

Code for Teachers

A practical approach to programming

Episode 4:

Build a Number Guesser

Putting it all together

- The number guesser is a flexible activity appropriate for many levels
- Our version works with partners to teach both the programming logic *and* order of operations
- The concept of “remix” will allow students to own, self-differentiate, and learn new things beyond the stated objectives

Program Design

- Start with a number to guess (defined using mathematical operations)
 - `NUMBER = 7 * 2 - 8 + 5`
 - Ask the player to guess
 - Tell the player if the guess was too high, too low, or right on

Lesson Design

- Given the program objectives, students work in pairs to write the code
- Everyone's code must have the correct output to continue
- Then, have the partners create new math expressions for their secret number
- Partners switch computers and attempt to solve each other's problems
- Open it up to the whole class as they walk around and attempt to solve increasingly complex expressions



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