

Unit 6 · Weeks 7-8

Investing & Wealth

Making your money work for you

LESSON 6.1

Compound interest — the 8th wonder

LEARNING OBJECTIVES

- Calculate compound interest over time
- Apply the Rule of 72
- Compare outcomes of investing early vs. later
- Explain why time is the most powerful variable in investing

READ THIS FIRST

There is one mathematical truth about money that changes how people think about time once they fully understand it: money grows **exponentially**, not linearly. A single dollar invested today is worth more than a dollar invested next year — not just by the interest on that dollar, but by the interest that dollar earns on its interest, and the interest earned on that interest, and so on indefinitely. Albert Einstein reportedly called **compound interest** "the eighth wonder of the world." Whether he actually said that doesn't matter. The math is undeniably extraordinary.

Here's what exponential growth actually looks like. You invest \$1,000 at a 7% average annual return. After 10 years: \$1,967. After 20 years: \$3,870. After 30 years: \$7,612. After 40 years: \$14,974. After 50 years: \$29,457. You started with \$1,000 and ended with nearly \$30,000 — without adding another penny. The money tripled in the second 20 years compared to the first 20 years, and nearly tripled again in the final 10. This acceleration is the signature of compound growth: it gets faster over time because there's more money earning interest.

The Rule of 72 is a mental math shortcut that tells you how long it takes money to double at a given interest rate. Divide 72 by the interest rate and you get the approximate number of years to double. At 6%: $72 \div 6 = 12$ years to double. At 8%: $72 \div 8 = 9$ years. At 12%: $72 \div 12 = 6$ years. This also works in reverse for debt: at 24% APR credit card interest, your debt doubles in 3 years if you don't pay it down. The **Rule of 72** makes compound interest intuitive — you can calculate **doubling time** in your head.

Time is the most critical input to compound growth — more important than the amount you invest or even the interest rate. Consider two investors. Investor A starts at 16, invests \$100/month for

10 years (until 26), then stops completely. Investor B starts at 26 and invests \$100/month for 40 years (until 66). At 7% return, Investor A ends up with more money — despite investing for only 10 years versus 40 — because those early years of compounding have so much more time to multiply. Investor A invested \$12,000 total. Investor B invested \$48,000 total. Investor A wins because starting early beats investing more.

This is why starting to invest at 16 or 17 is not just a good idea — it's one of the highest-return financial decisions you'll ever make. Every year you delay costs you not just one year of returns, but one year of compounding on top of all future compounding. The specific numbers depend on your return rate, but at 7% (a reasonable long-term stock market average after inflation), money doubles roughly every 10 years. Starting at 17 instead of 27 means your investments have one extra doubling cycle — which at the end of a 50-year horizon can mean the difference between \$500,000 and \$1,000,000 from the same monthly contributions.

Compound interest works against you when you borrow with exactly the same mathematical force. A credit card balance at 22% APR doubles in about 3.3 years if you make only minimum payments. A \$2,000 balance becomes \$4,000 becomes \$8,000 — without a single new purchase — if you only pay minimums and the rate is high enough. Debt and savings are the same math running in opposite directions. The goal of personal finance is to make compound interest work for you (through investing) while avoiding situations where it works against you (through high-interest debt).

What \$50/month from age 16 becomes: *At 7% average annual return invested monthly until age 65, \$50/month = \$600/year. You'll have invested \$29,400 total over 49 years. At compound growth, you'd have approximately \$280,000 at retirement. The same \$50/month starting at 26 (39 years of investing) yields about \$135,000. The 10-year head start is worth \$145,000. That's the cost — or the gift — of time. You have more of it right now than at any point in your life.*

KEY VOCABULARY

Term	Definition
Compound interest	Interest earned on both your original principal AND on previously accumulated interest — the mechanism behind exponential growth
Simple interest	Interest calculated only on the original principal — does not compound, grows linearly instead of exponentially
Rule of 72	A shortcut: divide 72 by the annual interest rate to estimate how many years it takes for money to double
Principal	The original amount of money invested or borrowed, before any interest is added
Rate of return	The annual percentage gain on an investment — 7% is the commonly used inflation-adjusted estimate for stock market returns
Investment horizon	The length of time you plan to hold an investment — longer horizons allow compound interest to produce dramatic results
Future value	What a sum of money will be worth at a specific future date, given a rate of return and time period
Doubling time	The number of years it takes for an investment to double in value — calculated using the Rule of 72

LESSON 6.2

Stocks, bonds, and mutual funds

LEARNING OBJECTIVES

- Define stocks, bonds, and mutual funds
- Explain the risk/return relationship
- Describe what diversification means
- Read a basic stock price chart

READ THIS FIRST

Investing is not gambling — it is **ownership**. When you buy a share of **stock**, you own a fraction of a real business with real employees, real products, and real earnings. You're not betting on a number going up; you're becoming a part-owner of the global economy. That reframes everything about how you think about market crashes, long-term holding, and **risk**. When stock prices drop, you haven't "lost money" if you haven't sold — you own the same fraction of the same company. Short-term price volatility is the cost of long-term returns.

A **stock** (also called a share or equity) represents partial ownership of a company. When a company wants to raise money, it sells ownership stakes to the public — that's a stock offering. If the company grows and becomes more profitable, your ownership stake is worth more. If you hold a **dividend**-paying stock, the company also distributes a portion of its profits to shareholders regularly. Stocks historically return about 7–10% annually over long periods (after inflation, closer to 7%), but with significant volatility year to year — in any given year, the market might rise 30% or fall 30%. Long holding periods smooth out that volatility and capture the long-term average.

A **bond** is a loan you make to a government or corporation. When you buy a **bond**, you're lending money in exchange for regular interest payments and the return of your principal at a set maturity date. Bonds are generally less volatile than stocks and pay a fixed return, but they historically offer lower long-term returns — typically 2–5% annually. Bonds serve a different purpose: stability and income. As investors approach retirement, they typically shift some of their **portfolio** from stocks to bonds to reduce the risk of a major market crash wiping out savings they'll need soon.

A **mutual fund** pools money from many investors to buy a diversified portfolio of stocks, bonds, or both. Instead of picking individual companies, you buy shares of the fund — and the fund's professional manager selects and manages the underlying investments. This gives individual investors instant **diversification** (owning small pieces of hundreds of companies) that would be impossible to replicate

by buying individual stocks with limited capital. The cost of this professional management is an **expense ratio** — an annual fee expressed as a percentage of your assets, typically 0.5–1.5% for actively managed funds.

Index funds are a specific type of **mutual fund** that track a market index — like the S&P 500 (the 500 largest U.S. companies) — rather than trying to beat the market through active selection. Because they don't require active management, they charge dramatically lower fees: expense ratios of 0.03–0.10% versus 0.5–1.5% for active funds. Decades of data show that the vast majority of actively managed funds fail to outperform a simple S&P 500 index fund over 10+ year periods, once fees are accounted for. This is why index fund investing has become the dominant recommendation in personal finance.

Diversification is the practice of spreading investments across different asset types, industries, and geographies to reduce risk. If you own stock in 500 companies across many industries, one company failing or one sector struggling doesn't significantly damage your portfolio. If you own stock in only one company and it collapses, you lose everything. "Don't put all your eggs in one basket" is financial advice that literally describes the value of diversification. A total stock market index fund provides diversification across thousands of companies with a single investment.

The simplest investment portfolio: *A single S&P 500 or total stock market index fund in a Roth IRA is a complete, diversified investment strategy for most young investors. It costs almost nothing in fees, requires no active management, has historically returned 7–10% annually over long periods, and grows tax-free in a Roth account. You don't need to pick stocks, read earnings reports, or monitor daily prices. Buy consistently, hold for decades, ignore the noise. That's it.*

KEY VOCABULARY

Term	Definition
Stock	A fractional ownership stake in a company — entitles you to proportional voting rights, dividends, and claims on assets
Bond	A loan you make to a government or corporation in exchange for fixed interest payments plus return of principal at maturity
Mutual fund	A pooled investment vehicle that holds many stocks or bonds — allows small investors to achieve instant diversification
Dividend	A portion of a company's profits paid to shareholders, typically quarterly
Diversification	Spreading investments across many assets so that no single failure can significantly damage your overall portfolio
Asset class	A category of investments with similar characteristics — stocks, bonds, real estate, and cash are the major asset classes
Bear market	A market decline of 20% or more from recent highs — historically temporary, followed by recovery and new highs
Risk	The possibility that an investment will lose value — generally higher potential returns come with higher risk

LESSON 6.3

Index funds & ETFs

LEARNING OBJECTIVES

- Explain the difference between index and actively managed funds
- Define expense ratio and calculate its impact over 30 years
- Describe dollar-cost averaging
- Identify low-cost index funds for a beginner

READ THIS FIRST

An **index fund** is one of the most powerful financial inventions of the 20th century — and one of the simplest. Instead of paying a team of analysts to pick winning stocks, an **index fund** simply buys every stock in a market index in proportion to its size. The **S&P 500** index, for example, tracks the 500 largest publicly traded companies in the United States. An S&P 500 index fund owns a tiny slice of all 500 — Apple, Microsoft, Amazon, and 497 others — automatically, without any human stock-picking decisions. No predictions, no guessing, no expensive management team. The result: instant diversification, extremely low costs, and — historically — better performance than most actively managed funds over long periods.

The math on fees is where index funds win decisively. The cost of running a fund is expressed as an **expense ratio** — a percentage of your assets deducted annually. A typical actively managed mutual fund charges 0.5–1.5% per year. A Vanguard or Fidelity **S&P 500** index fund charges 0.03–0.04%. On \$10,000 invested for 30 years at 7% return: at 1% **expense ratio**, you end up with about \$57,400. At 0.04%, you end up with about \$74,800. That \$17,400 difference came entirely from fees — not from making better investment decisions. Fees compound against you just like returns compound for you.

Why do actively managed funds lose to index funds? Several reasons. First, fees: active funds must outperform the market by at least their expense ratio just to break even with an index fund. Second, market efficiency: millions of professional investors are analyzing the same stocks simultaneously, making it extremely difficult to consistently find mispriced opportunities. Third, consistency: even fund managers who outperform in one period rarely sustain it. Studies consistently show that over 10–15 year periods, 80–90% of actively managed funds underperform their **benchmark** index after fees. The ones that do outperform often benefit from luck rather than skill, and identifying them in advance is nearly impossible.

ETFs (Exchange-Traded Funds) are index funds with one structural difference: they trade on stock exchanges throughout the day like individual stocks, rather than settling once daily like traditional mutual funds. You buy and sell ETF shares at current market prices rather than end-of-day net asset value. For long-term investors, this difference rarely matters — but ETFs often have slightly lower minimum investments (sometimes just one share) and can be slightly more tax-efficient. Vanguard's VOO, iShares' IVV, and SPDR's SPY are all S&P 500 ETFs with expense ratios under 0.10%. For most teenage investors, a Roth IRA holding a single S&P 500 ETF is a complete, excellent investment strategy.

Total market index funds go one step further than S&P 500 funds — they own not just the 500 largest companies but the entire U.S. stock market, including mid-size and small companies. This adds even broader diversification. Vanguard's VTI (Total Stock Market **ETF**) holds over 3,500 companies.

International index funds add exposure to non-U.S. markets — Europe, Asia, emerging markets — for even broader diversification. A common simple portfolio for young investors: 80–90% U.S. total market index fund, 10–20% international index fund. That's genuinely all most people need.

Dollar-cost averaging is the strategy of investing a fixed amount on a regular schedule — \$50 every month, for example — regardless of whether the market is up or down. When prices are high, your \$50 buys fewer shares. When prices are low, your \$50 buys more. Over time, this averages out your purchase price and removes the impossible task of "timing the market." It also removes emotion from the equation: you don't need to decide whether now is a good time to invest. You just invest, consistently, on schedule. The evidence strongly supports this approach over trying to predict market movements.

The simplest investment plan that works: *Open a Roth IRA. Set up a monthly automatic contribution. Invest 100% in a total stock market or S&P 500 index fund with an expense ratio under 0.10%. Increase contributions whenever your income increases. Never sell during a market crash. Do this from age 18 to 65 and the math does the rest. You don't need to read financial news, track individual stocks, or pay anyone for investment advice. The boring, simple approach beats almost everything else over a lifetime.*

KEY VOCABULARY

Term	Definition
Index fund	A fund that passively tracks a market index — low cost, broadly diversified, historically outperforms most active funds
ETF	Exchange-Traded Fund — an index fund that trades on a stock exchange like a share
Expense ratio	The annual fee charged by a fund as a percentage of assets — 0.03% is excellent, above 0.5% is expensive for passive funds
Passive investing	Buying and holding a broad market index rather than actively selecting stocks — historically outperforms most active strategies
Active investing	Paying managers to select specific stocks attempting to beat the market — most funds fail to outperform after fees
S&P 500	An index of 500 large US companies representing approximately 80% of total US stock market value
Dollar-cost averaging	Investing a fixed dollar amount at regular intervals — automatically buys more shares when prices are low
Benchmark	The index a fund is measured against to evaluate whether it is outperforming or under-performing the market

LESSON 6.4

Roth IRA for teenagers

LEARNING OBJECTIVES

- Explain how a Roth IRA works and why it's tax-advantaged
- Calculate projected growth started at different ages
- Describe the earned income requirement
- Compare Roth IRA to Traditional IRA

READ THIS FIRST

A **Roth IRA** is probably the single best financial vehicle available to a teenager — and most teenagers have no idea it exists. Here's the core concept: you contribute money you've already paid taxes on, it grows completely tax-free for decades, and you pay zero taxes when you withdraw it in retirement. You invest after-tax dollars now and get the entire growth tax-free forever. For a teenager in the 10–12% tax bracket investing for 50 years, this is an extraordinary deal that gets harder to replicate as you get older and move into higher tax brackets.

The rules are straightforward but important. First, you must have **earned income** — money from a job, babysitting, freelance work, or any taxable work. You cannot contribute investment income, gifts, or allowance (unless that allowance is compensation for real work). Second, your annual contribution cannot exceed your **earned income** for the year. If you earned \$1,200 working this summer, you can contribute up to \$1,200. Third, the annual maximum contribution is \$7,000 (in 2025) — you can't contribute more than that even if you earned more. Fourth, you must be under the income limit — for 2025, single filers earning under \$150,000 can contribute the full amount. This limit won't affect most teenagers but is worth knowing.

Traditional IRA vs. Roth IRA — why does the order of taxation matter?

A **Traditional IRA** gives you a tax deduction now (reducing this year's taxable income) but taxes you on withdrawals in retirement.

A **Roth IRA** gives you no deduction now but zero taxes on withdrawals. For teenagers, the Roth wins almost every time: you're likely in the lowest tax bracket of your entire life right now. Taking a deduction at 10–12% to avoid taxes later at potentially 22–32% is a bad trade. Pay the low tax now, get the large **tax-free growth** later.

The numbers are genuinely striking. If you invest \$1,000 in a **Roth IRA** at age 16 and earn a 7% average annual return, by age 65 that \$1,000 becomes approximately \$28,000 — completely tax-free. If you invest \$200/month from age 16 to 65 at 7%, you'll have contributed \$117,600 and end up with roughly \$1,000,000. A million dollars. From \$200/month starting at 16. The same \$200/month starting at 26 (10 years later) yields about \$487,000 — still impressive, but less than half, from starting a decade later. Time is the most valuable ingredient, and you have more of it right now than at any future point in your life.

How to open a Roth IRA as a minor:

If you're under 18, you need a **custodial Roth IRA** — a parent or guardian opens the account jointly with you and manages it until you reach the age of majority (18 in most states). Major brokerages that offer custodial Roth IRAs include Fidelity, Schwab, and Vanguard. The process takes about 20 minutes online. Once the account is open, the minor controls investment decisions with the custodian's oversight, and the account transfers fully to the minor at 18. At 18, you can open a regular Roth IRA on your own with no custodian needed.

What to invest in:

For a Roth IRA with a 40–50 year time horizon, the answer is simple: a low-cost, broad market index fund. Fidelity's FZROX (zero expense ratio total market fund), Vanguard's VTI, or any S&P 500 index fund with an expense ratio under 0.10%. Don't pick individual stocks in a retirement account — diversification is your friend when the money won't be touched for decades. Set up automatic monthly contributions. Invest in the index fund every time money goes in. Ignore market fluctuations. This is genuinely the entire strategy.

Early withdrawal rules are more flexible than most people realize. Roth IRA contributions (not earnings) can be withdrawn at any time, for any reason, with no taxes or penalties. So if you contribute \$2,000 and it grows to \$2,800 and you need money for an emergency, you can withdraw your original \$2,000 contribution tax- and penalty-free. The \$800 in earnings must stay until 59½ to avoid penalties (with some exceptions). This makes the Roth IRA slightly less "locked up" than many people assume — though withdrawing early defeats the compounding purpose.

The action item is simple: *If you have any earned income — from a job, mowing lawns, babysitting, selling anything — open a Roth IRA (or have a parent open a custodial one) and contribute whatever you can. Even \$500/year starting at 16 compounds into tens of thousands of dollars by retirement. The best time to open a Roth IRA was the day you earned your first dollar. The second best time is today.*

KEY VOCABULARY

Term	Definition
Roth IRA	An individual retirement account where you contribute after-tax dollars and all growth and qualified withdrawals are completely tax-free
Traditional IRA	An individual retirement account where contributions may be tax-deductible today, but withdrawals in retirement are taxed as income
Tax-free growth	Investment gains that accumulate without being taxed — a key feature of Roth IRAs that compounds powerfully over long horizons
Earned income	Wages, salaries, tips, or net self-employment profit — required to contribute to a Roth IRA; gifts and investment income do not qualify
Custodial account	An account opened and managed by a parent or guardian on behalf of a minor — transfers to the minor's sole control at age 18
Contribution limit	The maximum allowed annual contribution to a Roth IRA — \$7,000 in 2025, or your total earned income if less than \$7,000
Five-year rule	Roth IRA earnings cannot be withdrawn tax-free until the account is at least 5 years old and you are 59½ — contributions can be withdrawn anytime
Qualified withdrawal	A Roth IRA withdrawal that meets age and account-age requirements — completely tax-free and penalty-free

LESSON 6.5

Avoiding scams & bad advice

LEARNING OBJECTIVES

- Identify at least five red flags of financial fraud
- Explain what a fiduciary is and why it matters
- Critically evaluate social media financial advice
- Apply the "too good to be true" test

READ THIS FIRST

Financial scams are growing faster than almost any other category of fraud — and young people are increasingly the primary target. The reason is counter-intuitive: younger people are more likely to report scams than older people (who often feel embarrassed to come forward), which means the data is clearer. But younger people are also more likely to be targeted through social media, online communities, and peer networks — platforms where scams spread fast and credibility is manufactured easily. Knowing the specific patterns is your best defense.

Investment scams follow predictable formulas. The **Ponzi scheme** pays early investors with money from later investors rather than actual returns — it works as long as new money keeps coming in, then collapses suddenly. Bernie Madoff ran the largest Ponzi scheme in history for decades. Modern versions appear on social media as "exclusive investment groups" or "copy trading" platforms. **Pump and dump** schemes inflate the price of a low-value asset (often a penny stock or obscure cryptocurrency) through coordinated promotion, then the promoters sell at the top while everyone who bought in loses. The promoters on TikTok or Discord who made you "aware" of the opportunity were the ones selling into your purchase.

Cryptocurrency scams deserve specific attention because they've become the dominant fraud category for people under 30. **Rug pulls** occur when developers launch a new token, attract investors, then abandon the project and withdraw all liquidity — leaving token holders with worthless assets. **Fake exchanges and wallets** look like legitimate platforms but steal your funds or private keys. **Romance scams** (also called "pig butchering") involve someone building a relationship with you online over weeks or months, then introducing an "investment opportunity" in crypto — once you send money, they disappear. **NFT wash trading** creates the illusion of demand by trading assets between controlled wallets to inflate perceived value before selling to real buyers.

The warning signs of any financial scam are remarkably consistent across different types: **guaranteed returns** with no risk (legitimate investments always carry risk), urgency and artificial deadlines ("this opportunity closes tonight"), pressure to recruit others, returns that seem impossibly high compared to anything legitimate, requests to pay in cryptocurrency, gift cards, or wire transfer (irreversible payment methods chosen because they can't be recalled), testimonials from people you can't independently verify, and the feeling that you were specifically selected or that you'd be foolish to miss this. Any combination of these signs should trigger immediate skepticism.

Bad financial advice is distinct from scams — it's not always illegal, but it can cost you just as much. Common sources of bad advice: **commission-based salespeople** selling financial products (whole life insurance, annuities, high-load mutual funds) that primarily benefit the seller. **Social media "finfluencers"** who promote products or platforms they're paid to recommend without disclosing the conflict of interest — the FTC requires disclosure, but enforcement is inconsistent. **Friends and family** who share financial advice based on their own experience without understanding that their situation may differ significantly from yours. The test for any financial advice: what is this person's incentive, and do they have a **fiduciary** duty to act in my interest?

A **fiduciary** is a financial professional legally required to act in your best interest. Fee-only financial advisors (paid by you directly, not by commission) are typically fiduciaries. Registered Investment Advisors (RIAs) have a fiduciary duty to clients. Broker-dealers and many financial salespeople operate under a lower "suitability" standard — they only need to recommend products that are "suitable," not necessarily best. When seeking financial advice, always ask: "Are you a fiduciary?" and "How are you compensated?" The answers reveal whose interests are being served.

If you think you've been scammed: Stop sending money immediately. Don't believe promises that you can get your money back if you pay more. Report to the FTC at reportfraud.ftc.gov, to your state attorney general, and to the FBI's Internet Crime Complaint Center (IC3) at ic3.gov. If it involved cryptocurrency, report to the CFTC at cftc.gov/complaint. Recovery is rare, but reporting prevents others from being victimized and occasionally leads to enforcement action. And remember — scams are designed by professionals who do this full time. Getting deceived is not evidence of stupidity. It's evidence of effective targeting.

The three questions that stop most scams: (1) *Would this opportunity still look good if I had 48 hours to research it? Scammers create urgency specifically to prevent research.* (2) *Can I independently verify the people, company, and returns using sources I found myself — not links they provided?* (3) *Would I be comfortable describing this investment to a skeptical, financially literate adult? If the answer to any of these is no, stop. Real opportunities can withstand scrutiny. Scams cannot.*

KEY VOCABULARY

Term	Definition
Ponzi scheme	A fraud where returns to early investors are paid using money from new investors rather than actual investment gains
Pyramid scheme	A business model where participants earn primarily by recruiting new members rather than selling real products
MLM	Multi-Level Marketing — a sales structure where participants earn commissions on both sales and recruits; FTC data shows most participants lose money
Finfluencer	A social media creator who provides financial advice or promotes financial products — may or may not be a fiduciary or licensed advisor
Fiduciary	A financial advisor legally required to act in your best interest at all times — only about 15% of advisors hold this standard
FOMO	Fear Of Missing Out — an emotional trigger exploited by scammers to push fast decisions before rational evaluation can occur
Due diligence	Researching an investment thoroughly before committing money — verifying registrations, reading disclosures, checking FINRA BrokerCheck
Guaranteed return	A promise of a specific investment return — always a red flag in legitimate investing, as all real investments carry risk

LESSON 6.6

Cryptocurrency & Digital Assets

LEARNING OBJECTIVES

- Explain what cryptocurrency is and how it differs from traditional investments
- Identify the key risks of crypto including volatility, exchange risk, and tax obligations
- Recognize pump-and-dump tactics and influencer promotion schemes
- Apply the 5% rule framework to evaluate any speculative investment

READ THIS FIRST

Walk into any high school and ask about **Bitcoin**. Most students have heard of it. Many have opinions about it. A growing number have bought some. But very few understand what it actually is — or why it carries risks that traditional investments don't.

Cryptocurrency is digital money that exists on a decentralized network called a **blockchain**. Unlike dollars in your bank account, crypto is not backed by a government, not insured by the FDIC, and not regulated by a central authority. Bitcoin was the first, created in 2009. Today there are thousands of **Altcoin**— Ethereum, Solana, Dogecoin, and countless others.

Here is what makes crypto genuinely different from stocks or index funds: when you buy a share of an index fund, you own a piece of real companies generating real revenue. When you buy Bitcoin, you own a digital asset whose value is determined entirely by what someone else will pay for it tomorrow. That is **speculative assets**, not investing in the traditional sense.

The **volatility** is real and extreme. Bitcoin lost more than 80% of its value between November 2021 and November 2022. A student who put in \$1,000 at the peak had \$180 a year later. Traditional index funds have never lost 80% of their value and stayed there.

Crypto held on an exchange is only as safe as that exchange. In 2022, FTX — one of the largest crypto exchanges in the world — collapsed overnight. Customers lost billions. There is no FDIC equivalent. No bailout. No recourse. If the platform fails, the money is gone. This is considered an **exchange risk**.

Taxes are more complicated than most people realize. Every crypto trade is a **taxable event** in the US. Selling Bitcoin: taxable. Trading Bitcoin for Ethereum: taxable. Using crypto to buy something: taxable. Many casual traders discovered significant tax bills they were not expecting.

Most teens encounter crypto through social media influencers who are frequently paid to promote specific coins. The tactic is called a **pump and dump**: promote a coin, watch new buyers drive the price up, sell at the peak, move on. It is legal in crypto in ways it would not be in traditional markets.

None of this means crypto will be worthless forever. Bitcoin has survived multiple crashes. But for a teen building their financial foundation, the order matters: emergency fund, Roth IRA, index funds — then, only after those are funded, a small speculative position if genuinely curious. Never money you cannot afford to lose entirely.

*Think about it: In November 2021, Bitcoin hit \$69,000. By June 2022 it had fallen to \$17,000 — a 75% drop in seven months. Someone who invested \$10,000 at the peak had \$2,500 left. The S&P 500 lost about 18% in that same period. **Volatility** cuts both ways — the same math that makes crypto exciting on the way up makes it devastating on the way down. Before investing in any **speculative asset**, ask yourself: could I afford to lose 75% of this and still be okay?*

KEY VOCABULARY

Term	Definition
Cryptocurrency	Digital currency secured by cryptography on a decentralized blockchain, not controlled by any government or central bank
Blockchain	A distributed digital ledger recording transactions across many computers, making records extremely difficult to alter
Bitcoin	The first and largest cryptocurrency by market value, created in 2009 with a fixed supply capped at 21 million coins
Altcoin	Any cryptocurrency other than Bitcoin — Ethereum, Solana, Dogecoin, and thousands of others
Volatility	The degree to which an asset price fluctuates — crypto is considered extremely high volatility compared to stocks or bonds
Speculative asset	An asset whose value depends primarily on what future buyers will pay, not on underlying earnings or physical assets
Pump and dump	A scheme where promoters inflate an asset price through hype, sell at the peak, and leave late buyers with losses
Taxable event	Any crypto transaction triggering a tax obligation — selling, trading, or using crypto to purchase goods
Exchange risk	The risk that a crypto exchange platform fails or is hacked, resulting in loss of funds with no FDIC protection

LESSON 6.7

Capstone: Personal finance plan

LEARNING OBJECTIVES

- Create a written personal financial plan
- Set SMART goals for 1, 3, and 5 years
- Identify specific action steps and timelines
- Reflect on how this course changed your thinking about money

READ THIS FIRST

You have now covered every major area of personal finance: how money works, **budgeting**, saving, credit, taxes, and investing. A capstone isn't a test — it's a **synthesis**. The goal is to take everything you've learned and build one coherent, written **financial plan** that reflects your actual situation and your actual goals. A financial plan isn't a document you file and forget. It's a living guide you update as your life changes. The habit of having a written plan — and revisiting it regularly — is what separates people who achieve financial goals from people who just have financial intentions.

A complete personal financial plan has six components. First, a **net worth statement**: what you own (**assets**) minus what you owe (liabilities). For most teens, this is simple — maybe a savings account balance and a car, minus any debt. The number matters less than the habit: tracking **net worth** over time shows whether you're building wealth or falling behind. Second, a **monthly budget**: income minus all expenses, organized into needs, wants, and savings, using real numbers — not approximations. If your income varies, use the lowest reasonable month as your baseline.

Third, a **savings plan** with named goals. List at least three: one short-term (under 1 year), one medium-term (1–5 years), and one long-term (5+ years). Each goal needs a specific dollar amount and a target date. Divide the amount by the number of months to the date and you have a monthly savings target. This converts vague aspirations ("I want to save more") into concrete actions ("I need to transfer \$85/month to my car fund"). Fourth, a **debt management plan** if applicable: list every debt, its balance, its interest rate, and your monthly payment. Rank them by interest rate and direct any extra payments to the highest-rate debt first (the avalanche method) or the smallest balance first for momentum (the snowball method).

Fifth, a **credit plan**: where does your credit stand today, and what specific steps will you take over the next 12 months to build or improve it? If you have no credit history, your plan might be: apply for a secured card, use it for one recurring monthly charge, set up autopay for the full balance. If you have some history, your plan might focus on lowering utilization or ensuring every payment is on time. Sixth,

an **investment plan**: when will you open a Roth IRA, how much will you contribute monthly, and in what will you invest? Even if the answer is "when I start my first job" and "\$50/month in a Vanguard index fund," writing it down makes it a plan rather than a hope.

The best financial plan is one you'll actually use. That means it needs to be specific enough to guide decisions ("I have \$200 extra this month — my plan says it goes to my **emergency fund** until I hit \$1,000") and flexible enough to survive real life (car breaks down, income dips, unexpected expense). Build in a review cadence: monthly to check your budget against actual spending, quarterly to review your savings progress and adjust contributions, annually to update your net worth and revisit your long-term goals.

Talking about money with the people in your life is part of a healthy financial plan. Financial stress is one of the leading causes of relationship conflict. Families that talk openly about money — what they spend, what they save, what they worry about, what they're working toward — handle financial decisions better and fight about money less. The skills you've built in this curriculum aren't just personal tools. They're communication skills. "Here's my budget. Here's what I'm saving for. Here's my plan for the next year." That conversation, at any age, is a sign of financial maturity.

Your plan starts now: *Don't wait until you have a "real job" or "enough money" to start a financial plan. Write your plan based on your current reality. What do you earn? What do you spend? What are you saving toward? What debt do you have? What's your credit situation? What's your first investment move? A plan built on \$200/month is more valuable than a theoretical plan built on future income that doesn't exist yet. Start where you are.*

KEY VOCABULARY

Term	Definition
Financial plan	A written document integrating your budget, savings, credit, tax, and investment strategies into a coordinated roadmap
Net worth	Total assets minus total liabilities — the most useful single number for tracking overall financial health over time
SMART goal	A goal that is Specific, Measurable, Achievable, Relevant, and Time-bound — a wish with a deadline, dollar amount, and mechanism
Financial independence	The point at which passive income covers living expenses — work becomes optional
Milestone	A specific measurable checkpoint toward a larger goal — helps track progress and maintain motivation
Action step	A specific concrete next action — not "save more" but "open a Fidelity Roth IRA this Saturday and contribute \$500"
Asset	Anything you own that has monetary value — savings accounts, investments, vehicles, property
Liability	A financial obligation or debt you owe — student loans, credit card balances, car loans