LESSON PLAN

Decoding Cryptocurrency

- IT'S A -
MONEY THING®

INCLUDED IN THIS PACKAGE

- **LESSON PLAN** *(2 pages)*
- **ACTIVITY** *(3 pages)*
- **QUIZ** *(1 page)*
- **ACTIVITY ANSWER KEY** *(1 page)*
- **QUIZ ANSWER KEY** *(1 page)*

COLLECT FROM YOUR LIBRARY

- **VIDEO 50** *(Decoding Cryptocurrency)*
- **PRESENTATION 50** *(Decoding Cryptocurrency)*
- **HANDOUT 50** *(Decoding Cryptocurrency)*



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LESSON PLAN

Decoding Cryptocurrency

GRADES
10 to 12

TIME
45 minutes



OVERVIEW

Bitcoin, blockchain, crypto—you've probably heard the terms, but what do they actually mean? In this lesson, students will explore the basics of cryptocurrency and what makes it different from traditional forms of money. Students will also learn key cryptocurrency terms and consider some of its potential benefits and risks.

GOALS

- Familiarize students with key cryptocurrency concepts and terminology
- Encourage students to think critically about cryptocurrency

OBJECTIVES

- Explain how cryptocurrency differs from traditional forms of money
- Describe how cryptocurrency can be used both as a currency and an investment
- Identify potential benefits and risks associated with cryptocurrency

ASSESSMENT

Use the activity in this lesson plan to assess students' grasp of the topic. An optional quiz is also provided (the quiz is not factored into the lesson's 45-minute runtime).

Did you know? *There will only ever be 21 million bitcoins in existence. This scarcity is designed to give bitcoin value over time.*

MATERIALS

- ☐ **VIDEO 50**—*Decoding Cryptocurrency*
- ☐ **PRESENTATION 50**—*Decoding Cryptocurrency*
- ☐ **HANDOUT 50**—*Decoding Cryptocurrency*
- ☐ **ACTIVITY**—*Crypto Decoder*
- ☐ **QUIZ**—*Decoding Cryptocurrency and Answer Key*

PREPARATION

- *Gather digital materials (video and presentation)*
- *Prepare the* **ACTIVITY:** *Print one copy of the Crypto Decoder (page 1) for each group. Print and cut out one complete set of clue cards (pages 2–3). Briefly review the Answer Key.*
- *Print* **HANDOUT 50** *for each student*
- *(Optional) Print* **QUIZ** *(Decoding Cryptocurrency) for each student*

LESSON PLAN

Decoding Cryptocurrency

TIMELINE

5 minutes	Introduce topic and show **VIDEO 50** *(Decoding Cryptocurrency)*
15 minutes	Go over **PRESENTATION 50**
20 minutes	Facilitate the **ACTIVITY**
5 minutes	Wrap up discussion and distribute **HANDOUT 50**
(Optional)	Assessment: **QUIZ** *(Decoding Cryptocurrency)*

INSTRUCTIONS

1. Introduce the topic: "You may have heard words like bitcoin, blockchain or crypto online or in conversations. Today, we're going to take a closer look at what cryptocurrency is and how it works."
2. Show **VIDEO 50**
3. Go over **PRESENTATION 50**
4. Facilitate the **ACTIVITY**
   - Divide students in up to 12 teams
   - Give each team a copy of the Crypto Decoder worksheet
   - Distribute the clue cards as evenly as possible among the teams
   - Explain that teams will match the definition on each clue card to the correct term and record the card's letter on their worksheet; as they solve the clues, they can use the letters to decode the secret message
   - Establish the order in which clue cards will be passed between teams
   - Give teams about one minute to solve their clue card, then have them pass their card to the next team
   - Continue until each team has worked through all 12 clue cards
   - Give teams a few minutes to complete the secret message, then review the correct matches and message as a class
5. Use the secret message to lead into a brief discussion about cryptocurrency risks:
   - What should someone consider before deciding whether to invest in cryptocurrency?
   - Based on what you've learned, would you recommend investing in cryptocurrency? Why or why not?
6. Distribute **HANDOUT 50** for students to take home
7. (Optional) Distribute **QUIZ** for individual assessment, or answer the questions together as a class; decide whether or not students can reference their notes/handouts during the quiz

NOTES

ACTIVITY

Decoding Cryptocurrency

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CRYPTO DECODER

Directions: Match each clue card to the correct cryptocurrency term. Record the letter from the clue card in the decoder below. Use the completed decoder to reveal the secret message.

SYMBOL	TERM	LETTER
	WALLET	
£	BLOCKCHAIN	
¥	FIAT CURRENCY	
✱	NODE	
	ENCRYPTION	
€	PUBLIC KEY	

SYMBOL	TERM	LETTER
⊓	BITCOIN	
	DISTRIBUTED LEDGER	
∇	EXCHANGE	
¢	CRYPTOGRAPHY	
$	PRIVATE KEY	
◊	LEDGER	

SECRET MESSAGE



ACTIVITY

Decoding Cryptocurrency

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CRYPTO DECODER – CLUE CARDS

Directions: Cut out and shuffle the cards, then divide them as evenly as possible among the teams.

I

The first widely used cryptocurrency, created as an alternative to traditional money.

T

A digital record of transactions stored in connected blocks and shared across a network.

W

The use of codes and other techniques to keep information secure.

S

A record of transactions that is shared and synchronized across multiple computers.

H

The process of turning information into a coded form to protect it from unauthorized access.

R

An online platform where people can buy, sell or trade cryptocurrencies.

ACTIVITY

Decoding Cryptocurrency

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CRYPTO DECODER – CLUE CARDS

Directions: Cut out and shuffle the cards, then divide them as evenly as possible among the teams.

O

Government-issued money, such as the U.S. dollar.

K

A record used to keep track of financial transactions.

K

A computer connected to a cryptocurrency network that helps store or verify transaction information.

E

A secret code used to access and manage your cryptocurrency.

S

A code that can be shared with others so they can send cryptocurrency to you.

N

A digital tool that stores the keys needed to access and manage cryptocurrency.

QUIZ

Decoding Cryptocurrency

NAME: _____

TOTAL */ 7 pts*

MULTIPLE CHOICE

Directions: CIRCLE the best possible answer to each question.

1. Which statement best describes how cryptocurrency differs from traditional currency?
   a. It can operate without a central bank or government
   b. It can only be used for online purchases
   c. Its value is fixed to the U.S. dollar
   d. It must be stored in a bank account

2. What role does blockchain technology play in cryptocurrency?
   a. It converts cryptocurrency into cash
   b. It determines the value of cryptocurrency
   c. It records and verifies transactions
   d. It protects cryptocurrency from price changes

/2 pts

SHORT ANSWER

Directions: Answer the following question in one or two sentences.

3. Identify one potential benefit and one potential risk of cryptocurrency.

_____

_____

/2 pts

TRUE OR FALSE

Directions: CIRCLE either true or false.

4. TRUE or FALSE — The value of cryptocurrency can rise or fall quickly.

5. TRUE or FALSE — Cryptocurrency funds are insured by the federal government, just like money in a bank account.

6. TRUE or FALSE — Strong passwords and two-factor authentication can help protect cryptocurrency.

/3 pts

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ACTIVITY ANSWER KEY

Decoding Cryptocurrency

CRYPTO DECODER

Directions: Match each clue card to the correct cryptocurrency term. Record the letter from the clue card in the decoder below. Use the completed decoder to reveal the secret message.

SYMBOL	TERM	LETTER
◊	WALLET	*N*
£	BLOCKCHAIN	*T*
¥	FIAT CURRENCY	*O*
*	NODE	*K*
☺	ENCRYPTION	*H*
€	PUBLIC KEY	*S*

SYMBOL	TERM	LETTER
⊓	BITCOIN	*I*
┼	DISTRIBUTED LEDGER	*S*
∇	EXCHANGE	*R*
¢	CRYPTOGRAPHY	*W*
$	PRIVATE KEY	*E*
◊	LEDGER	*K*

SECRET MESSAGE

K	N	O	W		T	H	E		R	I	S	K	S
◊	◊	¥	¢		£	☺	$		∇	⊓	€	*	┼



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QUIZ ANSWER KEY

Decoding Cryptocurrency

MULTIPLE CHOICE

Directions: CIRCLE the best possible answer to each question.

1. Which statement best describes how cryptocurrency differs from traditional currency?
   - (a.) It can operate without a central bank or government
   - b. It can only be used for online purchases
   - c. Its value is fixed to the U.S. dollar
   - d. It must be stored in a bank account

2. What role does blockchain technology play in cryptocurrency?
   - a. It converts cryptocurrency into cash
   - b. It determines the value of cryptocurrency
   - (c.) It records and verifies transactions
   - d. It protects cryptocurrency from price changes

/2 pts

SHORT ANSWER

Directions: Answer the following question in one or two sentences.

3. Identify one potential benefit and one potential risk of cryptocurrency.

Example benefits: Fast transactions; easy access; direct payments; global use.

Example risks: Price changes; scams or fraud; lost passwords; limited protections.

/2 pts

TRUE OR FALSE

Directions: CIRCLE either true or false.

4. (TRUE) or FALSE — The value of cryptocurrency can rise or fall quickly.
5. TRUE or (FALSE) — Cryptocurrency funds are insured by the federal government, just like money in a bank account.
6. (TRUE) or FALSE — Strong passwords and two-factor authentication can help protect cryptocurrency.

/3 pts