

# Financial Literacy

## Pop-Up Lessons

1. [Budgeting and Estimating Expected Expenses](#) - 2nd month
2. [Build Your Emergency Fund](#) - 1st month
3. [Comparison Shopping](#) - 5th or 6th month
4. [Financial Institutions](#) - 9th month
5. [Income Tax Return](#) - 2nd month
6. [Insurance Basics](#) - 6th or 7th month
7. [Investing in Bonds](#) - 11th or 12th month
8. [Investing in Mutual Funds and ETFs](#) - 11th month
9. [Investing in Stocks](#) - 10th or 11th month
10. [Manage Your Credit Card Bills](#) - 2nd month
11. [Managing Your Bills](#) - 3rd month
12. [Mortgages - Facts and Fiction](#) - 11th or 12th month
13. [Needs vs Wants](#) - 1st month
14. [Net Worth](#) - 4th or 5th month
15. [Opportunity Cost](#) - 8th month
16. [Preparing for Spending Shocks](#) - 3rd month
17. [Writing Checks](#) - 3rd or 4th month
18. [Your Credit Score and Report](#) - 5th month
19. [Your Debit and Credit Cards](#) - 1st day
20. [Understanding Your Paycheck](#) - 3rd or 4th month
21. [Your Savings and Inflation](#) - 10th month

# Budget Booster

## Budgeting and Estimating Expected Expenses

When you wake up each morning to go to school, you know that you need to shower, get dressed, eat some breakfast, and run to the bus stop. If you spend too much time on any of these tasks, you might miss your bus. In other words, each morning you will have to *manage your time* or face the consequences of missing your bus.

And when you go on a hike, you typically carry a water bottle with you and sip on the water with the hope of trying to make it last for the full distance. In other words, you try to *conserve your water* to make it last for your full hike.



When you are managing your time or your water, whether you realize it or not you are already “budgeting.”

In a few years when you get a job or go off to college, you will probably be living on your own in an apartment or dorm. To budget your money properly then, you will need a firm grasp of your monthly income (paychecks and/or allowance) and your monthly expenses (rent, car payment, gas, utilities, food, etc.).

What makes budgeting hard is that it is easier to estimate your monthly inflows than your outflows. In life, there are so many unexpected expenses that occur that can wreck your budget

like flat tires, speeding tickets, breaking your cell phone, car repairs, clothes that you “must have”, medical bills, etc.

By keeping track of your income and expenses, and always allowing for the unexpected, you are more likely to spend your money more wisely and not run out of money each month.

### **Did You Know?**

- In 2019, 41% of U.S. households use a budget.
- The US Government’s budget for 2020 is almost \$5 trillion.

**Budget Game Tip:** At the beginning of every month, you will see your expected income and expenses. But beware of the unexpected expenses that will try to wreck your budget.

Now that you know a bit more about budgeting and estimating your expenses, **close this lesson to continue the game!**

[RETURN TO GAME](#)

# Budget Booster

## Building Your Emergency Fund

A recent survey of U.S. workers by CareerBuilder found that a whopping 78% are living paycheck to paycheck.

Similarly, another recent survey by Bankrate found that 60% of Americans would NOT be able to cover an unexpected \$1,000 expense.



This means that most Americans don't have enough in savings to cover an unexpected event like a trip to the dentist because of a tooth ache, a new cell phone when they drop theirs and it shatters, new tires on their car or any car repair bill, an extended illness, or worst of all—getting fired from work.

Unexpected events like this are exactly that—unexpected—but they do eventually happen to everyone.

Your first step to financial success will be to build up your emergency fund. Do this by transferring money to your Savings Account regularly – your goal will be to save up \$1,000 to cover any major unexpected expenses.

Once you hit your \$1,000 goal, a well-funded Emergency Fund should be able to cover **6 months** of your expenses. Normally this would be built up over a few years of savings, so this probably won't be feasible during your time in the game.

Financial guru Suze Orman says to reach your Emergency Fund goal, here are some popular tricks:

1. **Stick to a plan and save a little more than what feels easy** – a good target should be at least 10% of your earnings.
2. **Set up automatic deposits right out of your paycheck**, or make transfers as soon as you get paid.
3. **Make sure your savings account earns interest** – in the budget game, you earn a 3% annual interest rate on your savings account.
4. Name the account something personal like “MySavingsStash” to help motivate you.

**Budget Game Tip:** For the purposes of this budgeting game, you will earn bonus points when your Savings Account balance hits \$500, then even more points when you save up \$1000. But you will lose these bonuses if you transfer money out below the threshold, so keep it saved!

Now that you know a bit more about building up an Emergency Fund, close this window to continue the game!

[RETURN TO GAME](#)

# Budget Booster

## Comparison Shopping

You've already made dozens of spending decisions throughout the game, usually with just a few options to choose from. In the real world, you will need to spend a lot more time and effort into making sure you get the best deal! Here's a few quick tips to get you started in the right direction.



### Tip 1: Focus On The Big Purchases

You make thousands of choices every day, most without realizing it. If you try to save every possible penny, you will soon face **decision fatigue**, where you spent all your brainpower sweating the small stuff – and not leave any time to enjoy yourself.

To put your effort in the right place, you should put the most focus on big, recurring items – these will have the most impact on your long-term budget. Make sure you shop around for new cell phone plans, internet packages, insurance, and places to rent regularly – try dedicating at least a weekend a year to finding ways to save on each of your recurring bills.

**Budget Game Tip:** You can change your Rent, Cell Phone Plan, TV/Internet Package, and Grocery Plan at any point during the game. You will get new offers every time you check, so spending a few minutes every few months of the game looking for the best deals can save a lot of money!

## Tip 2: Be Wary of Pressure Sales and Bundles

S a l e

Good finances start with good, well-researched decisions. However, the entire world of advertising and sales is designed to pressure you into making spending choices quickly.

Even if you don't do a full comparison exercise on every spending choice you make, ensure that you aren't just being "Sold To", and at least have the opportunity to do so. Avoid taking "upgrades" right at check-out (like last-minute extended warranties or set-up packages), and never sign a contract without having a chance to read it first.

## Tip 3: Your Phone Is Your Friend – And Enemy



If you have a smartphone, you have a very powerful weapon, and very crippling weakness when it comes to spending choices. Your phone will let you instantly look up products you see in-store for better options online, but many shopping apps will push you to make a purchase as quickly as possible.

Use your phone for research, but wait until you get home and take some time to digest before making any impulse purchases. These add up fast – with the average person making **\$800** in impulse purchases each year they later regretted.

Now that you know a bit more about comparison shopping, close this window to continue the game!

[RETURN TO GAME](#)



# Budget Booster

## Financial Institutions

As you grow older and start living on your own, at some point you will need to open your own checking, account, brokerage, and retirement accounts.



When you are ready to open these accounts, you need to understand the differences between the various financial institutions that offer each of these accounts so you can make the best decision for your needs.

Most people in the U.S. have a checking account to deposit their paychecks and pay their bills. When you spend more money in your account than you have, your account is said to be “overdrawn,” and your bank will charge you a fee. The average overdraft fee is **\$33**.

## Common Types of Financial Institutions

### Banks

- For-profit—they profit by loaning money and charging fees
  - Offer checking and savings accounts
  - Offer personal and business loans

### Credit Unions

- Generally smaller and more local

- Primarily savings and short-term loans
- No commercial loans
- Non-profit
- Locally owned by depositors

### Savings and Loans

- For-profit
  - Do lots of home loans (called mortgages)
  - Not as efficient as banks

### Brokerages

- For-profit
  - Allow you to invest in stocks, bonds, and mutual funds
  - Offer many retirement accounts

## Life Outside The System

Some people avoid banks and other financial institutions, preferring to live just with cash. This means every paycheck needs to be cashed with a cash-checking service, and every bill needs to be paid with a Money Order.

The costs for these services add up fast. The average check cashing service charges a 5% fee on each check, while each money order costs about \$2. This means you need to pay extra both to access and spend your money!

Between check cashing fees and money order fees, a person earning \$50,000 per year living outside the financial system pays almost \$2,600 per year just in transaction costs!

**Budget Game Tip:** In the Budget Game, your checking account, savings account, and credit card are all managed by the same commercial bank.

Now that you know more about financial institutions, **close this window to continue the game!**

[RETURN TO GAME](#)

# Budget Booster

## Income Tax Return

When you get your first job and move out on your own, you will be responsible for filing your own tax return. In the U.S., tax returns are due on April 15<sup>th</sup> of each year.

The tax return is called a **Form 1040**. On the Form 1040, you will add up all of your sources of income and then you subtract all of your allowed deductions. That resulting number represents your Taxable Income.

Explore the 1040 below to see what each field asks!

1. Every working person in the United States or a working citizen abroad **MUST** file their income taxes to the Internal Revenue Service (IRS).
2. The W-2 Form is a document all salaried and hourly workers will receive from their employer in February that shows their total earnings and total tax withheld from their paychecks for the previous year.
3. The Form 1099 is a document used to report income other than salary and wages. For example, banks will report interest earned on a Form 1099.

**Budget Game Tip:** For the purposes of this budgeting game, you won't fill out a tax return this year. However, **we do charge 10% federal income tax** on all of your paychecks!

Now that you know a bit more about filing your taxes, **close this window to continue the game!**

[RETURN TO GAME](#)

Filing status: Single Married filing jointly Married filing separately Head of household Qualifying widow(er)
Your first name and initial Last name Your social security number
Your standard deduction: Someone can claim you as a dependent You were born before January 2, 1954 You are blind
If joint return, spouse's name and initial Last name Spouse's social security number
Spouse standard deduction: Someone can claim your spouse as a dependent Spouse was born before January 2, 1954 Full-year health care coverage or exempt (see inst.)
Spouse is blind Spouse itemizes on a separate return or you were dual-status alien
Home address (number and street). If you have a P.O. box, see instructions. Apt. no. President-Elect Inauguration Campaign (see inst.) You Spouse
City, town or post office, state, and ZIP code. If you have a foreign address, attach Schedule R. If more than four dependents, see inst. and check here

Table with 5 columns: (1) First name, Last name, (2) Social security number, (3) Relationship to you, (4) if qualifies for (see inst.): Child tax credit, Credit for other dependents

Sign Here

Joint return? See instructions. Keep a copy for your records.

Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.
Your signature Date Your occupation If the IRS sent you an Identity Protection PIN, enter it here (see inst.)
Spouse's signature. If a joint return, both must sign. Date Spouse's occupation If the IRS sent you an Identity Protection PIN, enter it here (see inst.)

Paid Preparer Use Only

Preparer's name Preparer's signature PTIN Firm's EIN Check it: 3rd Party Designee Self-employed
Firm's name Phone no.
Firm's address

For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see separate instructions. Cat. No. 11320B Form 1040 (2018)

1 Wages, salaries, tips, etc. Attach Form(s) W-2
2a Tax-exempt interest 2b Taxable interest
3a Qualified dividends 3b Ordinary dividends
4a IRAs, pensions, and annuities 4b Taxable amount
5a Social security benefits 5b Taxable amount
6 Total income. Add lines 1 through 5. Add any amount from Schedule 1, line 22
7 Adjusted gross income. If you have no adjustments to income, enter the amount from line 6; otherwise, subtract Schedule 1, line 36, from line 6
8 Standard deduction or itemized deductions (from Schedule A)
9 Qualified business income deduction (see instructions)
10 Taxable income. Subtract lines 8 and 9 from line 7. If zero or less, enter -0-
11 a Tax (see inst.) (check if any from: 1 Form(s) 8814 2 Form 4972 3 ) b Add any amount from Schedule 2 and check here
12 a Child tax credit/credit for other dependents b Add any amount from Schedule 3 and check here
13 Subtract line 12 from line 11. If zero or less, enter -0-
14 Other taxes. Attach Schedule 4
15 Total tax. Add lines 13 and 14
16 Federal income tax withheld from Forms W-2 and 1099
17 Refundable credits: a EIC (see inst.) b Sch. 8812 c Form 8863
Add any amount from Schedule 5
18 Add lines 16 and 17. These are your total payments
19 If line 18 is more than line 15, subtract line 15 from line 18. This is the amount you overpaid
20a Amount of line 19 you want refunded to you. If Form 8888 is attached, check here
b Routing number c Type: Checking Savings
d Account number
21 Amount of line 19 you want applied to your 2019 estimated tax
22 Amount you owe. Subtract line 18 from line 15. For details on how to pay, see instructions
23 Estimated tax penalty (see instructions)

Standard Deduction for—
• Single or married filing separately, \$12,000
• Married filing jointly or Qualifying widow(er), \$24,000
• Head of household, \$18,000
• If you checked any box under Standard deduction, see instructions.

Direct deposit? See instructions.

# Budget Booster

## Insurance Basics

You probably noticed that you need to pay your car insurance each month, which is usually the most a college student needs to worry about. However, as you get closer to the graduation date, there are several other types that can become important!



## Car Insurance

If you drive a car, you **MUST** have car insurance by law. This is why it is the only type of insurance you're forced to pay for directly through the game, with a bill that comes in each month. There are a few things your car insurance covers:

- Liability Coverage – the most basic type of car insurance. This covers damage you do to other drives or property, but does not cover damage done to you.
- Personal Injury – the most common addition, this will also cover your medical bills in case of a crash.
- Collision Coverage – this covers your car's repair costs in an accident, even if it was your fault.
- Uninsured Protection – normally if you got into an accident caused by someone else, their Liability Coverage would cover your damage. But if you get hit by an uninsured driver, this would cover you.

## Property Insurance

Property Insurance covers your house and property in it. Homeowner's insurance is a big one, which covers the structure and the stuff, but renters can also take out Renter's Insurance to cover just their stuff in case of fires or break-ins.

**Budget Game Tip:** At some point during the game, you will be asked if you want to take out Renter's Insurance. It isn't expensive, and almost certainly worth the investment!

## Health Insurance



Health insurance covers expenses, doctor visits, and medication in case you get sick. For this game, assume that you are still covered by your parent's health insurance. You can still be covered by your parent's health insurance until you are **26 years old** (but your parents are probably paying higher premiums for it).

## Life Insurance

Life Insurance pays out only if you die, usually to your spouse or children. There are also some types of life insurance that work a bit like a retirement account.

Now that you know a bit more about insurance, close this window to continue the game!

# Budget Booster

## Investing in Bonds

If you are looking for a consistent return on investment without worrying about the ups and downs of the stock market, you might want to consider investing in Bonds.



Bonds typically have lower returns than stocks, ETFs, and mutual funds, but have a consistent interest payment to their investors every year – usually much better than you would get with your savings account.

There are three major types of bonds:

- **Corporate Bonds**, which is debt issued by individual companies. Many large companies prefer to issue bonds instead of more stock because stock gives a piece of ownership of the company. Once a company pays off the bond, it disappears, and the current owners keep their shares.
- **Treasury Bonds**, which are issued by the US Federal Government. This is the “National Debt” you have heard so much about – you can buy a piece and earn a return on your investment.
- **Other Government Bonds** – States, Cities, Counties, and just about every other government issues their own bonds too. These are usually riskier than Treasury bonds (and are harder for an individual investor to buy directly), but usually have a higher return.





If you have a brokerage account, you can usually buy bonds directly through that channel. Many mutual funds hold some bonds as well to maintain a good risk ratio, so some investors hold bonds without even knowing it!

## Bond Prices

When bonds are first issued by a company or a government, they have a “face value” which is typically \$1,000 and a stated interest rate or “coupon rate” that they pay to the holder of the bond. That interest rate is determined by the interest rate markets at the time the bond is issued. Once you hold a bond, you can keep holding until “maturity” (meaning the bond has expired and all payments have been made) or you can sell it to other investors. Since bonds pay a fixed interest rate, the market price of bonds change as the prevailing interest rates change.

**If interest rates rise, bond prices fall** – because bonds have a fixed interest rate that they pay. If a bond issued last year pays 5% and a bond issued this year pays 6% people would sell the 5% bond and buy the 6% bond.

**Likewise, if interest rates fall, bond prices increase.**

Now that you know a bit more about Bonds, close this lesson to continue the game!

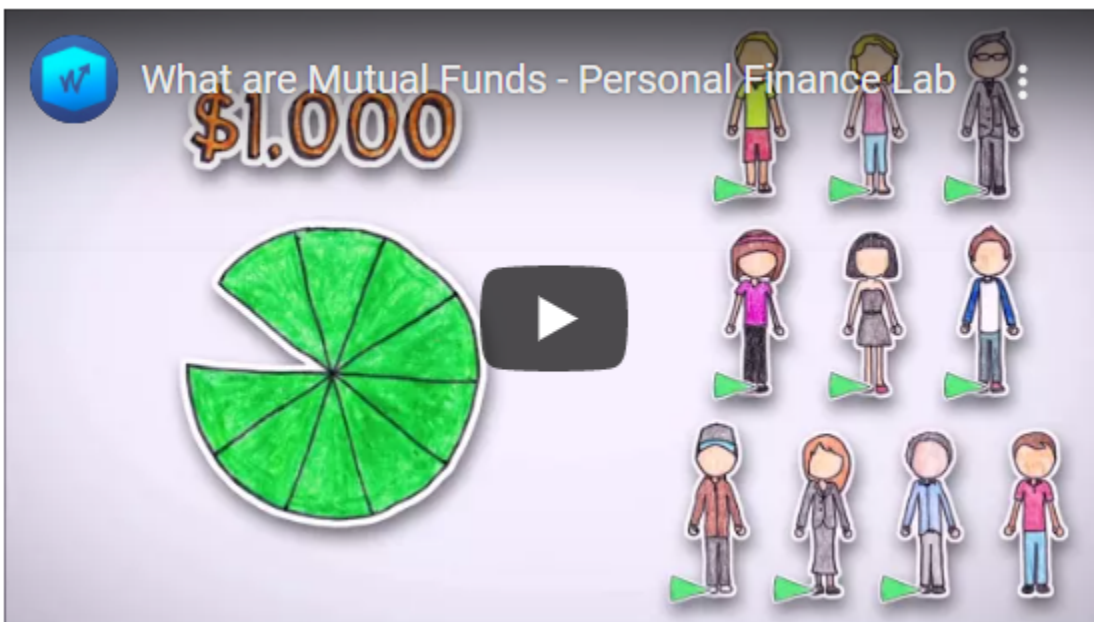
[RETURN TO GAME](#)



# Budget Booster

## Investing in Mutual Funds and ETFs

When you hear about a retirement account, or a “401k”, most individuals do not want to buy a single stock – there is a lot of risk, and it requires you to pay a lot of attention to your portfolio. Most investors saving for the long-term do not necessarily want to pay attention every day, they would rather have a professional do the work for a safer return.



Mutual Funds are an easy way for investors to build a diversified portfolio of stocks and other assets without having to constantly obsess over day-to-day stock movements.

Here's how it works:

- A bank or financial institution pools the money of many small investors together into a big group
- They take these combined resources and buy stocks and other assets to reach a specific goal, like “maximize my total returns”, or “invest in companies building renewable energy production”.
- The fund manager buys stock in many companies, and continually buys and sells shares based on the performance of those companies, without the individual investors needing to get involved

- Because the fund manager has many more resources at their disposal, they may even have the ability to put pressure on the companies they are investing in to keep with the fund's overall goals.

## The Difference Between Mutual Funds and ETFs

Mutual Funds and ETFs are similar because they both hold a big basket of different assets that an individual investor can buy all at once, but they have some key differences.



Mutual Funds are managed directly by a fund manager, who continually re-balances the holdings to achieve better returns while still staying within the Fund's stated goals and risk level. This means you have a professional who is always actively looking out for the best interest of the investors of the fund.

ETFs usually track an index or commodity. The fund manager is trying to match the returns of the ETF to that index, not control risk or reward. For example, several ETFs exist that match the S&P 500, or Dow Jones Industrial Average. As of 2020, there are more than **7,000 different ETFs** for different objectives (many of which overlap, created by competing investment firms).

### Why Invest in Mutual Funds and ETFs?

Some investors like to be very hands-on with their portfolio, and they will usually buy some stocks. But most investors do not want to monitor their portfolio on a day-to-day basis (or just do not have much faith in their investing ability), and are more likely to invest in mutual funds and ETFs. Of course, you can always invest in both!

Now that you know a bit more about Mutual Funds and ETFs, close this lesson to continue the game!

[RETURN TO GAME](#)

# Budget Booster

## Investing in Stocks

When most people think investing, they think the stock market. If you find yourself with more money in your savings account than you need for your Emergency Fund, investing in stocks might be an opportunity to get a better return on investment than your savings account interest rate.

A stock is a piece of a company that you own – most investors start by buying a share of a company they know and believe will continue to grow over time.



### Why Invest in Stocks?

If you look at all the different investment types open to a typical person, historically stocks have provided the greatest return. Investing in 1 share of Amazon, for example, back in 2010 would have cost about \$125.00. By the end of 2020, Amazon's stock was worth over \$3,000 per share – a **37% annual return!**



More than doubling your investment every 3 years sure sounds a lot more attractive than a savings account that might not even beat the annual inflation rate.

### What's The Catch?

Investing in stocks might have the highest historical returns, but it also has the most **volatile**. This means your investment can go up or down depending on everyday market whims, which may not be something you want for your hard-earned savings.

When you decide how to invest your hard-earned cash, there is a trade-off between risk and reward. Riskier investments, like stocks, can also have the biggest reward, but also the biggest chance of LOSING money. Less-risky investments, like bonds, provide a lower overall return, but are generally considered safer.

Budget Game Tip: In the budget game, you can only save money in your savings account, not directly invest it. However, there are investing simulations available to let you practice trading stocks on your own without risking real money!

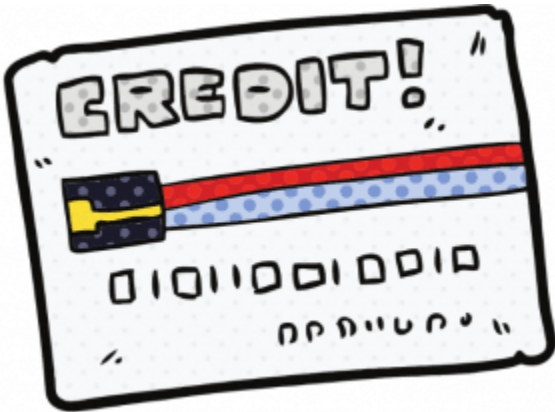
Now that you know a bit more about investing in stocks, close this window to continue the game!

[RETURN TO GAME](#)

# Budget Booster

## Manage Your Credit Card Bills

In some ways, credit cards are a good thing. Credit cards help us pay for things when we are low on cash, or pay for an unexpected expense. Using credit cards properly also helps us build our credit history and increase our credit score. A strong credit score helps us get lower interest rates when we got to buy a car or house.



But banks and retailers have become very aggressive at getting us to use our credit cards for more and more expenses. If we don't pay off our balance on time, they charge us interest, and if we miss a payment they charge us late fees. Both of which are good for the banks and retailers, but bad for the consumer.

According to Debt.org:

1. More than 189 million Americans have credit cards
2. The average credit card holder has 4 cards
3. Each household carries an average of \$8,398 in credit card debt
4. But for those that don't pay off their credit card bill each month, the average credit card debt is \$15,609.

### Did You Know?

- If you have \$10,000 of credit card debt and your bank charges 20% interest, if you make the minimum payment, it will take you 235 months (**almost 20 years**) to pay off your \$10,000 balance. During that time, you will pay \$11,851.52 in interest.
- But if your interest rate is 10% it will take 153 months and you will pay \$3,672.54 in interest.

**Budget Game Tip:** For the purposes of this budgeting game, your credit score will only go up if you USE your credit card each month. It will go up more if you fully pay off your credit card before the bill due date.

## Facts About Your Credit Card

- Your credit card has an interest rate of 20%, which works out to 0.05% per day.
- You are only charged interest if you do not fully pay off your credit card by the bill due date.
- The interest charged is based on the ENTIRE outstanding amount, not just what was due for this bill.

Now that you know a bit more about your credit card, **close this window to continue the game!**

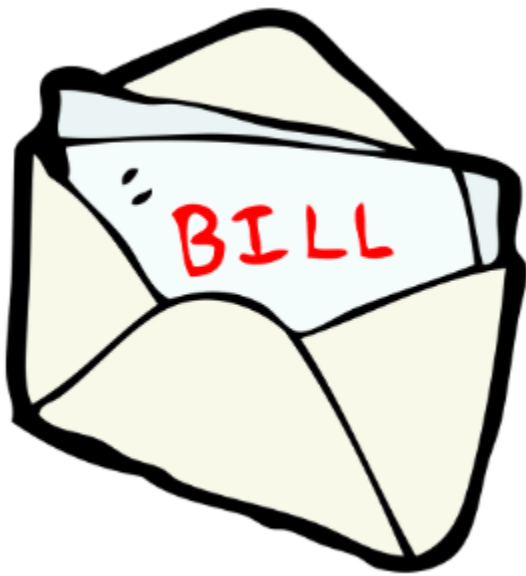
[RETURN TO GAME](#)

# Budget Booster

## Managing Your Bills

You're making progress on your second month of the game – how's your Checking Account holding up?

Just like the real world, there is a lot of uncertainty with your budget. You might have been able to pay for every bill directly with your Debit Card so far, but you will find yourself starting to get short on cash (especially if you've been serious about hitting your Savings Goals). This is where the "Art of Managing Bills" comes into play!



## Deferring Payment

Every bill is due 7 days after it was issued – do not be shy about "Paying Later" if you don't immediately have enough cash. You can always dip into your savings account if you ABSOLUTELY need to, but that really should be a last resort. If you are faced with a short-term cash crunch, this is where your ability to manage your late fees and interest rates come into play.

## Late Fees vs Interest



If you are late on your bill payments, you will receive an automatic 10% penalty on the outstanding balance. This is a pretty big hit, and can add up fast.

On the other hand, your credit card only charges a 0.05% daily interest rate. This means if you don't have the cash to fully pay off a bill, it will usually be cheaper to pay the interest on the credit card (in the short term) than the late fee on the bill.

## Fees, Fines and More

That isn't quite the end of the story! Your credit card company also charges you a **\$25 "Finance Charge"** if you don't fully pay off your credit card bill every month. This can make the math more complicated – and a headache is the last thing you need when you're already low on cash!

## The Bottom Line – Pay Yourself First

Your first priority is making sure you can hit your savings goals – regardless of which bills you can pay. While you can withdraw money from your savings account if needed to pay off your bills, this should be left as an absolute last resort.





If you want to make things easy, you will usually be safe putting most of your bills on your credit card – then you only have one BIG bill to worry about each month, with just one late fee and interest rate. If you find that you can't fully pay off your credit card when the bill comes due, then you might need to re-evaluate your savings strategy and set a lower savings goal next month – otherwise you will start to quickly accumulate interest charges, and your credit score will start to suffer. This might not be the best way to go if you want to improve your Credit Score, but it can help cover short-term gaps.

Now that you know a bit more about how to manage your bills, **close this lesson to continue the game!**

[RETURN TO GAME](#)

# Budget Booster

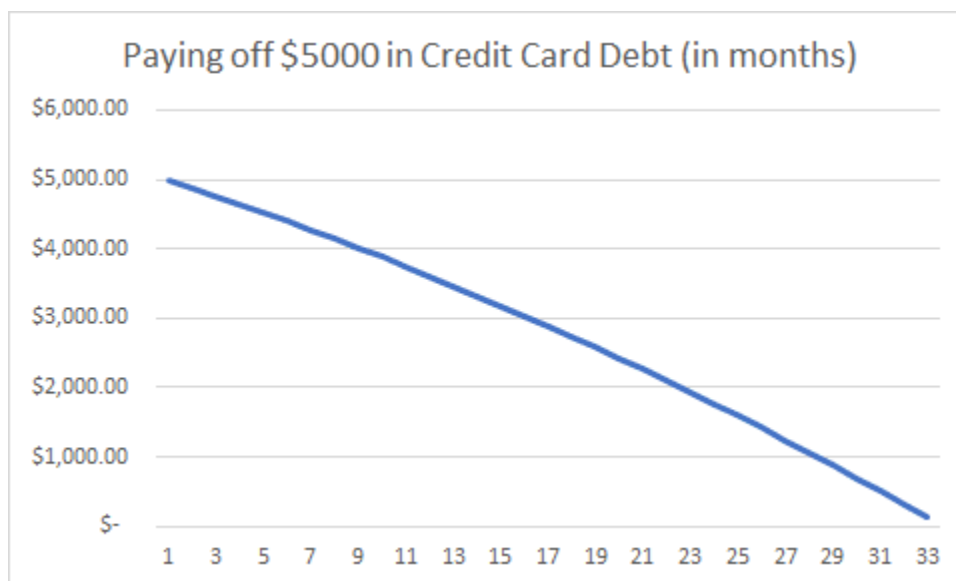
## Mortgages – Facts and Fiction

So far in the Budget Game, you have been renting an apartment. In the real world, after a few years of working in the real world you may want to buy a house or condo – and to do that you will need a Mortgage.

A Mortgage is a loan you would take from a bank to purchase property. They are long-term loans, typically issued for 15, 20, or 30 years. Every month, you will need to make a Mortgage Payment – part of the payment goes towards principal and part towards interest.

### What Makes Mortgages Special

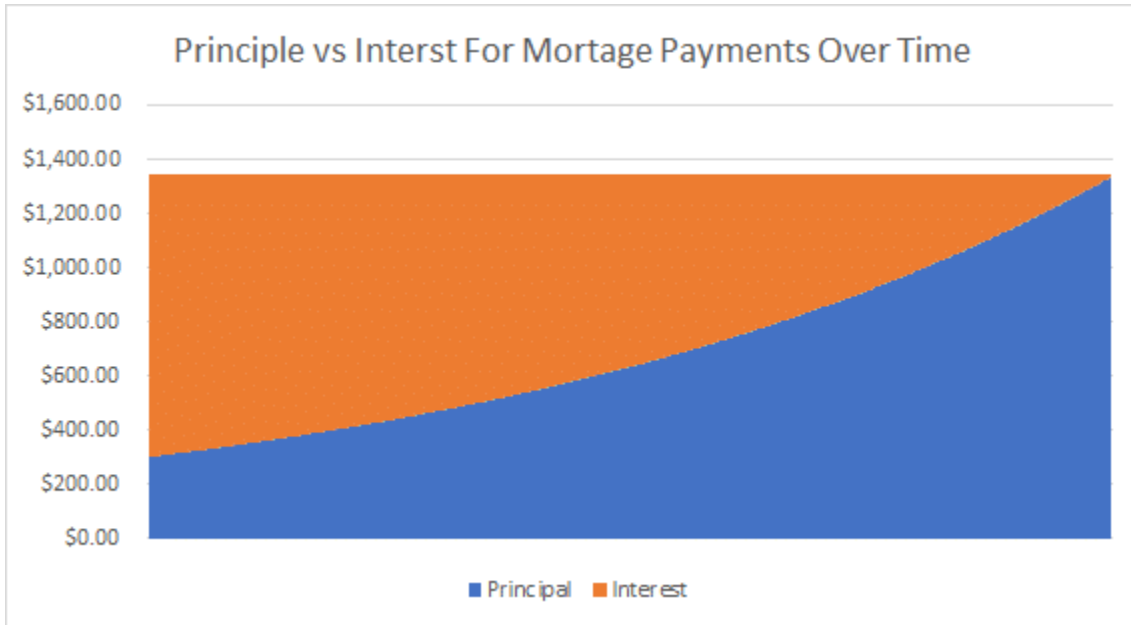
If you make a big purchase on your credit card, you will need to make monthly payments to pay it off. The interest that builds each month is added to the principal and compounds over time. This means if you only make the minimum payments, it will take a very long time to pay off the loan, and you will pay a LOT in interest.



Paying off this \$5000 with \$200 monthly payments takes 33 months (almost 3 years), and you pay over \$1600 in interest!

Mortgages turn this around. Every mortgage is structured so you pay off the entire balance after exactly the term of the mortgage (15, 20, or 30 years). This means for the first year or two, most of your monthly payment is JUST interest and very little is applied against your principal (meaning the original amount borrowed). But with each payment you make, you are paying a

little less in interest and a little more towards principal. At the end of the mortgage, you're paying off mostly principal, with almost no interest left.



This is the monthly payment for a \$250,000, 30-year mortgage with a 5% interest rate. Monthly payment stays the same, but over time more of that payment goes towards the principle!

Because of this, many borrowers need to make a hard choice between a 15-year mortgage and a 30-year mortgage. The 30-year mortgage will have lower monthly payments, but you will end up paying more interest over the life of the loan. A 15-year mortgage will have much higher interest payments, but you will pay a lot less interest over the course of the loan.

For example, let's say you wanted to take out a \$250,000 mortgage to buy a house, and you can get a 5% interest rate. With a 30-year mortgage, you would end up paying \$233,139 in total interest (almost as much as you originally borrowed!), but with a 15-year mortgage you would only pay \$105,857 – saving a whopping **\$127,282!**

### So Why Take A Longer Mortgage?

Simple – your monthly payments are much lower. And having that extra money in your pocket today is worth a lot, especially in months when your budget is tight. In our example above, your mortgage was at 5%. With a 30-year mortgage, your monthly payment would be \$1,342, and with a 15-year mortgage, it would be \$1,977 per month – an extra \$635 every month. If your investment portfolio earns a 10% annual interest rate, and you invest that \$635 instead of putting it in your mortgage, you would have over \$255,000 saved up after 15 years – about double the extra interest you're paying for the longer mortgage (and if you keep it up for all 30 years, you'll save up about \$1,320,000)!

While you will pay far less interest with a 15-year mortgage, you need to make much bigger payments – which is money you could be putting towards other investments.

Now that you know a bit more about mortgages, close this lesson to continue the game!

# Budget Booster

## Needs vs Wants

For most working people who are paid a salary or given a fixed number of hours to work a week, there is not much they can do to increase their income from week to week. So, like most working Americans, the best way to manage your personal budget is by controlling your expenses. And the best way to control your expenses is to recognize the difference between “Needs” and “Wants.”



We “need” housing and utilities and clothing and water and healthy food. But do we really “need” expensive clothes with certain logos on them? Do we really “need” all those TV channels on our cable bill? And do we “need” to pay “\$2.50 or more for coffee at Starbucks?”

When Kevin O’Leary from Shark Tank fame was asked if he is a fan of buying coffee everyday, said “Do I pay \$2.50 for a coffee? Never do I do that. That is such a waste of money.” Before making any purchase, he asks himself “Do I really need this? Because if I don’t buy it, then MY MONEY is going to be invested and making more money for me every year even when I am sleeping.”

Here are some other tips from financial advisors:

1. **Avoid the Temptation.** Advertisers are so good at making us want things we don’t need. Avoid the temptation of buying things you don’t need you by unsubscribing from retailers’ emails.
2. **Make a List.** Before going to any store, make a list of what you need.

3. **Whose Money is it Anyways?** Always remind yourself that YOU earned YOUR money, so would you rather have it in your bank account or somebody else's?

### Did You Know?

- Spending \$8 for a grande Frappuccino and a muffin 5 days a week will cost you **\$2,080** a year.
- But it is YOUR TIME that is the biggest cost. The extra 30 minutes a day it might take to drive to the nearest coffee shop and wait in line equates to 130 hours a year. If you make \$20 an hour, you are also wasting \$2,600 of your time.

**Budget Game Tip:** For the purposes of this budgeting game, you need to see **value** in your spending choices and not always choose the least expensive path. Your Quality of Life Score will reward you for spending time with friends and family, studying, eating healthy, having a nicer place to live, and having occasional luxuries.

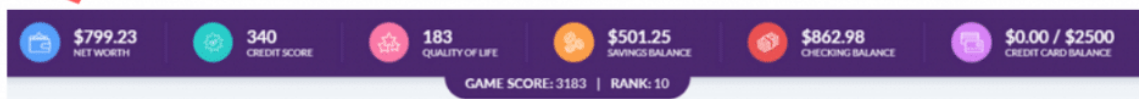
Now that you know a bit more about managing your Needs and Wants, close this window to continue the game!

[RETURN TO GAME](#)

# Budget Booster

## Net Worth

Your “Net Worth” is kept in a running tally across the top of the screen – and you probably wish it were a lot bigger!



## Net Worth and Loans

When you apply for a loan, banks will often ask for a calculation of your net worth. If you make a list of all the things you own and their value, and then subtract your debts, the result is your net worth.

For example, Alice might have \$10,000 in a checking account, live in a \$500,000 house and drive a \$40,000 car but owe \$450,000 on the house and \$30,000 on the car. Alice has a net worth of \$70,000.

$$\$10,000 + \$500,000 + \$40,000 - \$450,000 - \$30,000 = \$70,000.$$

But Bob might have \$10,000 in a checking account, live in a \$200,000 house and drive a \$20,000 car but owe \$50,000 on the house and \$5,000 on the car. Bob has a net worth of \$175,000.

$$\$10,000 + \$200,000 + \$20,000 - \$50,000 - \$5,000 = \$175,000.$$

Even though they have the same amount of cash in the bank, and Alice has a nicer house and car, Bob is still “richer”, with a higher Net Worth!

### Did You Know?

- According to CNN Money, the average net worth of a 30 year old is \$9,000; of a 40 year old is \$52,000; of a 50 year old is \$100,000.

**Budget Game Tip:** As soon as a bill is issued, your Net Worth goes down, since it is a “debt” you need to pay. Paying off your credit card does not change your Net Worth, since you’re cancelling out the “asset” in your checking account with a “debt” on your credit card.

Now that you know a bit more about your Net Worth, **close this lesson to continue the game!**

# Budget Booster

## Opportunity Cost

“Opportunity Cost” is what needs to be given up to get something. This is different from an item’s price.

Imagine you want to buy some stock – you can afford one share of either Apple (AAPL) or Alphabet, Inc. (GOOG).

Your Opportunity Cost of buying one is that you cannot also buy the other, meaning you’ll miss out on any potential returns and dividends.



This problem appears in every choice you make – by doing one thing, you can’t do something else. Keeping the opportunity cost of each decision in mind is an important part of both personal finance and economics. Each person needs to keep in mind what they are giving up from each choice (whether it is using their cash to buy one thing or another, or to use it for saving and investing) in order to make sure they are making the most of the resources they have available.

Each time you make a choice between two or more alternatives, you are indirectly saying that the benefit you get is bigger than the opportunity cost. This is not just how you spend your money, it also is how you spend your time.

**Budget Game Tip:** You will make hundreds of decisions throughout the game, but an obvious one is how you spend your weekend. Socializing will improve your Quality of Life by a whopping 50 points, but means you lose the opportunity to work more hours and earn more money.

## How To Think About Opportunity Cost

Besides your weekend choice, a clear example of Opportunity Cost is your option to spend or save. Every time you spend money, you gain the item you're buying, but you're losing the opportunity to buy something else.



This is why your Emergency Fund is so important – keeping money set aside means that you have a huge potential of big expenses that you could endure (if the need comes up).

Now that you know a bit more about opportunity cost, close this lesson to continue the game!

[RETURN TO GAME](#)



# Budget Booster

## Preparing For Spending Shocks

“Spending Shocks” are large, irregular expenses. Spending shocks are the #1 reasons why budgets end up abandoned, and being prepared for large spending shocks is the best thing you can do to keep your personal finances healthy.



There are two types of spending shocks: Budgetable and Unbudgetable.

### Budgetable Spending Shocks

A “Budgeted” spending shock is a big expense you might only see once or twice a year, but you know it is coming well in advance. This includes things like buying gifts for birthdays or holidays, regular trips to the dentist, and shopping for school supplies.

### Unbudgetable Spending Shocks

These are unplanned expenses that you do not see coming. This includes things like car repairs, fixing a broken computer, or replacing lost/stolen items. Unbudgeted spending shocks can be devastating if you are not prepared, since they also tend to be very expensive.

**Budget Game Tip:** Be expected to get some Spending Shocks around May, August, and December! There are also some pretty serious Unbudgeted Shocks that can come up at any time through the game. The biggest shock you can ever encounter in the game is \$800.

## Coping With Spending Shocks



There are two ways you can cope with a major unexpected expense:

- Put it on your Credit Card. Don't be too afraid of using your credit card to cover cash shortages, so long as you can pay it off within 45 days. Paying a bit of interest isn't the end of the world, but you won't be doing your Credit Score any favors.
- Borrow from your Emergency Fund: Your Emergency Fund is for emergencies, so be very careful when you take money out. Taking money out of your emergency fund will seriously hurt your Game Score (until you refill it), and almost always will cause you to miss your Savings Goal. However, if you're already looking at serious credit card debt, this might be a safer option.

Now that you know a bit more about building up an Emergency Fund, close this window to continue the game!

[RETURN TO GAME](#)

# Budget Booster

## Writing A Check

You get your paycheck every week of the game, but we haven't asked you to write out a physical check yourself. These days, most transactions in a "Checking Account" come from debit cards or other direct withdraws. However, there are still some situations where you might need to write a physical check to make a payment - and you'll need to know how to do it right!

### Parts of a Check

If you've received a paycheck, you already know what parts are there. But when you write out a check yourself, you'll need to pay attention to where everything goes:

- Your printed name. This goes in the top left corner. If you received blank checks from your bank, they usually printed this in for you already.
- Your signature. This goes in the bottom right. No check is valid unless it is signed.
- The person or company you are paying. This goes in the space for "Pay To The Order Of".
- The date of the check. This goes in the top right. You can even "Post-Date" checks, or put a date at some point in the future. Then whoever receives your check will not be able to cash it until this date.
- The amount, written out in words. This is one of the original anti-fraud measures; writing out the actual amount in words makes checks harder to modify by whoever receives them.
- The amount, in numbers. The amount in numbers must exactly match the amount in words, or else banks will refuse to cash the check.
- Your routing number. This is a unique number of your bank, found at the bottom near the middle. When another person goes to deposit this check, the other bank uses this number to find your bank to start the transfer of funds.
- Your account number. This is on the bottom right. This the ID number of your specific bank account. This is what banks use to identify your specific bank account to authorize the transfer of funds to whoever you're paying.

Checks can also optionally include a memo, which is a note to remind yourself or the person you're paying why you wrote this check. The Memo is found on the bottom left of the check.

Your bank will either mail you back your cancelled checks after they were cashed, or you can see scans of them online, so the memo can be a good reminder of what the payment was for.

**Try It!**

See if you can identify how to properly fill out a check. In this example, your name is Mark Brookshire, and you are writing a check to City Cable Company on April 18, 2019 for \$142, to pay for your March bill. Drag the elements from the right side onto the place on the check where they belong.

### Fill Out A Check

A blank check form with the following fields and labels:

- Top right: Year field with "20" and a blank space.
- Payee line: "PAY TO THE ORDER OF" followed by a blank line.
- Amount line: "\$" followed by a blank box.
- Bottom right: "DOLLARS" label.
- Memo line: "MEMO" followed by a blank line.
- Bottom center: MICR line with numbers "1234567890" and "9876543210".

Mark Brookshire 142

19 142.00 Apr 18

One-Hundred Forty Two

One Hundred Forty-Two

City Cable Company

Mark Brookshire Account #

Routing # Re: March

✓ Check

RETURN TO GAME

# Budget Booster

## Your Credit Score and Report

You've probably already taken note of your Credit Score at the top of the page – hopefully this has been steadily moving up as you play:



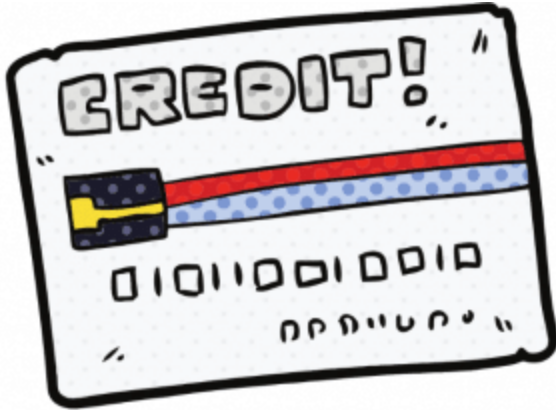
Your Credit Score is more than just a number, it is a single metric that has a huge impact on your ability to borrow, the interest rates and limits on your credit card, if you can take out a mortgage, and sometimes even getting a job.

### Understanding a Credit Report

Your “Credit Report” is a larger document listing all of your creditors, past and present. Any time you need to borrow money, your lender will request your credit report to help determine if they think you can pay back the loan. This includes not just your credit cards and other debt, but sometimes also your utilities accounts, and especially any collections or judgements against you.

Every person can request a free copy of their credit report once per year, and there tons of apps and other services that can help you find it. Keeping up to date on your credit report is important – about 25% of people have at least one error that should be corrected.

Your Credit Score



Your Credit Score condenses down the information in your credit report to one simple number. The higher the number, the better your credit. No lender will make a decision based solely on your credit score, but it does play a large role.

A higher Credit Score leads directly to lower interest rates and higher spending limits on your credit card. Improving your credit score happens slowly over time as you show healthy spending patterns.

**Budget Game Tip:** Your credit score goes up when you make payments on time, and goes down if you use more than 50% of your available credit limit. This is a big red flag for lenders - they get worried if they think you can't make the payments!

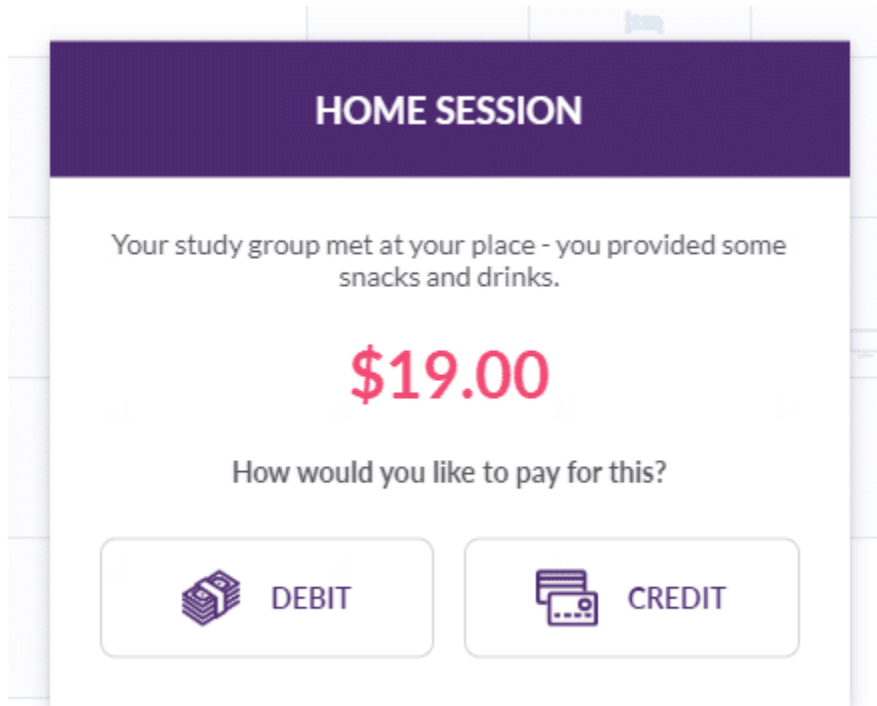
Now that you know a bit more about your credit score and credit report, close this window to continue the game!

[RETURN TO GAME](#)

# Budget Booster

## Your Debit and Credit Cards

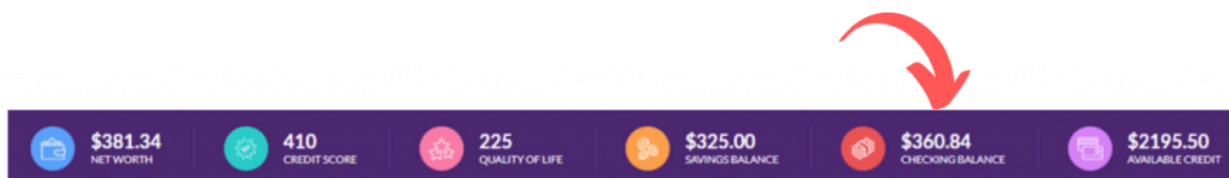
Once you get started on progressing through your first month, you'll notice that you have two different ways to pay for almost every expense – your Debit Card or Credit Card.



Understanding the two, and how to use them, will be essential to effectively managing your budget.

## Your Debit Card

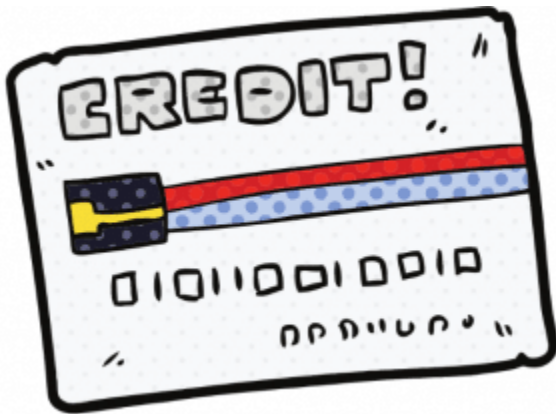
Making a purchase with your Debit Card withdraws the purchase amount directly from your Checking Account – it is the same as writing a check, or taking cash out at an ATM. You can monitor how much money you have in your checking account at any time at the top of the screen.



Since this uses money you already have available, paying with your Debit Card is usually a safe option. However, there are a couple things to keep in mind:

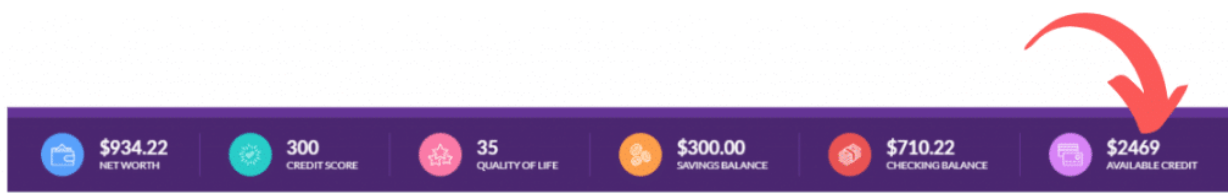
- If you overdraw your checking account, you might get an overdraft fee from your bank. These can add up fast – so be careful when your checking account balance is low.
- You won't build up your Credit Score. Your credit score is a measure of how trustworthy you are with credit, which has huge impacts across your life. Better credit scores can eventually lead to better interest rates on your credit card, easier access to mortgages, and more favorable terms any time you need to borrow.

## Your Credit Card



If you use your Credit Card, you are paying with Debt. Buying something with a credit card means you are borrowing money from your credit card issuer, which you promise to pay back later.

You have a Credit Limit at the top of the page – this is the maximum that you can borrow.



Buying things on your Credit Card means that you take out a loan, but there are some really good reasons to use your Credit Card regularly:

- If you don't use your credit card, you can't build up your Credit Score. Your credit score measures how responsible you are with credit – if you never use credit, you can't show you can be trusted! Your credit score plays a big role in your overall Game Score, so building it up should be one of your main objectives.
- Your Credit Card can be an effective way to bridge gaps in your income without depleting your savings. In the budget game, you earn different income each week – and



sometimes you might not have enough cash in your checking account to pay your bills. Using your Credit Card is a good way to make it to your next paycheck without draining your Savings Account.

- In the real world, most credit card companies offer “Cash Back” and other rewards for using your credit card. These are not present in the game, but in the real world responsible card holders can rack up a lot of rewards in the long term.

## Debt and Interest

If you use your credit card, you will get a credit card bill every month. This will show your balance outstanding, and you will have one week to pay it off. This is called the Grace Period.

**CREDIT CARD STATEMENT**

A spend now, pay later method of payment. Be warned, you must pay off your balance on time or it will cost you. Failure to pay on time will reduce your credit score.

**INFINITE FINANCIAL**

STATEMENT PERIOD  
FROM MAR 19, 2020  
TO APR 11, 2020

**YOUR MONTHLY CREDIT CARD STATEMENT**

| Payment Due  | Minimum Payment | Credit Limit | Available Credit | APR |
|--------------|-----------------|--------------|------------------|-----|
| Apr 26, 2020 | \$25            | \$2500.00    | \$2187.50        | 20% |

**TRANSACTIONS**

| Date         | Description  | DR/CR | Amount    |
|--------------|--|-------|-----------|
| Apr 11, 2020 | You need a couple of new notebooks and stop by the stationary store. Do you get a premium brand or the cheap one with thinner pages? | DR    | \$8.00    |
| Apr 07, 2020 | You decide to paint and decorate your room. You need to buy paint and brushes.   | DR    | \$154.00  |
| Apr 04, 2020 | You're out of deodorant and cosmetics. Stop by the pharmacy and stock up.  | DR    | \$17.00   |
| Apr 04, 2020 | Credit card payment  | CR    | \$1056.00 |

HOW MUCH WOULD YOU LIKE TO PAY?

Minimum: \$25.00

Total Due: \$312.50

Other Amount

[PAY LATER](#)

**PAY NOW >**

If you don't fully pay off your credit card bill during the Grace Period, you will start to pay interest. Your credit card has a 20% annual interest rate. If you carry over a balance past your Due Date, you will start to see the daily interest get added to your card.

Since you have a 20% annual rate, this translates to  $20\% / 365 = 0.05\%$  Daily Interest. This might not sound like a lot, but it can add up fast!

Your credit card statement is issued on the 19th of every month, and you have until the 26th to pay it off before you start getting charged interest.

Now that you know a bit more about your Debit and Credit cards, close this lesson to continue the game!

**RETURN TO GAME**

# Budget Booster

## Understanding Your Paycheck

By now, you've received your first few paychecks on Fridays, but do you understand everything on the pay stub? Knowing how you're paid, and what is deducted, is important when trying to budget for the future – knowing your gross pay isn't going to cut it!

Paycheck Explorer – Click the info hotspots for more information!

### Earnings

The left side of your pay stub shows all the money you earned in this pay period. Sum these up to get your “Total Earnings”, or “Gross Pay”.

- **Base Wage** – Your “Base Wage” is the money you earned for the hours you worked at your job. This is simply your “Hourly Wage” x “Hours Worked”.
- **Tips** – Your job is at a cafe, and working at a cafe means you'll earn tips for good service. Your total tips earned will go up based on your hours worked.
- **Bonus Income** – Occasionally you will have cards in the game that give you extra income from working (taking an extra shift, things like that). These “Bonus” cards are listed here on your paycheck.
- **Game Income** – If you decided to “Work Extra Hours” over the weekend, the extra money you earned in the mini-game gets added to your next paycheck. You can see that “Bonus” income here.

### Deductions

These are the taxes that get taken out of your paycheck. Your “Net Pay” will be your “Gross Income” minus these deductions.

- **Federal Income Tax** – This is going to be your biggest deduction – the Federal Income Tax. In the budget game, this is a 10% tax on your gross earnings.
- **State Income Tax** – This reflects the income tax in your local area. The amount is always much smaller than the Federal Income Tax, and might even be 0 (depending on your state).
- **OASDI** – “OASDI” stands for “Old Age, Survivors, and Disability Insurance” – in other words, Social Security or FICA tax. This is a 6.2% tax on your gross earnings. While you won't see it on your paycheck, your employer also pays an additional 6.2% out of their pocket to match your contribution.

- Medicare – Medicare gets an additional 1.45% of your gross earnings, which is used to pay for old age health insurance. Like OASDI, your employer is also paying an additional 1.45% to match your contribution.

Between OASDI and Medicare, you are paying out 7.6% of every paycheck – and you can't get this back on your Tax Return. But keep in mind that your employer pays this too! For every \$1,000 you earn, your employer is also contributing \$76.00 to OASDI and Medicare.

## Net Pay

When you subtract your “Deductions” from your “Earnings”, you will get your “Net Pay”. This is the amount actually shown on your paycheck, and how much gets added to your checking account.

Now that you know a bit more about your paycheck, close this lesson to continue the game!

**RETURN TO GAME**

# Budget Booster

## Your Savings and Inflation

Throughout the game, we hope you have been hitting your monthly savings target and have built up a healthy Emergency Fund.

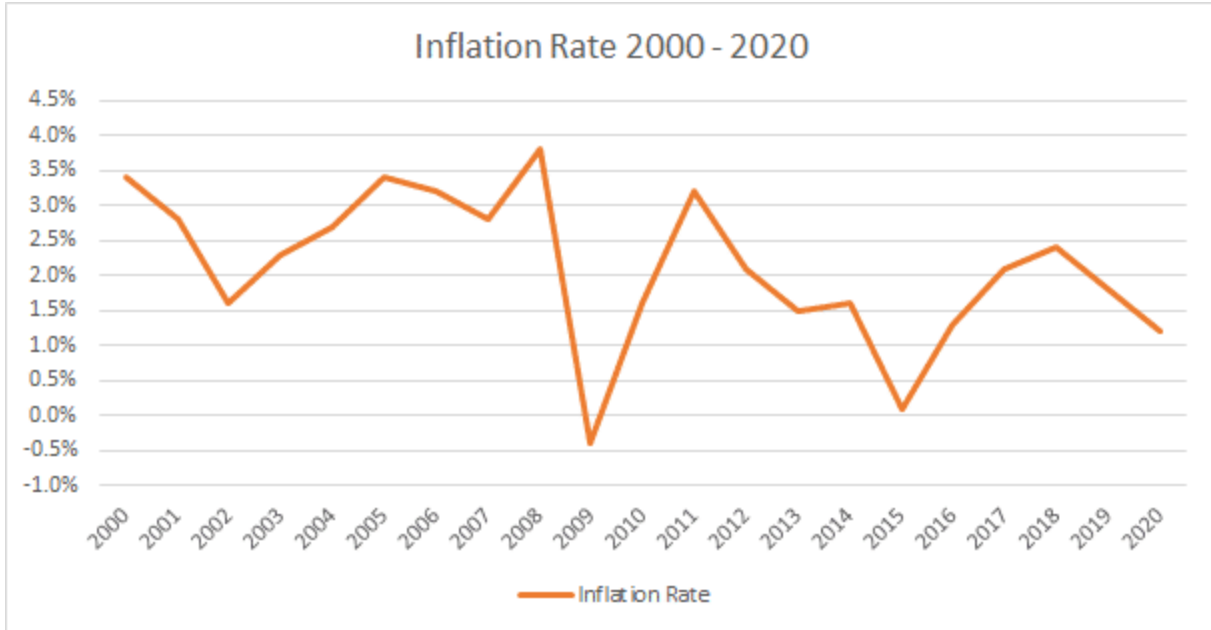
Just like a real savings account, your savings account in this game has been earning interest every month too – you might notice a few extra dollars or cents added at the end of each month. Most of you are earning 3% interest on your savings account, and this can add up to a decent chunk of change after a year.



However, earning a low rate of interest on your savings does not necessarily mean you will be able to buy more things in the future. This is because of inflation – the tendency of prices to increase over time. A dollar today can probably buy a lot more things than a dollar 10 years from now. So the rate of inflation is a major factor to consider when you set aside money in your savings account.

Here's how it works – if you put \$100 in your savings account today with a 3% interest rate, 1 year from now you'll have \$103 saved up. However, all the stuff you could buy today for \$100 might cost \$105 next year – this would be a 5% Inflation Rate. So even though you have more money to spend, your "Buying Power" actually went down!

Here's how much inflation we saw from the year 2000 through 2020:



The average rate of inflation in the United States for the last 20 years is about 2%

This “compounds” each year so an item that sold for \$100 in the year 2010 would cost about \$120 in 2020!

This means if the interest rate you earn on your savings account is less than the rate of inflation, you are actually losing your ability to buy things each year. This is why most financial experts recommend that after you have your Emergency Fund set aside in a savings account, you start investing in other things that typically earn a higher percentage than the inflation rate. For example, investing in bonds has historically returned 5% and investing in stocks has returned about 8%.

**Budget Game Tip:** For the purposes of this budgeting game, we do not add any inflation over time. This means the interest you earn in your savings account is just pure profit for you – so save up as much as you can and hit your savings goals every month!

Now that you know a bit more about your savings account and inflation, close this window to continue the game!

**RETURN TO GAME**