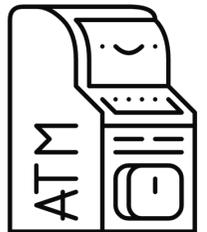
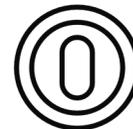


A large dashed rectangular box containing a horizontal line, three vertical lines, the text "To:", and a square box.



CURRENCY

This month we'll be exploring currency. That is to say, all things money! How do credit cards work? And what is that cryptocurrency stuff that's all over the news? What is the future of money and who are the pioneers behind it? Take a peek inside to learn about the tech that makes our systems of money possible!

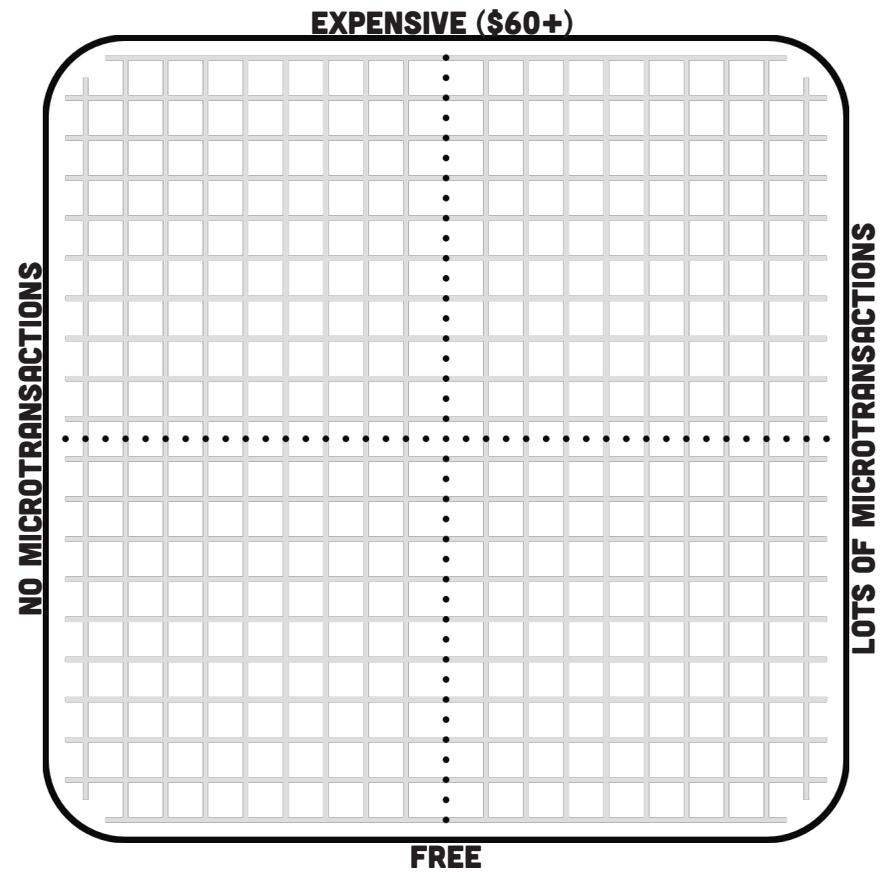


SCORE, COINS, AND MONEY IN VIDEO GAMES

Earning money is a great way to feel a sense of accomplishment! Because earning money is such a good reward, video games often reward players with in-game money of all kinds. You collect coins in Mario, Bells in Animal Crossing, Cookies in Cookie Clicker. You can even think of your score in Pac Man as a kind of money. How do you earn this money? By playing the games, of course! But there's a different kind of currency in video games that is a little different. Some video game currency, like V-Bucks are limited by the game and if you want more, it requires you to spend

real life money to get more. The amount of V-Bucks you have aren't an indication of how much you've played the game, but how much money you've spent to play it. Microtransactions are small affordable purchases that games will include, often for cosmetic accessories. But you have to watch out, these purchases can pile up if you aren't careful! On the next page is a "quadrant chart", four squares for you to categorize games into! Think of some of your favorite games and mark them on the chart. Was it free? Does it have microtransactions? Was it expensive? See if you can find a pattern in which games you like best!

QUADRANT CHART



Imagine This...



You want to buy a new phone



So you cut your neighbor's grass and afterwards they hand you a few pieces of paper.

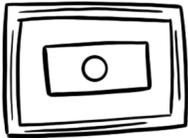


You take that paper to the phone store and trade it for a smartphone.

The phone store has a few pieces of paper that...

Obviously, you won this trade!

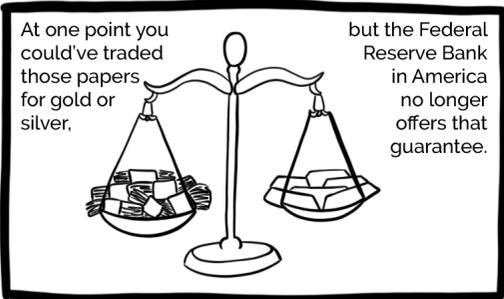
You have a new phone and you can listen to music, call friends, and browse the internet.



... they can hang on the wall?

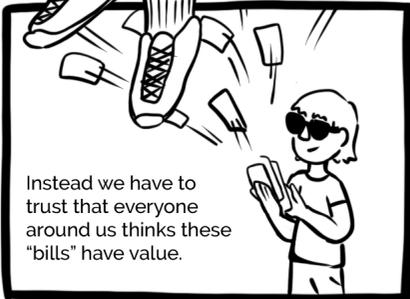


...or maybe fold into little frogs?



At one point you could've traded those papers for gold or silver,

but the Federal Reserve Bank in America no longer offers that guarantee.



Instead we have to trust that everyone around us thinks these "bills" have value.

$\frac{1}{3}$ of money transactions happen in cash, which is more than any other type of payment!

So we'll probably be trading in bills and coins for a while!



Maybe you don't want to carry around cash.

You can ask a bank to hold your money. Then the bank gives you a **debit card** that keeps track of your spending.



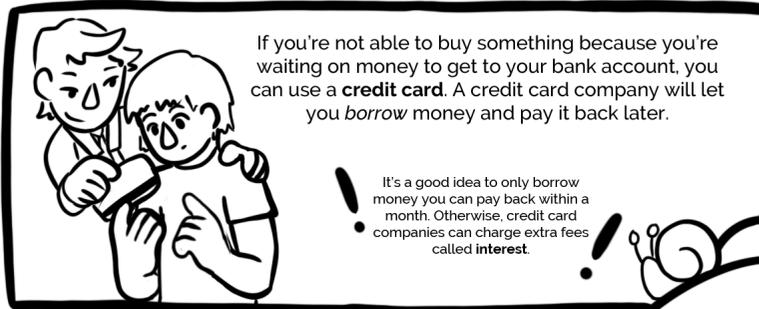
When you swipe your card at a store,



the seller requests money from your bank account and the bank sends it for you. If you don't have money in your account, the card doesn't work.



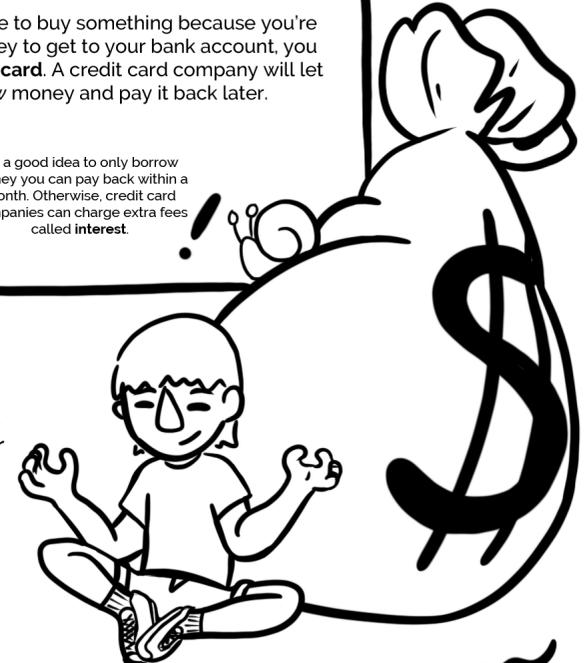
But what if you want to buy something anyway?



If you're not able to buy something because you're waiting on money to get to your bank account, you can use a **credit card**. A credit card company will let you *borrow* money and pay it back later.

! It's a good idea to only borrow money you can pay back within a month. Otherwise, credit card companies can charge extra fees called **interest**. !

On the next page is a financial planner. Cut it out and save up for a big purchase. You can ask an adult for help filling it out. Or be a "financial advisor" for someone that has questions about budgeting!



SHOULD I USE A CREDIT CARD?

Sometimes a credit card will help you buy something sooner! But remember, you're borrowing money and you need to pay it back. If you pay it back before the card payment is due, you won't have to pay interest.

INTEREST OVERVIEW

Borrow \$100 on March 1st, pay in back before March 31st = \$100
 Borrow \$100 on March 1st, pay it back on April 1st = \$120
 ...pay it back on May 1st, pay \$144
 ...by June 1st you have to pay \$173

(based on a 20% interest rate, the fees that credit companies charge when you take out a loan)

HOW CAN I SAVE MONEY?

When you write down all the ways that you spend money, some of them might be kind of silly. Can you buy snacks less often? Some of the things we buy are important because they make us happy. But sometimes our savings goal will make us even happier. You can decide what's more important by separating your money into "spend" or "save" piles. Then you can calculate how much you save every month and still get a snack sometimes.

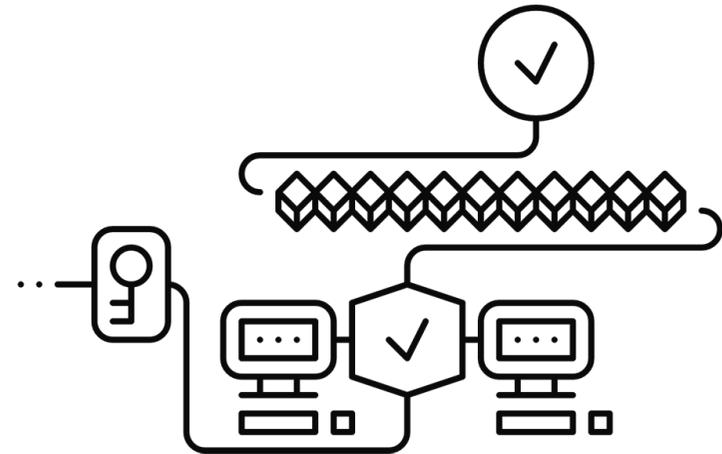


MY MONEY GOALS



I'm saving up for:	
Total cost:	
Amount of money already saved:	Money spent per week:
Money earned per week:	Ways to spend less money:
Ways to earn money:	

Week	(+) Money Saved	(-) Money Spent	(=) Total
1			
2			
3			
4			



WHAT IS CRYPTO-CURRENCY?

Cryptocurrencies are a digital form of payment that can be exchanged for goods and services. Most cryptocurrencies are exchanged as digital tokens or coins. What makes cryptocurrencies really different from traditional currency is that ALL crypto transactions are logged on a decentralized blockchain.

What is a blockchain? Imagine a chain of blocks in a long line. Whenever someone sends or receives cryptocurrency, information about that transaction is stored in this blockchain. Each block is a box that holds 1 Megabyte of data.

Once that block fills up, a new block is added to the chain! Crypto miners are people who have set up their computers to do the math required to verify each block in the chain every time a new transaction is made! As a reward, miners are paid in bitcoin! Each block has to be unique so that all of the transactions are remembered. That means it gets harder and harder to add to the blockchain. Eventually, Bitcoin could run out of new blocks. Other cryptocurrencies are finding new ways to verify transactions and avoid that.

FOLDING PAPER ACTIVITY

The reward for the very first Bitcoin block was worth 50 bitcoins. Now each new block is worth only 6.25 bitcoins. Why? Because Bitcoin has a built in system to slow down miners and make sure the price of the cryptocurrency stays somewhat stable. Fewer resources will go into mining if it's less likely to make people rich.

See it yourself:

For this activity, you need a piece of paper. This paper represents all 21.5 million bitcoins that can be mined.

Fold it in half! Now the paper is half as big. Half of all the Bitcoins were mined in the first four years.

Fold it in half again. Four years later, another half of the remaining Bitcoins were mined. This quarter piece of paper is the quarter of Bitcoin left. That means about 5 million bitcoins are left to be mined.

Fold it again! Maybe you guessed it already: the number of Bitcoins left to be mined were cut in half again, and now only a few Bitcoins are left. This is where we are now, with only 3 million Bitcoins not yet mined.

But what happens when you fold the paper one more time? It might be kind of difficult. You're having to work a lot harder to get more Bitcoins into the market, and when you fold it there will still be more than a million coins left. Just like Bitcoin miners, you might need a technology upgrade to keep folding. Some people think it will take another hundred years to mine just 3 million Bitcoin.



CRYPTO WALLETS

While Bitcoin and other cryptocurrencies don't run the risk of getting lost between your couch cushions, like any currency, keeping it safe and secure is important. Cryptocurrency wallets exist to securely store private Bitcoin keys. Wallets are designed for only the owner of the wallet to access and check or transfer the cryptocurrency, which are typically password protected. These wallets are apps such as Coinbase and Mycelium and some exist as hardware like those through Ledger and Trezor.

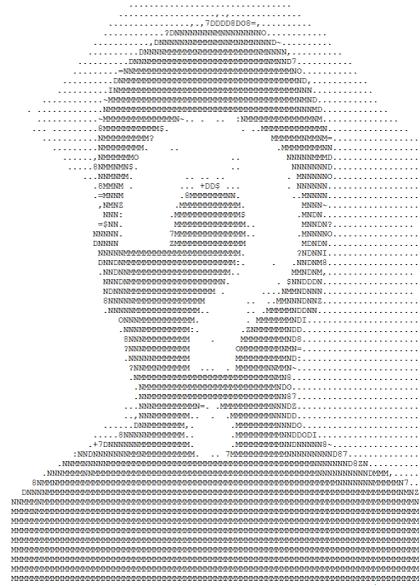
Perhaps you've seen a Bitcoin ATM at your nearby

convenience store. These Crypto-ATM's are growing in popularity in most major cities, however they function a bit differently than app or hardware wallets do. Many Bitcoin ATM's do not require your personal data to conduct a purchase of Bitcoin. Simply pay for the amount of Bitcoin you would like with either cash or card and the ATM will print out a private key for that amount on a paper wallet (like a receipt). That paper contains a QR code that the wallet app or hardware can scan to add that into your personal Crypto-wallet, rendering the paper wallet useless. It's really as simple as that!

CRYPTO CREATION

What do you think crypto looks like? Draw your take on a physical crypto currency on the next page!
What is it named? How would it be designed and what would it look like? What does a wallet look like? How do you access it? How much is it worth?

DRAW IT HERE!



SATOSHI NAKAMOTO

Our person of the month for March is also one of the internet's biggest mysteries: the person who created bitcoin. We have no idea who he/she/they are; they could be one person, or a group of people. All we have is a name: Satoshi Nakamoto.

Here's what we know about him:

The name Satoshi Nakamoto is a pseudonym -- it's a false name that they go by online. But that doesn't mean it isn't helpful!

Someone with Nakamoto's name registered the website "bitcoin.org" in 2008.

That same year, a Nakamoto

published a paper describing how bitcoin would work titled "Bitcoin: A Peer-to-Peer Electronic Cash System" In 2009, bitcoin 0.1 was released and the first block was mined, worth 50 bitcoins. Satoshi disappeared from the public in 2011 and hasn't been heard from since.

There's a lot of rumors about Satoshi. Some people say they have 1 million bitcoins. In 2020, somebody moved 40 bitcoins from an account that hadn't made any transactions since 2009, creating a swarm of speculation that it was Nakamoto. The 40 bitcoins were worth nearly \$400,000 and were mined during the first month of bitcoins existence. Some people even think that Satoshi died back in 2014.

Even though Nakamoto is still a complete mystery, they've been a huge influence on daily life and global news. Thanks to their work on bitcoin, a lot of people now believe in money that isn't controlled by governments, and millions of people around the globe own an amount of Bitcoin!

Thank you for participating in this month's Snail Mail! Did you know you can sign up a friend for free? Tell us your favourite part and get involved with other Eureka programs! You can share your projects and drawings with us directly at: codeva.info/SubmitYourSnailMail

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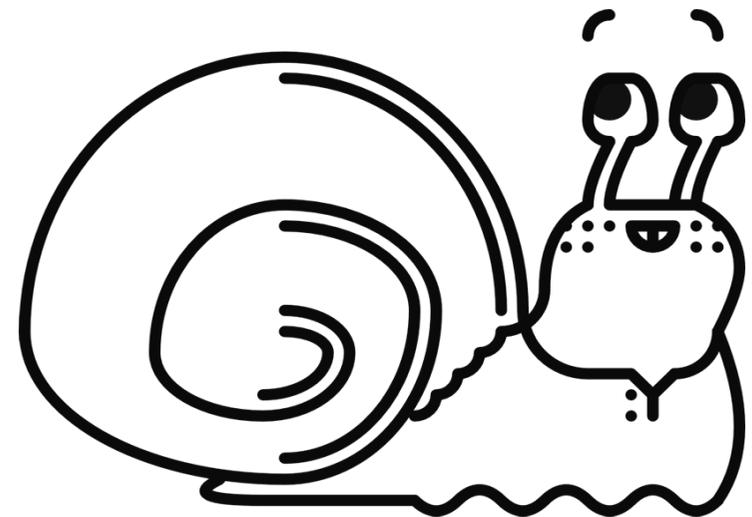
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