

Wondering about virtual currencies

Students practice their nonfiction reading skills as they read a Consumer Financial Protection Bureau consumer advisory about virtual currencies and answer questions to measure their reading comprehension skills.

Learning goals

Big idea

Virtual currency is a type of digital money issued and controlled by its developers, rather than by a government, and can be accepted and exchanged among members of a virtual community.

Essential questions

- What are virtual currencies?
- What risks should I be aware of related to virtual currencies?

Objectives



- Read a nonfiction text to develop basic understanding of virtual currencies
- Analyze the text by making inferences, finding the main idea, and examining vocabulary in context

NOTE

Please remember to consider your students' accommodations and special needs to ensure that all students are able to participate in a meaningful way.

KEY INFORMATION

Building block:

-  Financial habits and norms
-  Financial knowledge and decision-making skills

Grade level: High school (9-12)

Age range: 13-19

Topic: Save and invest (Investing)

School subject: CTE (Career and technical education), English or language arts, Social studies or history

Teaching strategy: Competency-based learning, Direct instruction

Bloom's Taxonomy level: Understand, Evaluate

Activity duration: 75-90 minutes

National Standards for Personal Financial Education, 2021

Investing: 8-1, 12-1, 12-2, 12-3, 12-5, 12-6, 12-7, 12-9, 12-11, 12-12

These standards are cumulative, and topics are not repeated in each grade level. This activity may include information students need to understand before exploring this topic in more detail.

What students will do

- Read a nonfiction text about virtual currencies.
- Answer reading comprehension questions.

Preparing for this activity

- While it's not necessary, completing the "Investigating investing" activity first may make this one more meaningful.
- Print copies of all student materials for each student, or prepare for students to access them electronically.

What you'll need

THIS TEACHER GUIDE

- **Wondering about virtual currencies (guide)**
[cfpb_building_block_activities_wondering-about-virtual-currencies_guide.pdf](#)

STUDENT MATERIALS

- **Wondering about virtual currencies (worksheet)**
[cfpb_building_block_activities_wondering-about-virtual-currencies_worksheet.pdf](#)
- **The Consumer Financial Protection Bureau's "Risks to consumers posed by virtual currencies" consumer advisory** https://files.consumerfinance.gov/f/201408_cfpb_consumer-advisory_virtual-currencies.pdf

Exploring key financial concepts

Virtual currency is a digital representation of value that's not issued by a government or a public authority but may be accepted as a means of payment. It can be transferred, stored, or traded electronically. Virtual currencies don't have geographical or political borders. Instead, the community that supports a particular virtual currency makes the decisions about it.

While virtual currency doesn't always have a physical equivalent in the real world, it does share some characteristics with traditional money. People who accept virtual currency can pass value back and forth and can use it to pay for goods and services,

TIP

Because financial products, terms, and laws change, students should be encouraged to always look for the most up-to-date information.

especially online purchases. Some companies offer services where they hold people’s virtual currencies. This looks somewhat like a bank account, but it isn’t one. It’s important to be aware that the company offering this service may not have a federal or state government charter or related oversight that a bank does.

The number of virtual currencies is growing, but one that you may have heard of is Bitcoin, which was started in 2009. Bitcoin is a cryptocurrency. Also called “crypto,” cryptocurrency is a type of encrypted digital currency that generally only exists electronically. (Encryption is a process that protects something from unauthorized access.) There is no physical coin or bill unless you use a service that allows you to cash in cryptocurrency for a physical token. You usually exchange cryptocurrency with someone online, with your phone or computer, without using an intermediary like a bank. Cryptocurrency accounts are not backed by a government. Cryptocurrency values change constantly.

One way people invest in virtual currency in some cases is through buying virtual coins. Some businesses sell virtual coins to raise money. In return, the businesses offer people who invest in the coins a return or a share of their profits. (This is called an initial coin offering, or ICO. It can be similar to a company selling stock in order to raise money.) The coins can be resold to other investors, often on a virtual currency exchange, where a person or organization exchanges the coins for regular currency or for other virtual currency. As with any type of investment, the coins’ value may rise or fall, based on various factors.

It’s helpful to keep in mind that virtual currencies are still evolving and may carry significant risk. According to the Consumer Financial Protection Bureau and the U.S. Securities and Exchange Commission, virtual currency users and investors might not have the same protections they’d have with more traditional ways of making purchases or investments. Frauds and scams often cheat consumers and investors with fake opportunities. In addition, virtual currencies and the companies that store them are often targets for hackers, so both consumers and investors can lose their money. It’s good practice to make sure you understand the risks of virtual currencies before using or investing in them.

NOTE

It’s important to emphasize that all investments, even savings products, have some level of risk. These risks include how readily investors can get their money when they need it; how fast their money will grow; whether they can lose some, all, or in some cases, more than their initial investment; and how inflation, taxes, market conditions, and other external factors may affect the value of their investment.

Teaching this activity

Whole-class introduction

- Ask students if they’ve heard of virtual currency or cryptocurrency.
 - If they have heard of those terms, ask them to share what they know.

- Read the “Exploring key financial concepts” section to students,
- Tell students they’ll read a consumer advisory from the CFPB – called “Risks to consumers posed by virtual currencies” – to learn about virtual currencies, with some attention given to a type of virtual currency called cryptocurrency.
 - Be sure to explain that because virtual currencies are changing rapidly, students who want to use or invest in them can check <https://www.consumerfinance.gov/> and <https://www.investor.gov/> for any new information from the federal government on virtual currencies.
- Have them discuss what they think a consumer advisory might be.
- Ask them to predict what the tone and focus of the text will be given the title and the fact that it is a consumer advisory.
- Be sure students understand key vocabulary:
 - **Cryptocurrency:** Also called “crypto,” it’s a type of encrypted digital currency that generally only exists electronically. (Encryption is a process that protects something from unauthorized access.) There is no physical coin or bill unless you use a service that allows you to cash in cryptocurrency for a physical token. You usually exchange cryptocurrency with someone online, with your phone or computer, without using an intermediary like a bank. Cryptocurrency accounts are not backed by a government. Cryptocurrency values change constantly.
 - **Inflation:** Inflation occurs when the prices of goods and services increase over time.
 - **Invest:** To commit money to earn a financial return; the strategic purchase or sale of assets to produce income or capital gains.
 - **Investment:** Something you spend your money on that you expect will earn a financial return.
 - **Taxes:** Required payments of money to governments, which use the funds to provide public goods and services for the benefit of the community as a whole.
 - **Virtual currency:** A kind of electronic money. It’s a digital representation of value that is not issued by a government, such as a central bank or a public authority, but is accepted as a means of payment and can be transferred, stored, or traded electronically.

TIP

Visit CFPB’s financial education glossary at [consumerfinance.gov/financial-education-glossary/](https://www.consumerfinance.gov/financial-education-glossary/).

Individual work

- Distribute the “Wondering about virtual currencies” worksheet.
- Distribute the CFPB consumer advisory or have students access the document electronically at https://files.consumerfinance.gov/f/201408_cfpb_consumer-advisory_virtual-currencies.pdf.
 - Note: Pages 1-3 address investing risks and pages 4-6 address risks to consumers.
- Students will read the consumer advisory and answer the reading comprehension questions on the worksheet.
- Students will then answer the reflection questions.

Wrap-up

Ask volunteers to share their answers to the reflection questions.

Suggested next steps

Consider searching for other [CFPB activities](#) that address the topic of investing. Suggested activities include “[Discovering the benefits of investing early](#)” and “[Playing an investment game](#)”.

You also can have students explore the U.S. Securities and Exchange Commission resource at <https://www.investor.gov/additional-resources/spotlight/crypto-assets> to learn more about virtual currencies and cryptocurrency.

Measuring student learning

Students’ answers on their worksheets and during discussion can give you a sense of their understanding.

The answer guide on the next page provides possible answers for the “Wondering about virtual currencies” worksheet. **Keep in mind that students’ answers may vary.** The important thing is for students to have reasonable justification for their answers.

Answer guide

- In the first paragraph, the word “virtual” most closely means:
 - Near
 - Digital**
 - Practical
 - Indirect
 - Pretend
- This passage is written from the viewpoint of:
 - A person who made a lot of money investing in virtual currency
 - A company that makes virtual currencies
 - A celebrity that likes virtual currencies
 - A helpful expert sharing information about virtual currencies**
 - A victim of fraud related to virtual currencies
- The primary purpose of this text is to:
 - Persuade you to invest in virtual currency
 - Inform you about a hot new trend in investing
 - Make you aware of the potential risks of investing in virtual currency**
 - Make sure you don’t invest in virtual currency
 - Help you if you’ve been a victim of virtual currency fraud
- The following were all discussed as a potential risk of virtual currency EXCEPT:
 - Hackers
 - Scams
 - Fewer protections
 - Cost
 - You may be arrested**
- The text explains that virtual currencies are not kept in banks or credit unions. Rather, they’re stored in a “digital wallet” that you access through a “private key.” Which of the following is true about a private key? (Select all that apply.)
 - It is a physical token that you must have on you at all times.
 - It is a random sequence of 64 letters and numbers.**
 - It should be kept secret.**
 - It is critical to owning and using virtual currency.**
 - It can be seen by everyone in your virtual network.

6. The text box on the top of page two describes Nicole’s experience making a Bitcoin purchase. From this description, you can infer that:
- a. **Nicole was the victim of a scam and lost all of her money.**
 - b. Nicole sued the company that had set up the Bitcoin exchange.
 - c. Nicole made a lot of money from her investment.
 - d. Nicole’s bank reimbursed the money she lost in the Bitcoin exchange.
 - e. The author believes Nicole’s investment was worth the risk.
7. The key message of the section “Know who you’re dealing with if you decide to buy” can best be described as: It’s important to know _____
- a. What country you’re buying virtual currency from
 - b. **Who is behind this investment and what your contractual rights are**
 - c. The phone number of your virtual currency exchange
 - d. How much you’re likely to make from this investment
 - e. The minimum investment you need to make
8. A virtual currency account is often referred to as _____.
- a. A Bitcoin
 - b. A private key
 - c. **A wallet**
 - d. A bank account
 - e. A media account

Reflection questions

Answers will vary.