Course 1 | Lesson 13



# Maze: Loops

Lesson time: 30 Minutes

### **LESSON OVERVIEW**

Building on the concept of repeating instructions from Getting Loopy, this stage will have students using loops to more efficiently traverse the maze.

**TEACHING SUMMARY** 

**Getting Started** 

Introduction

**Activity: Maze Loops** 

Maze: Loops

**Extended Learning** 

**Extension Activities** 

## **LESSON OBJECTIVES**

#### Students will:

- Identify the benefits of using a loop structure instead of manual repetition
- Create a program for a given task which loops a single command
- Break down a long sequence of instructions into the smallest repeatable sequence possible
- Create a program for a given task which loops a sequence of commands
- Employ a combination of sequential and looped commands to reach the end of a maze

### **GETTING STARTED**

#### Introduction

Review with students the Getting Loopy activity:

- What are loops?
- Why do we use them?

#### **ACTIVITY**

#### **Maze: Loops**

As students work through the puzzles, see if they can figure out how many fewer blocks they use with a loop vs. not using a loop.

# **EXTENDED LEARNING**

Use these activities to enhance student learning. They can be used as outside of class activities or other enrichment.

#### So Moving

- Give the students pictures of actions or dance moves that they can do.
  - Have students arrange moves and add loops to choreograph their own dance.
- Share the dances with the rest of the class.

#### **Connect It Back**

- Find some YouTube videos of popular dances that repeat themselves.
- Can your class find the loops?
- Try the same thing with songs!



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