

Unit 1 · Week 1

Money Fundamentals

How money works & basic concepts

LESSON 1.1

What is money?

LEARNING OBJECTIVES

- Explain why barter systems have limitations
- Describe the three functions of money
- Distinguish between commodity and fiat currency
- Explain how inflation erodes purchasing power

READ THIS FIRST

Before money existed, people used **barter** — trading goods or services directly with each other. If you were a farmer who grew wheat and needed shoes, you had to find a cobbler who both had shoes and wanted wheat, at the same time, in matching quantities. Economists call this the **double coincidence of wants** problem. It sounds manageable until you realize: what if the cobbler wants meat, not wheat? Now you need to find a farmer who wants shoes so you can get meat to trade for shoes. Every transaction becomes a chain of negotiations. This is why **barter** economies stay small — they simply cannot scale.

Every civilization on earth, independently, solved this problem the same way: they invented money. Not because a government planned it, but because people naturally gravitated toward one commodity that everyone was willing to accept. In different places and times, that commodity has been shells, salt, beads, tobacco, gold, and silver. What made these work wasn't magic — it was scarcity (not everyone could get unlimited amounts), durability (it didn't rot or break), and divisibility (you could make change). These are the same properties your dollar bill has today.

Money works because it serves **three functions** — and all three must work for something to truly be money. First, it's a **medium of exchange**: both parties in any transaction accept it, which eliminates the need for a perfect barter match. Second, it's a **store of value**: unlike baked goods or fish, money doesn't go stale — you can earn it today and spend it next year. Third, it's a **unit of account**: money gives us a common measuring stick so we can compare completely different things. Without it, how would you decide if an hour of tutoring is worth three haircuts or half a bicycle? Money lets us price everything in the same terms.

Here's something that surprises most people: a dollar bill is just paper. It has almost no physical value. So what gives it value? The answer is **legal tender** status and collective trust. **Legal tender** means the

government has officially declared that dollars must be accepted as payment for debts in the United States. Everyone — businesses, landlords, courts — is legally required to accept it. Because everyone knows everyone else will accept it, it has value. This kind of money is called **fiat currency**: the government declares it money, and so it is. This is different from **commodity money**, like a gold coin, which had value because the metal itself was scarce and useful — you could always melt it down and use the gold for something else.

The U.S. moved away from **commodity money** in stages. Until 1971, dollars were backed by gold — you could theoretically exchange your dollars for a fixed amount of gold. Most of the world's major currencies — euros, yen, pounds — are also fiat currencies today. This isn't necessarily bad; it gives governments flexibility to manage their economies. But it does create one important risk.

That risk is inflation. **Inflation** means a general rise in prices over time — which is the same as saying your money buys less than it used to. Here's why it happens: imagine the economy has \$1 trillion in circulation and produces \$1 trillion worth of goods. Each dollar equals one dollar of stuff. Now the government prints another \$1 trillion without producing any new goods. There's now \$2 trillion chasing the same goods — so prices roughly double. Your dollar now only buys what 50 cents used to buy. This is why "just print more money" isn't a real solution to poverty or debt. The opposite of inflation is **deflation** — when prices fall. That sounds good, but it's actually dangerous: if people expect prices to drop, they stop spending and wait, which slows the whole economy down.

So who prevents the government from printing unlimited money? In the U.S., that's the job of the Federal Reserve — the country's central bank. The Fed controls the money supply and sets interest rates to try to keep inflation low and stable, ideally around 2% per year. A little inflation is considered healthy because it encourages spending. When inflation gets too high — like it did in 2021–2023 when it hit 8–9% — the Fed raises interest rates to slow borrowing and cool the economy down.

Think about it: *In 1950, a movie ticket cost about \$0.46. In 2024, the average is over \$13.00. That's inflation at work over 74 years. Your grandparents' dollar and your dollar are both called "one dollar" — but they buy very different amounts. This is also why keeping cash under a mattress is actually a losing strategy: every year, inflation quietly erodes what that cash can buy. Understanding this is one of the most important money concepts you'll ever learn.*

KEY VOCABULARY

Term	Definition
Barter	Trading goods or services directly with another person, without using money
Currency	Money in any form — coins, bills, or digital — used as a medium of exchange
Medium of exchange	Something widely accepted as payment for goods and services, allowing trade without barter
Fiat currency	Money that has value because the government declares it legal tender, not because it's backed by a physical commodity
Commodity money	Money made from something with its own intrinsic value, such as gold or silver coins
Inflation	A general rise in prices over time that reduces how much your money can buy
Legal tender	Currency that must be accepted by law as payment for debts in a given country
Deflation	A general fall in prices over time, which increases the purchasing power of money

LESSON 1.2

Needs vs. wants

LEARNING OBJECTIVES

- Define needs and wants with real examples
- Apply the framework to a personal budget scenario
- Recognize how marketers blur the line
- Explain opportunity cost in everyday decisions

READ THIS FIRST

Every dollar you spend is a dollar you can't spend on something else. That's the foundation of every financial decision you'll ever make. Before you can budget, save, or invest, you need one foundational skill: telling the difference between what you **need** and what you **want**. It sounds obvious until you're standing in a store holding something you really, really want — and your brain starts making arguments for why it's actually a need.

Needs are expenses required for basic survival and functioning — housing, food, utilities, transportation to work or school, and basic healthcare. Without these, your life breaks down. **Wants** are everything that improves your life but isn't strictly required: streaming subscriptions, restaurant meals, designer clothing, the latest phone model, gaming consoles. The categories seem obvious in the abstract, but in real life the line blurs constantly. A phone might be a need for someone whose job requires being reachable at all times. That same phone is a want for someone whose employer provides one. Context always determines the category — which is exactly what makes this skill hard to apply consistently.

Here's a useful test: ask yourself, "If I didn't have this, would my basic ability to work, stay healthy, and keep a roof over my head be at risk?" If yes — need. If no — want. A car can be a need if public transit doesn't reach your job. A second car is almost always a want. Groceries are a need. A \$14 smoothie on the way to work is a want. The test isn't about judgment — it's about clarity. Knowing which category something falls into before you spend is what separates people who control their money from people whose money controls them.

This is where **opportunity cost** comes in — one of the most important concepts in all of personal finance. Every time you spend money on one thing, you give up the ability to spend it on the next best alternative. If you spend \$150 on sneakers, your opportunity cost is whatever you would have done with that \$150 instead: three months of a gym membership, half a car insurance payment, or progress toward a security deposit. The sneakers aren't just \$150 — they're \$150 worth of everything else you can't do with that money. **Scarcity** is the economic reality that forces this trade-off: you have limited money and

unlimited options for spending it. Every "yes" to something is automatically a "no" to something else. This is called a **trade-off**.

Prioritization is the skill of deliberately choosing which trade-offs to make. High-priority items get funded first; low-priority wants get funded only if money remains. Most people do this backwards — they spend on wants throughout the month and hope needs are covered at the end. A budget flips that order: needs first, savings second, wants with whatever is left. This is why understanding needs vs. wants isn't just an abstract exercise. It's the literal first step in building any budget that actually works.

Discretionary spending is the technical term for money spent on wants — expenses you choose to have, not ones life requires. This category is where most budget problems live, because discretionary spending is where advertisers focus their energy. Their job is to make you stop thinking about alternatives and focus only on the product in front of you. They use social proof ("10,000 people bought this"), identity appeals ("successful people choose this brand"), and artificial urgency ("sale ends tonight") to collapse your decision-making window. The shorter the window, the less time you have to think about opportunity cost. Naming these tactics is the first step to neutralizing them — once you can say "that's artificial urgency," the pressure drops immediately.

One powerful tool against impulse spending is the **24-hour rule**: before buying any unplanned want over a certain dollar amount — pick your own threshold, maybe \$20 or \$50 — wait 24 hours. Research consistently shows that most impulse purchases feel less urgent the next day. The item didn't change. Your brain chemistry did. If you still want it after 24 hours and it fits your budget, buy it without guilt. If you forgot about it, you just saved that money.

Think about it: *A phone is listed on a website for \$999 "marked down" from \$1,299. Is that a need or a want? Is the \$1,299 price even real? Before you decide, ask: Do I need a new phone, or do I want this specific one? What's the opportunity cost of \$999 right now? Is the urgency I feel coming from a real deadline or from the way the ad is designed? These three questions — need or want, opportunity cost, and source of urgency — are a complete decision-making framework you can apply to any purchase for the rest of your life.*

KEY VOCABULARY

Term	Definition
Needs	Expenses required for basic survival and functioning — housing, food, utilities
Wants	Things that improve quality of life but are not required for survival
Discretionary spending	Money spent on non-essential items after needs are covered
Opportunity cost	The value of the next best thing you give up when you make a spending choice
Scarcity	The condition of having limited resources relative to unlimited wants
Trade-off	Giving up one thing to get another when resources are limited

LESSON 1.3

Your first paycheck

LEARNING OBJECTIVES

- Read a real pay stub and identify each line item
- Explain gross vs. net pay
- Name at least three common deductions
- Understand why employers withhold taxes

READ THIS FIRST

You've just worked your first two-week **pay period**. You earned \$12 an hour for 20 hours a week — \$480 gross. You're expecting \$480. Then you open the envelope and see \$378. Where did \$102 go? This is the single most common financial shock for first-time workers, and it's entirely preventable if you know what to look for. A **pay stub** isn't just a receipt — it's a detailed breakdown of exactly what happened to your money, and understanding every line on it is a skill you'll use for the rest of your working life.

Every paycheck has two key numbers: **gross pay** and **net pay**. **Gross pay** is the total amount you earned before any deductions — your hourly rate multiplied by hours worked, or your salary divided by pay periods. **Net pay** is what actually hits your bank account after everything is removed. The gap between those two numbers is called **withholding**, and it's made up of several mandatory and optional deductions that your employer processes on your behalf.

The largest mandatory deduction is **FICA** — the Federal Insurance Contributions Act tax. This is a flat 7.65% taken from every paycheck, no exceptions. It breaks down into two parts: **Social Security** (6.2% of your wages) and **Medicare** (1.45%). Social Security funds retirement and disability benefits; Medicare funds health insurance for Americans 65 and older. On a \$480 paycheck, FICA alone removes \$36.72. You don't get to opt out, but you do get to benefit from these programs eventually — and your employer matches your contribution dollar for dollar on top of your wages.

Next comes **federal income tax withholding**. Unlike FICA's flat rate, **federal income tax** is progressive — the percentage you pay depends on your total annual income. When you start a job, you fill out a **W-4 form**, which tells your employer your filing status and any adjustments, so they know how much federal income tax to withhold from each paycheck. They're essentially making estimated payments to the IRS on your behalf throughout the year. In April, when you file your tax return, you reconcile: if too much was withheld, you get a refund. If too little was withheld, you owe the difference.

Depending on where you live, you may also have **state income tax** withheld. States vary widely — Texas, Florida, and a handful of others have no state income tax at all, while California can reach over 13% at

high incomes. Some cities even have local income taxes. Your pay stub will show each **withholding** separately so you can see exactly what's going where.

Beyond taxes, your pay stub may show voluntary deductions — things you've chosen to have taken out. These can include health insurance premiums, contributions to a retirement account like a 401(k), dental and vision insurance, or other benefits your employer offers. These deductions come out before taxes in many cases, which actually reduces the amount of income you're taxed on — one of the best financial deals available to employees.

The rule that changes everything: **always budget from your net pay**, never your **gross pay**. Your rent is due in dollars that land in your account. Your groceries don't accept "I earn \$12/hour before taxes." Every financial plan, every budget, every savings goal needs to be built on the number that actually arrives — net pay. Most first-time workers make the mistake of mentally spending their gross pay and then feeling blindsided by deductions. Run the Tax Simulator in this curriculum before you accept any job offer, so you know your real take-home before you spend a dollar of it.

Real numbers: $\$12/\text{hour} \times 20 \text{ hours} = \480 gross. Subtract FICA (\$36.72), federal income tax (roughly \$26 for a single filer at this income), and state income tax if applicable — and you're looking at \$378–\$420 net depending on your state. That's a 12–21% difference between what you earned and what you received. Know this number before your first day, not after your first disappointment.

KEY VOCABULARY

Term	Definition
Gross pay	Total earnings before any taxes or deductions are removed
Net pay	Your actual take-home pay after all taxes and deductions — what hits your bank account
Withholding	Tax money subtracted from each paycheck before you receive it
W-4	A form you fill out when starting a job that tells your employer how much tax to withhold
FICA	A required payroll tax of 7.65% that funds Social Security (6.2%) and Medicare (1.45%)
Pay stub	A document showing your gross pay, deductions, and net pay for a pay period
Direct deposit	Electronic transfer of your paycheck directly into your bank account
Pay period	The time interval your wages are calculated over — weekly, biweekly, or monthly

LESSON 1.4

Banking basics

LEARNING OBJECTIVES

- Distinguish checking from savings accounts
- Explain how a debit card differs from a credit card
- Identify common fees and how to avoid them
- Understand FDIC insurance

READ THIS FIRST

Most teenagers know what a bank account is. Very few know how to actually open one. This lesson walks through both — what each type of account does, how to choose the right bank, and the exact steps to open your first checking and **savings account** today. If you already have an account, use this as a checklist to make sure you have the right setup.

Step 1: Understand what you're opening and why.

You need two accounts, not one. A **checking account** is your spending hub — your paycheck deposits here, your **debit card** draws from here, and your bills get paid from here. It earns almost no **interest** because it's designed for daily movement, not storage. A **high-yield savings account** is your storage — emergency fund, savings goals, and any money you won't need for at least a few months. It earns 4–5% **APY** at online banks. Keep these at separate institutions if possible: the small friction of moving money between banks makes it harder to casually spend savings.

Step 2: Choose your banks.

For checking, look for: no monthly maintenance fee, no minimum balance requirement, a large ATM network (or ATM fee reimbursement), and a solid mobile app. Local **credit unions** and online banks like Ally, Chime, and SoFi often beat traditional big banks on fees. For savings, look for the highest APY with no fees and no minimum balance — Ally, Marcus by Goldman Sachs, Discover, SoFi, and Synchrony consistently rank well. Compare current rates before choosing; they change frequently.

Step 3: Gather what you need before you start.

To open any bank account you will need: your **Social Security Number** (SSN), a **government-issued photo ID** (driver's license, state ID, or passport), your **home address**, your **date of birth**, and an **initial deposit** (many online accounts have no minimum; traditional banks may require \$25–\$100). If you are under 18, you cannot open a bank account on your own — you need a parent or guardian to open a **joint account** with you. Both of you will be on the account; your parent can be removed later when you turn 18.

Step 4: Complete the application.

Online applications take 5–15 minutes. You'll enter your personal information, agree to the account terms, verify your identity (you may be asked to upload a photo of your ID), and make your initial deposit via debit card or bank transfer. The bank runs a soft identity check and may run a **ChexSystems** report — a banking history report similar to a credit report, showing unpaid **overdrafts** or account closures. If you have no prior banking history, this returns blank (fine). The account is typically open within minutes for online banks.

Step 5: Set up the essentials immediately after opening.

- (1) **Direct deposit:** get your employer's direct deposit form and enter your **routing number** and account number — your paycheck will hit your account 1–2 days faster than a paper check and often a day early.
- (2) **Automatic savings transfer:** set up a recurring transfer from checking to savings on payday — even \$25/month builds the habit.
- (3) **Account alerts:** turn on notifications for every transaction and for low balance warnings — this is how you catch fraud and avoid overdrafts.
- (4) **Paperless statements:** required for most high-yield accounts, and reduces identity theft risk.

Sofia's lesson: *Sofia kept \$400 in a cash envelope after a summer gig. By month-end she'd spent \$280 with no memory of where it went. Cash has no record, earns no interest, and is uninsured. The same \$400 in an FDIC-insured high-yield savings account would have earned \$18 that year, been fully traceable, and been impossible to spend without a deliberate transfer. Opening a bank account takes 10 minutes. It's one of the highest-return 10 minutes available to you.*

KEY VOCABULARY

Term	Definition
Checking account	A bank account designed for frequent everyday transactions — linked to your debit card
Savings account	A bank account designed to hold money over time and earn interest
APY	Annual Percentage Yield — the real interest rate earned on savings in one year, including compounding
FDIC insurance	Federal protection guaranteeing bank deposits up to \$250,000 if a bank fails
Overdraft	Spending more money than is in your account, typically triggering a fee of \$25 to \$35
Credit union	A member-owned, non-profit financial institution that often offers better rates than banks
Routing number	A 9-digit number identifying your bank — needed for direct deposit and check writing
Debit card	A card that spends money directly from your checking account — not borrowed money

LESSON 1.5

How marketing works — and how to shop smarter

LEARNING OBJECTIVES

- Identify at least 5 common marketing tactics by name
- Calculate unit prices to find real value across products
- Apply the 24-hour rule to non-essential purchases
- Recognize anchor price manipulation
- Identify fine print traps before signing or subscribing

READ THIS FIRST

Companies spend billions every year on one goal: getting you to spend money before your rational brain can weigh in. They're not just selling products — they're engineering moments of impulse. The average American sees 4,000 to 10,000 ads per day. You can't avoid all of them, but you can learn to see through them. Understanding the specific tactics marketers use doesn't make you immune, but it does something almost as powerful: it lets you name what's happening. And once you can name a tactic, much of its power disappears.

Anchor pricing is one of the most common tricks in retail. You see an item listed at \$199 — now \$89! Your brain immediately grabs that \$199 as a reference point and decides \$89 is a great deal. But here's the problem: the item may never have actually sold at \$199. Retailers routinely set inflated "original" prices just to make discounts look impressive. This is called an **anchor price** — the first number you see anchors your perception of value, even when it's fake. Defense: before deciding something is a deal, check two or three other sites for the real going price.

Artificial scarcity creates urgency that often doesn't exist. "Only 3 left in stock!" "Sale ends in 04:37:22!" "Limited edition!" These messages trigger a fear of missing out that pushes you to act immediately, before you can think clearly. The countdown timer resets when you refresh the page. The "only 3 left" counter is frequently managed to stay at 3. The sale that "ends tonight" often returns next week. Defense: the **24-hour rule**. Close the tab, wait a day, come back. Items that were still available 24 hours later were never truly scarce.

Social proof exploits your instinct to follow the crowd. "10,000 five-star reviews." "As seen on TV." "Celebrities swear by this." Your brain interprets widespread adoption as evidence of quality — even when reviews are fake or paid for. **FOMO** (Fear Of Missing Out) is social proof's emotional cousin: the anxiety that everyone else is getting something you're not. Both target the same fear — making the wrong choice by not buying. The antidote is a simple question: "Do I actually want this, or do I just not want to feel left out?" Those are very different motivations with very different outcomes.

Decoy pricing is subtle but powerful. When a menu shows Small (\$3), Medium (\$4.75), and Large (\$5.25), the Medium isn't there because people want it — it's there to make Large look like a bargain by comparison. The Medium is the decoy. This same trick appears in software plans, car options, and subscription tiers. Defense: decide what you actually need before you look at the options. Once you've picked your real requirement, the pricing tiers lose their power to nudge you upward.

Identity-based marketing sells you a version of yourself, not just a product. "Serious athletes choose this." "Smart parents pick this brand." "Successful people drive this car." The ad isn't making a claim about the product — it's making a claim about you. If you buy it, you're the kind of person who's serious/smart/successful. If you don't, maybe you're not. This is one of the hardest tactics to resist because it hooks into your self-image. The counter is to ask: "Would I still want this if nobody knew I had it?" If the answer is no, you're buying an identity, not a product.

Bundling and up-selling work by changing what feels like the comparison. "For just \$10 more, you get the extended warranty." At the register, \$10 feels trivial compared to the \$200 you already spent. But \$10 is \$10 regardless of context — and extended warranties on most electronics are statistically bad deals. Extended payment plans, "complete the set" offers, and accessories bundles all work the same way: they make additional spending feel small by anchoring it to a larger purchase you've already committed to.

The 24-hour rule: *Before any non-essential purchase over your personal threshold (many people use \$20–\$50), wait 24 hours. Research consistently shows that most impulse purchases lose their urgency by the next day — because the urgency was manufactured, not real. This single habit, applied consistently, saves most people hundreds of dollars per year. It's not about deprivation. It's about making sure you're the one making the choice — not the ad.*

KEY VOCABULARY

Term	Definition
Anchor price	A high "original" price displayed next to a sale price to make the discount feel larger than it may be
Artificial scarcity	A manufactured sense of limited supply or time ("Only 3 left!") used to create urgency to buy
Social proof	Using other people's behavior or approval ("10,000 sold!") to make a product seem desirable
FOMO	Fear Of Missing Out — anxiety that others are experiencing something valuable that you're not
Loss aversion	The tendency to feel the pain of a loss more strongly than the pleasure of an equivalent gain
Decoy pricing	Offering a middle option priced to make the most expensive option seem like great value
Unit price	The cost per standard unit (per ounce, per load, per sheet) — the real comparison tool across sizes
24-hour rule	Waiting 24 hours before any non-essential purchase to test whether the desire was genuine or manufactured