

# What Is a Blockchain?

Grades 9–12 · 1:33 video · Spending 12-9c · [thesteadyblock.com/episodes/what-is-a-blockchain/](https://thesteadyblock.com/episodes/what-is-a-blockchain/)

Students learn what a blockchain is: a notebook of payments where each page carries a code made from the page before, kept and checked by many computers, so old pages are very hard to change.

## 1 Before watching

If everyone in the class kept a copy of the same notebook, how could you tell if someone secretly changed an old page in their copy?

## 2 Watch the episode

1:33, at [thesteadyblock.com/episodes/what-is-a-blockchain/](https://thesteadyblock.com/episodes/what-is-a-blockchain/) or on YouTube (@TheSteadyBlock).

## 3 Discuss

1. How does putting a code made from the previous page at the top of each new page link the whole notebook together?
2. Why would someone who changes an old page have to redo every later page, faster than everyone else adds new ones? What does that make very hard?
3. Supporters say a record that is very hard to change builds trust without a central keeper; critics point out that it also means mistakes and wrong payments stay in the record for good. Is a record that never forgets mostly a strength or a weakness? Give an example.

## Key terms

|                    |                                                                                                                           |
|--------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Block</b>       | A page of the record holding a batch of recent payments.                                                                  |
| <b>Blockchain</b>  | A chain of blocks, each linked to the one before by a code.                                                               |
| <b>Code (hash)</b> | A short fingerprint made from a page's contents; change anything on the page and the code comes out completely different. |
| <b>Node</b>        | A computer that keeps a copy of the record and checks every page.                                                         |

## 4 Exit quiz: answer key

1. **B A page holding a batch of recent payments**  
Each page of the notebook, holding a batch of recent payments, is called a block.
2. **C About every 10 minutes**  
A new page is added about every 10 minutes on average.
3. **D A code made from the previous page**  
Each new page starts with a code made from the page before it, so the pages are glued together all the way back to page one.
4. **B Its code changes, so it no longer matches the next page**  
A changed page gets a completely different code, so the break shows up and runs all the way to today.
5. **C Nothing gets erased, so mistakes stay in the record too**  
The same feature that protects old pages means mistakes can't be erased either.

## National standard

### MAIN STANDARD · SPENDING 12-9C

Research financial technology options for financial record-keeping.

Also: Saving 12-3b, Spending 8-4c. From the National Standards for Personal Financial Education (Council for Economic Education and Jump\$tart Coalition, 2021).

The student quiz handout, numbers, sources and further reading are on the full teacher page: [thesteadyblock.com/teachers/what-is-a-blockchain/](https://thesteadyblock.com/teachers/what-is-a-blockchain/). Free to use in class. Educational content only, not financial or investment advice.