



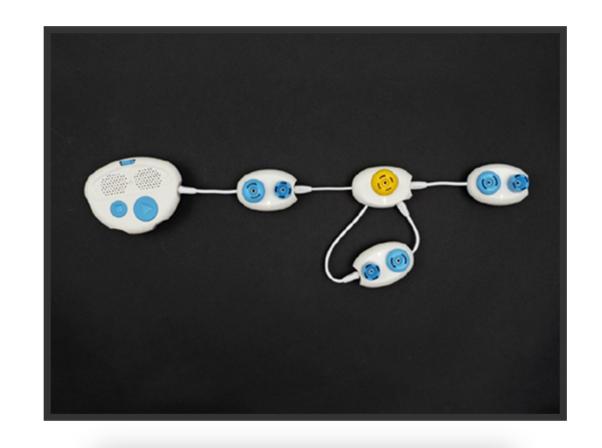
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Senior Manager

Why is coding important?

- Computational thinking
- Problem solving skills
- Resilience
- Creativity
- Collaboration/communication
- Lack of skills in the industry







How does Code Jumper work?

Glad You asked!





Can you save Code Jumper Programs?

If I can't save a program, how do I get data needed to assess my students?

- Computer Science Journal
- Screenshots
- Screen recording
- Photographs
- Audio/video recording





Poll Question

Have you used the assessments built into each Code Jumper Lesson?

- a.Yes
- b.No
- c. Unaware they existed



Assessment – Where do we find it?

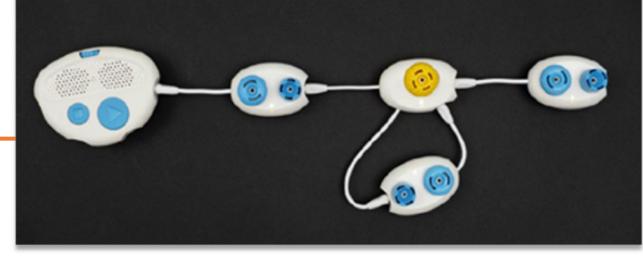
Overview

- Assessment embedded in each lesson
- Standards
- Assessment projects
- Resources





Let's see it in action... Lesson 6: Loops



LESSON OBJECTIVES

Students will:

- Understand that the loop command in computer programs is a repetition
- Learn how to create programs using the loop Command

EXPECTED OUTCOMES

Students will:

- All students: Explain what a loop command is and why we use it
- Most students: Recreate a programming sequence using a loop command
- Some students: Create an original sequence requiring a loop command



Loops Lesson: Unplugged example

OBJECTIVE

Introduce the students to the concept of a loop and how it can be modified to repeat a series of steps a required number of times.

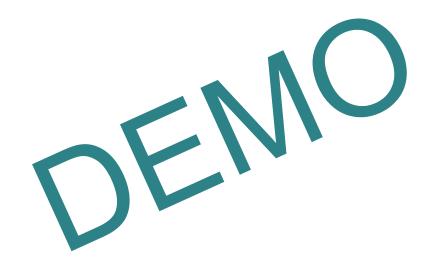
STUDENT EXAMPLE: Eliot and Mitchell

Unplugged Activity Computer Science Journal

Where do we see loops in our lives? Students write in their Computer Science Journals the list of ideas reported as a class to help them remember examples of repetitive tasks or loops.



Loops Lesson: Unplugged example





Poll Question

In this example, does the student understand how loops function?

a.Yes

b.No



Loops Lesson: Guided example

OBJECTIVE

Identify commands that repeat. Be introduced to the loop command and how to put the commands that need to be repeated inside a loop

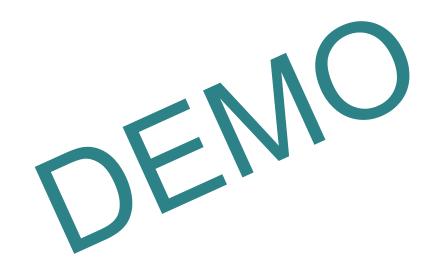
STUDENT EXAMPLE: Eliot and Mitchell

GUIDED ACTIVITY COMPUTER SCIENCE JOURNAL

How to get Code Jumper to create a loop? Students think about and record in their Computer Science Journals how to get Code Jumper to play the sequence of numbers 1, 2, 3, 4 three times in a row



Loops Lesson: Guided example





Assessment: Primary and Advanced

PRIMARY: Students will brainstorm and develop their own idea for a computer system they want to create using their prior learning of the programming components from lessons 1-8

ADVANCED: Students will demonstrate their understanding of the advanced lesson concepts by using Code Jumper to program a game, story or song.



Assessment: Primary dive

- PROJECT PLANNING: created in the Computer Science Journal
- PROGRAM CREATION: developing an original Code Jumper program
- REVIEW AND DEBUGGING: finding the errors and fixing them
- PROJECT PRESENTATION: demonstration of learning



Poll Question

What do you want to know about your students' progress with the computer science curriculum developed for Code Jumper?

- a. Open Ended question
- b.We will ask participants to leave their comments in the chat



Assessment: Computer Science Journal

LINK: <u>Primary Computer Science Journal Pages (Lessons 1-8)</u> (codejumper.com)



Assessment: Primary Rubric

LINK: Advanced Lesson Module: Project Assessment Rubric

(Lessons 9-19) (codejumper.com)



Resources

Code Jumper: www.codejumper.com

Code.org: Assessing and Checking Student Knowledge

MakeCode: <u>Teaching with Makecode</u>

CTSA: CSTA Standards

CSForAll: SCRIPT Program to get started

