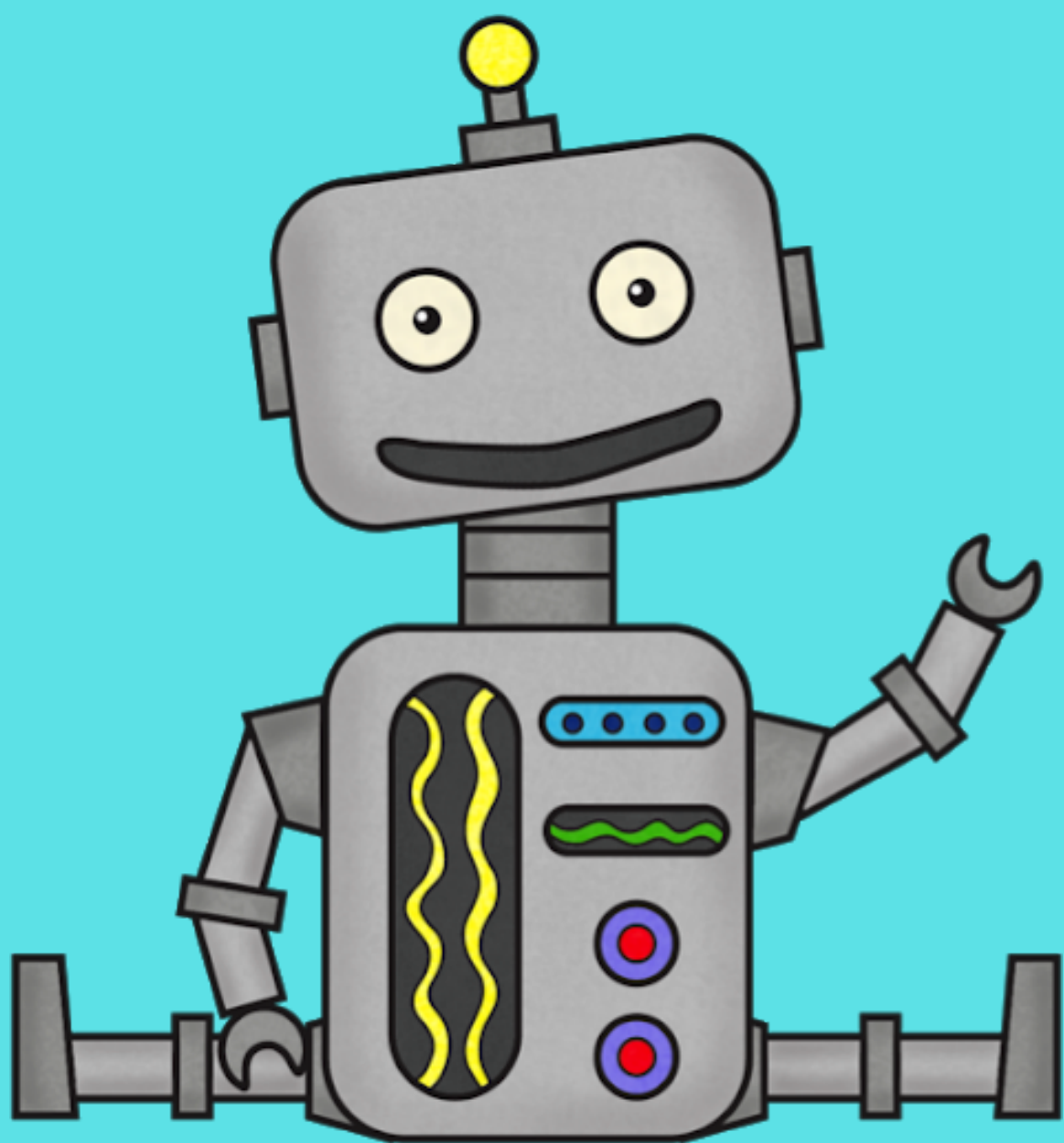
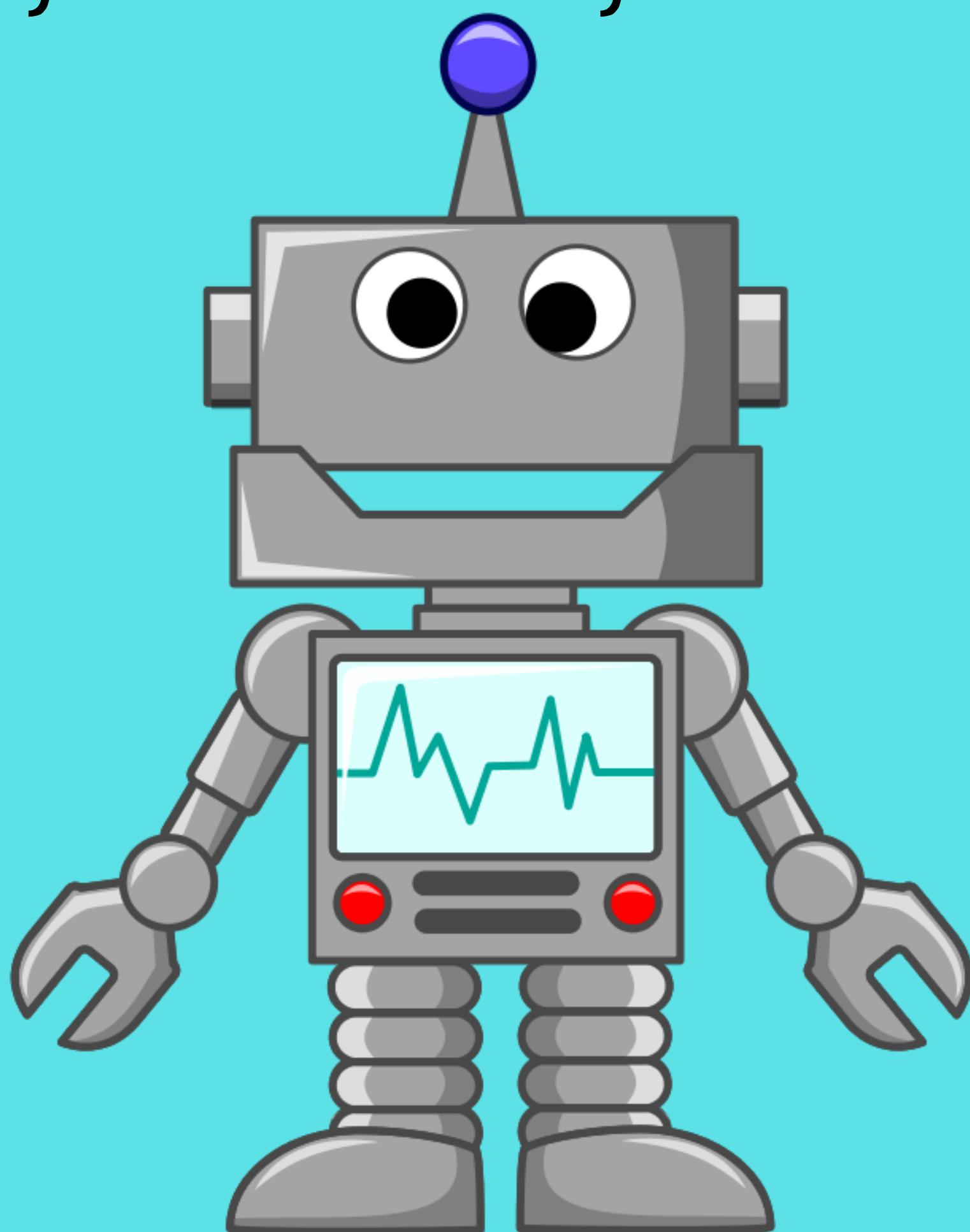


# Coding Workbook

## Beginner

Adapted and used with permission from  
Calgary Public Library



# Activity One

## Today's Module

<http://studio.code.org/s/course2/stage/3/puzzle/1>

Stage 3: Maze: Sequence



- Learn what coding and algorithms are, and practice making your own.
- You are also learning about “decomposing” - breaking a hard problem down into simpler parts.

## Vocabulary Words

- **Algorithm:** A list of steps to finish a task. A set of instructions that can be performed with or without a computer. For example, the collection of steps to make a peanut butter and jelly sandwich is an algorithm.\*
- **Decompose:** Break a problem down into smaller pieces.\*

Today I Learned... (write or draw about something you learned today)

A large, empty rounded rectangle with a light blue border, intended for the student to write or draw about something they learned today.

Really Liked... (write or draw about something you enjoyed today)

A large, empty rounded rectangle with a light blue border, intended for the student to write or draw about something they enjoyed today.

\*Vocabulary word definitions were taken directly from the glossary at code.org: <https://code.org/curriculum/docs/k-5/glossary>

# Activity Two

## Today's Module

<http://studio.code.org/s/course2/stage/6/puzzle/1>

Stage 6: Maze: Loops



- Learn about loops - how to make a computer repeat an instruction without having to use the same words (or code) over and over again.
- You are also working on the skill of “pattern matching” - finding things that are the same.

## Vocabulary Word

- **Loop:** the action of doing something over and over again.\*
- **Pattern Matching:** Finding similarities between things.\*

**Today I Learned...** (write or draw about something you learned today)

A large, empty rounded rectangular box with a light blue border, intended for a student to write or draw about something they learned today.

**Really Liked...** (write or draw about something you enjoyed today)

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# Activity Three

## Today's Module

<http://studio.code.org/s/course2/stage/10/puzzle/1>

Stage 10: Bee: Debugging



- Learn how to spot mistakes in a program and fix your code.
- This also lets you practice problem solving and persistence (working on a problem until you get it right).

## Vocabulary Words

- **Bug:** An error in a program that prevents the program from running as expected.\*
- **Debugging:** finding and fixing problems in your algorithm or program.\*

**Today I Learned...** (write or draw about something you learned today)

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**Really Liked...** (write or draw about something you enjoyed today)

A large, empty rounded rectangle with a light blue border, intended for the student to write or draw about something they enjoyed today.

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# Activity Four

## Today's Module

<http://studio.code.org/s/course2/stage/13/puzzle/1>

Stage 13: Bee: Conditionals

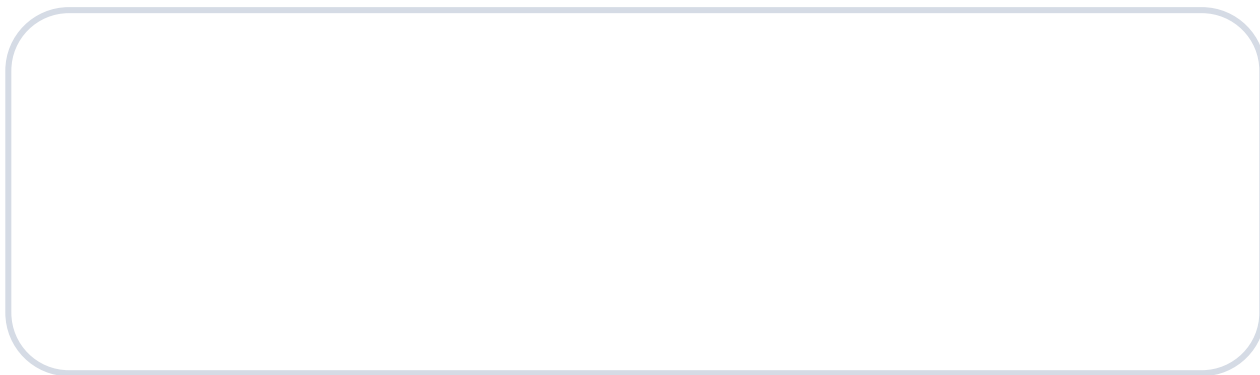
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

- Today you will learn about conditionals; if this happens, then something else happens.
- You will also keep practicing with loops and debugging.

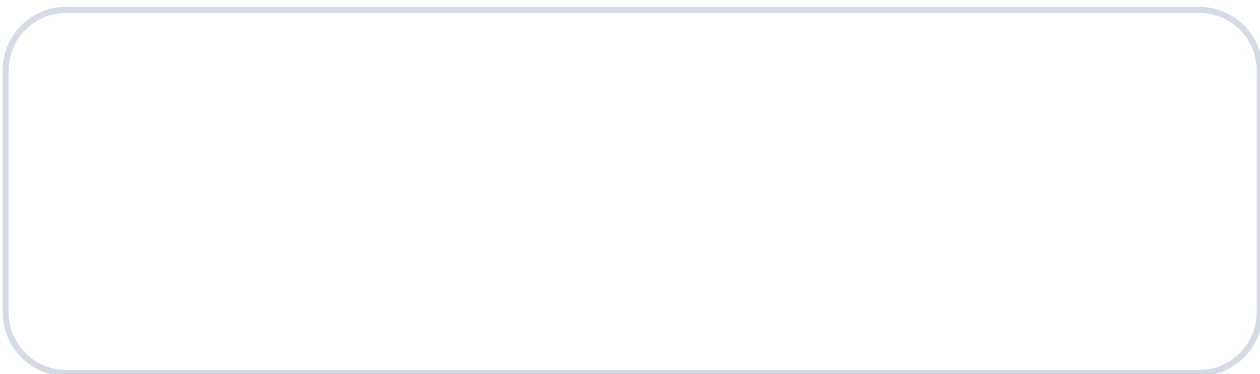
## Vocabulary Words

- **Conditionals:** Statements that only run under certain conditions or situations.\*

Today I Learned... (write or draw about something you learned today)



Really Liked... (write or draw about something you enjoyed today)



\*Vocabulary word definitions were taken directly from the glossary at code.org: <https://code.org/curriculum/docs/k-5/glossary>

# Activity Five

## Today's Module

<http://studio.code.org/s/course2/stage/16/puzzle/1>

Stage 16: Flappy

1 2 3 4 5 6 7 8 9 10

- Learn about events - in computer science terms, an action that causes something to happen (like clicking the mouse to move a character).
- You also get to make your own version of the Flappy game, that you can share with friends or family!

## Vocabulary Words

- **Event:** an action that causes something to happen.\*

Today I Learned... (write or draw about something you learned today)

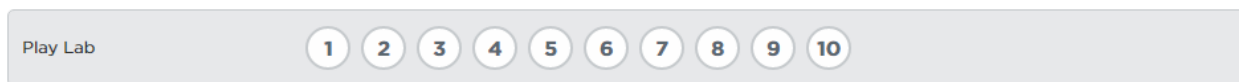
Really Liked... (write or draw about something you enjoyed today)

\*Vocabulary word definitions were taken directly from the glossary at code.org: <https://code.org/curriculum/docs/k-5/glossary>

# Activity Six

## Today's Module

<http://studio.code.org/s/playlab/stage/1/puzzle/1>



- Practice everything you learned by creating your own original game!
- When you're done, you can share the link with your family and friends so they can play the game you created.

The link for your game is: (write it out carefully)

Today I Learned... (write or draw about something you learned today)

Really Liked... (write or draw about something you enjoyed today)

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