

Goals:

- Create an engaging lesson with a variety of hands-on activities
- Create interest in playing and changing games with PICO-8
- Increase knowledge of coding

Introduction: 5 min**Overview of PocketCHIP + PICO-8**

What do we expect students to gain as a result of the lesson?

- Feel for playing PICO-8
- How to edit PICO-8 games
- Interest in/intro to coding with PICO-8

What are we going to do?

- Play games!
- Change games!
 - Characters
 - Map
 - Code

Play Celeste: 5 min

- Pull up the game and play one level as a demo
- CONTEST: Tell kids they will have 3 min - It does not matter how many times you die, but whoever gets to the highest level wins.
 - Show slide with controls
 - Ready...set...GO!
 - Stop everyone: Raise your hand if you beat level 1...2...3...etc.
 - Give prize to the winner (prize?)
- Celeste is HARD. By the end of the class, everyone should have the knowledge to make Celeste easier AND more fun.
 - Play saved version that is totally changed

Sprites Demo: 5 min

- Show how to navigate to the editor
- Have everyone change the way the 1st Celeste sprite looks
- Show how to run the game again
- Ask questions/explain why Celeste's look changes back and forth
- Side note: Terminal

- Explain what a terminal is and how typing 'run' is like using a terminal.
- Show how to get back to splore
- Show how to exit

Map Demo: 5 min

- Show how to navigate to the editor
- Have everyone move the map and build bridges/add elements to the map
- Show how to run the game again – see how the game has changed

Code Editor Demo 10 min

- Show how changes in the sprite and map editor has changed the code (?)
- Gravity:
 - Show how you can search w/ control F (f is for find)
 - Read the lines and ask them what we should do?
 - Everyone should make the agreed upon change and run the game to see what happens.

Apply new skills to Celeste or other games 10 min

PICO-8 Eval 5 min

What did you like about using PocketCHIP + PICO-8?

What didn't you like about using PocketCHIP + PICO-8?

Which of the following did you learn? Select all that apply.

How to play games on PICO-8

How to change sprites

How to change maps

How to use a terminal

How to edit code

How did you feel about coding BEFORE you played with PocketCHIP + PICO-8?

Not interested

A little interested

Moderately interested

Very Interested

Extremely interested

How do you feel about coding NOW that you have played with PocketCHIP + PICO-8?

Not interested

A little interested

Moderately interested

Very Interested

Extremely interested

Pick one: This class was... not good, good, great

TO BRING:

- 40 PocketCHiPs - updated software, tested
- 80 Pencils
- 2 CHiPs for demo
- HDMI adapter
- VGA adapter
- Composite Cable
- Small screen
- Keyboard
- Mouse
- Prize (?)
- Handouts (?)
- USB Hubs
- USB to mini cable
- Power strips