



# CodeHS

## Hour of Code: Teacher Guide

### BEFORE THE HOUR OF CODE:

- Make sure student computers have an up-to-date browser (Chrome, Safari, or Firefox).
- Read through teacher notes in this document. Download notes to have exercise solutions ready.
- Have enough copies of student handouts printed.

### DURING THE HOUR OF CODE:

1. Direct students to [codehs.com/hoc\\_blockchain](https://codehs.com/hoc_blockchain)
2. Allow students to work through Hour of Code at their own pace, providing encouragement and support when needed. See tips below for handling student questions.
3. Tweet pictures or stories at @CodeHS #HourOfCode!
4. If time allows at the end of the period, facilitate a discussion around the Hour of Code using the following guiding questions:
  - Before today, what did you think about cryptography or Blockchain?
  - Did any of these ideas change during the Hour of Code?
  - What was your favorite part of the Hour of Code?
  - Did any parts of the Hour of Code challenge you? How?

### HOUR OF CODE TIPS:

If students get stuck or have questions, it is okay if you don't have the answer! Ask questions to activate their problem-solving skills such as:

- What can we try differently?
- What do you want to see more of in cryptography, hashing, and how blockchain technology works?
- How can we break this problem into smaller steps?

**Thank you for your dedication to Computer Science Education!**

**Contact us at [hello@codehs.com](mailto:hello@codehs.com) if you have any questions about getting started!**



CodeHS

# Blockchain Technology Teacher Notes

**Interested in going beyond the Hour of Code?**

**Reach out to us at [hello@codehs.com](mailto:hello@codehs.com)!**

In this Hour of Code, students are introduced to cryptography, hashing and blockchain technology so they can begin to understand its potential as a technology.

## **Accompanying Handouts**

Student Version: [codehs.com/hoc\\_handout\\_blockchain](https://codehs.com/hoc_handout_blockchain)

Teacher Version: [codehs.com/hoc\\_handout\\_blockchain\\_teacher](https://codehs.com/hoc_handout_blockchain_teacher)

## **Objective**

Students will be able to ...

- use basic knowledge of hashing and blockchain to build successive more secure iterations of a blockchain in a fictitious setting.

**Link to Activity:** [codehs.com/hoc\\_blockchain](https://codehs.com/hoc_blockchain)

## **Discussion Questions**

- What is cryptography? Hashing?
- How do you think blockchains are used in Bitcoin transactions? In other ways?
- What was the hardest part about this activity? The easiest?

**Encourage students to get creative with their investigations of blockchain technology and not feel limited by the handouts or direction sets, if they have time! They should feel free to experiment until they have knowledge that they are excited to talk about.**