIMUM PAYMENTS

Format: Individual or pairs, 15 minutes
Instructions: Give students a sample credit card balance (for example, 1,000 dollars) and an APR (for example, 22 percent). Using a simplified calculation or an online minimum payment calculator, students estimate how much total interest would be paid, and how long it would take to pay off the balance, if only minimum payments were made, compared to paying a fixed larger amount each month.
Debrief: Discuss the gap between the two outcomes and why minimum payments are structured the way they are.
Materials: Sample balance and APR scenario; calculator or simplified payoff table.

ACTIVITY 2 / CASE STUDY: BNPL OR SAVE UP?

Format: Small groups (3 to 4 students), 15 minutes
Case study prompt: "Sam wants a 240 dollar pair of noise-canceling headphones. A Buy Now, Pay Later service offers four payments of 60 dollars every two weeks with no listed interest. Sam currently has 60 dollars saved."
Instructions: Groups discuss the risks of committing to four future payments against the option of saving for several more weeks and paying in full. Groups should consider what happens if Sam misses a BNPL payment, and whether the "no interest" framing changes their decision.
Debrief: Groups share their recommendation and identify at least one hidden risk of BNPL that is easy to overlook.

OPTIONAL EXIT TICKET

1. In one sentence, explain the difference between a credit card and a debit card.
2. Name one example of good debt and one example of bad debt.
3. On a scale of 1 to 5, how confident do you feel explaining what a credit score measures?

NOTES FOR TEACHERS

- This chapter deals with topics that can be sensitive if a student's family has experienced debt-related hardship. Keep examples hypothetical and avoid requiring personal disclosure.
- Free credit report access (through AnnualCreditReport.com in the United States) is worth mentioning as a legitimate, no-cost resource.
- **Vocabulary to preview:** APR, FICO, credit report, co-sign, BNPL, good debt, bad debt, bankruptcy.

CHAPTER 5

EDUCATION AND HOUSING

FAFSA, student loans, trade schools, and what to know before signing a first lease.

Suggested time: One 50-minute class period, or two 25-minute sessions

HANDBOOK CONCEPTS COVERED

37. FAFSA
38. Student Loans
39. Grants, Scholarships, and Loans
40. Trade Schools and Apprenticeships
41. Renting an Apartment
42. Renter's Insurance

LEARNING OBJECTIVES

By the end of this chapter, students should be able to:

- Explain why submitting the FAFSA early matters.
- Describe how and when interest accrues on student loans.
- Rank financial aid types (grants, scholarships, loans) in order of preference and explain why.
- Evaluate trade schools and apprenticeships as valid alternatives to a four-year degree.
- Identify the key factors involved in renting an apartment for the first time.

- Explain the purpose and value of renter's insurance.

KEY TAKEAWAYS

1. **FAFSA:** The FAFSA should be submitted as soon as it opens, since aid is often limited and awarded early.
2. **Student Loans:** When interest begins accruing matters as much as how much is borrowed.
3. **Grants, Scholarships, and Loans:** Not all financial aid is equal. Free money, such as grants and scholarships, should always be pursued before loans.
4. **Trade Schools and Apprenticeships:** Education and career paths should be evaluated based on long-term value, not simply tradition.
5. **Renting an Apartment:** Renting requires preparation. Income, credit history, and documentation matter as much as the monthly budget.
6. **Renter's Insurance:** Renter's insurance is a low-cost way to protect against potentially high-cost risks.

DISCUSSION QUESTIONS

1. Why might submitting the FAFSA just a few weeks later than necessary cost a student access to certain aid?
2. Explain in your own words why the timing of when student loan interest starts accruing matters.
3. If you were offered 5,000 dollars in grants, 5,000 dollars in scholarships, and 5,000 dollars in loans, how would you prioritize using each, and why?
4. What might lead someone to choose a trade school or apprenticeship over a four-year college, and how should that decision be evaluated?
5. What documentation or financial history do you think a landlord typically wants to see before approving a rental application?
6. Why might a renter assume their belongings are covered by the building owner's insurance, and why is that assumption usually wrong?

ACTIVITY 1: RANK THE AID

Format: Individual or pairs, 15 minutes

Instructions: Present students with a list of six to eight fictional financial aid offers (mixing

grants, scholarships, subsidized loans, and unsubsidized loans) with brief descriptions. Students rank them in the order they should be accepted or prioritized and justify their top and bottom choice.
Debrief: Compare rankings as a class and discuss any disagreements, particularly around loan types.
Materials: List of sample aid offers with short descriptions.

ACTIVITY 2 / CASE STUDY: FIRST APARTMENT CHECKLIST

Format: Small groups (3 to 4 students), 20 minutes
Case study prompt: "Taylor, age 20, just received a job offer in a new city and needs to rent a first apartment within the next month."
Instructions: Groups create a checklist of what Taylor needs to prepare before applying (such as proof of income, credit history, references, and a security deposit), identify at least one financial risk Taylor should plan for (such as needing a co-signer or guarantor), and decide whether Taylor should purchase renter's insurance and explain why.
Debrief: Groups share one item from their checklist that they think is most commonly overlooked by first-time renters.

OPTIONAL EXIT TICKET

1. In one sentence, explain why grants and scholarships should be pursued before loans.
2. Name one document or piece of financial history a landlord might request from a rental applicant.
3. On a scale of 1 to 5, how confident do you feel explaining what renter's insurance covers?

NOTES FOR TEACHERS

- If available, invite a school counselor to speak briefly about FAFSA timelines and local scholarship resources.
- This chapter may be especially relevant to juniors and seniors. Consider timing it to align with college or career planning units.
- **Vocabulary to preview:** FAFSA, subsidized loan, unsubsidized loan, grant, scholarship, lease, security deposit, renter's insurance.

CHAPTER 6

INVESTING AND WEALTH BUILDING

Compounding, index funds, Roth IRAs, and why starting early matters more than starting big.

Suggested time: One 50-minute class period, or two 25-minute sessions. This chapter may benefit from an additional session given its density.

HANDBOOK CONCEPTS COVERED

43. Compounding and the Rule of 72
44. Stocks vs. Bonds
45. The Stock Market
46. Index Funds and ETFs
47. Roth IRA
48. 401(k) Plans and Employer Matching
49. Risk vs. Reward
50. The Wealth Mindset

LEARNING OBJECTIVES

By the end of this chapter, students should be able to:

- Apply the Rule of 72 to estimate how long an investment takes to double.
- Distinguish between stocks and bonds and explain the role each plays in a portfolio.
- Explain, at a basic level, how stock prices are determined.
- Explain why index funds and ETFs reduce risk compared to owning individual stocks.
- Describe the basic tax advantage of a Roth IRA.
- Explain what employer matching in a 401(k) means and why it is valuable.
- Explain the relationship between risk and reward in investing.
- Articulate, in their own words, what a healthy long-term "wealth mindset" looks like.

KEY TAKEAWAYS

1. **Compounding and the Rule of 72:** Time is the most valuable advantage in investing. Starting early, even with small amounts, matters more than starting with a large sum.

2. **Stocks vs. Bonds:** Stocks drive growth, while bonds provide stability. Balancing both helps manage risk over time.
3. **The Stock Market:** Stock prices reflect real-time negotiation between buyers and sellers, not guesses or guarantees.
4. **Index Funds and ETFs:** Diversification reduces risk and increases consistency. Owning a broad slice of the market tends to outperform betting on a single company over the long run.
5. **Roth IRA:** Paying taxes on contributions now can unlock decades of tax-free growth later.
6. **401(k) Plans and Employer Matching:** Employer matching functions as free money and should be taken advantage of whenever available.
7. **Risk vs. Reward:** Risk becomes manageable when aligned with time horizon. Short-term volatility is the cost of long-term growth.
8. **The Wealth Mindset:** Money is a tool, time is the reward, and building wealth ultimately means buying freedom for one's future self.

DISCUSSION QUESTIONS

1. Using the Rule of 72, roughly how many years would it take an investment to double at an 8 percent annual return? What does this tell you about starting to invest at 18 versus 28?
2. Why might a young investor hold more stocks than bonds, while someone close to retirement might hold more bonds than stocks?
3. If a stock's price is determined by buyers and sellers rather than a fixed value, what does that imply about trying to predict short-term price movements?
4. Why does owning an index fund that tracks hundreds of companies reduce risk compared to owning stock in a single company?
5. Why might paying taxes now, through a Roth IRA, be worth it in exchange for tax-free growth decades later?
6. If an employer offers to match 401(k) contributions up to a certain percentage, why is not taking full advantage of this often described as leaving free money on the table?

ACTIVITY 1: THE RULE OF 72 IN ACTION

Format: Individual or pairs, 15 minutes

Instructions: Using the Rule of 72 (72 divided by the annual interest rate equals the approximate number of years to double an investment), students calculate how long it would

take 1,000 dollars to double at several different rates (for example, 2 percent, 6 percent, and 10 percent). Students then compare the outcome of investing 1,000 dollars at age 18 versus age 30, assuming the same rate of return, to see the effect of starting earlier.
Debrief: Discuss how much of the difference in outcomes comes from time rather than the amount originally invested.
Materials: Rule of 72 worksheet with blank calculation rows.

ACTIVITY 2 / CASE STUDY: BUILD A STARTER PORTFOLIO

Format: Small groups (3 to 4 students), 20 minutes
Case study prompt: "Priya, age 22, just started her first full-time job. Her employer offers a 401(k) with a 50 percent match up to 6 percent of her salary, and she is deciding how to begin investing."
Instructions: Groups decide, in order, what Priya should prioritize (for example, contributing enough to get the full employer match, then considering a Roth IRA, then considering additional index fund investing), and explain why an index fund might be a reasonable starting point compared to picking individual stocks. Groups should also discuss how Priya's risk tolerance might reasonably differ from that of a relative nearing retirement.
Debrief: Groups share their prioritized plan and compare approaches across the class.

OPTIONAL EXIT TICKET

1. In one sentence, explain why employer 401(k) matching is often called free money.
2. Using the Rule of 72, how long would it take an investment to double at a 9 percent annual return?
3. On a scale of 1 to 5, how confident do you feel explaining the difference between a stock and a bond?

NOTES FOR TEACHERS

- This chapter covers the most technical content in the handbook. Consider pacing it across two sessions if time allows.
- Emphasize that this guide is educational in nature and is not financial advice. Avoid recommending specific stocks, funds, or financial products.
- **Vocabulary to preview:** compounding, Rule of 72, stocks, bonds, index fund, ETF, Roth IRA, 401(k), employer match, risk tolerance.