

# Blockly Activity Answer Key

## Key Learning Points

- **Problem Solving Skills:** The game challenges students to navigate a maze and reach the end goal, which requires them to use problem solving skills and critical thinking
- **Intro to Loops and Conditionals:** The game introduces students to loops and conditionals , which allows them to write code that repeats actions based on certain conditions.
- **Algorithms :** The game requires student to create algorithms to navigate the maze, which helps them to understand the process of breaking down complex problems into smaller, manageable steps
- **Debugging :** As students progress through the game, they may encounter errors in their code which requires them to find and fix bugs. This helps them develop debugging skills and learn how to test and refine your code

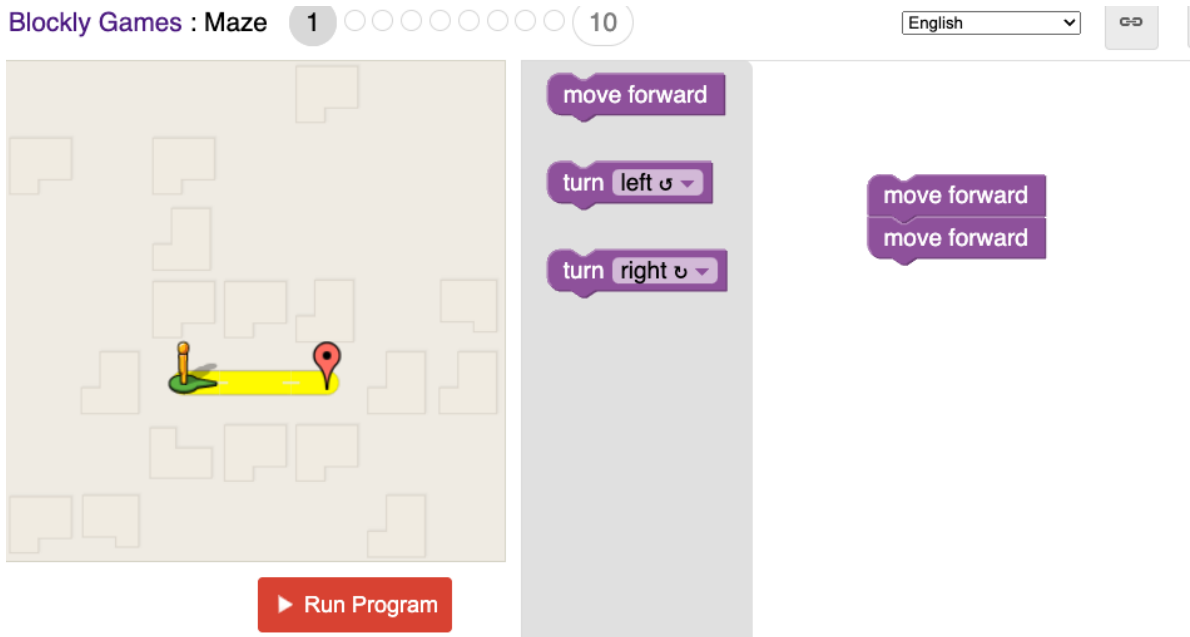
The following are the suggested answers to complete the maze. Level 1 - 10 .

1. Click this link to be directed to the Maze game website:

<https://blockly.games/maze?lang=en>

2. Solution for Level 1.

Blockly Games : Maze 1 ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ (10) English ↕



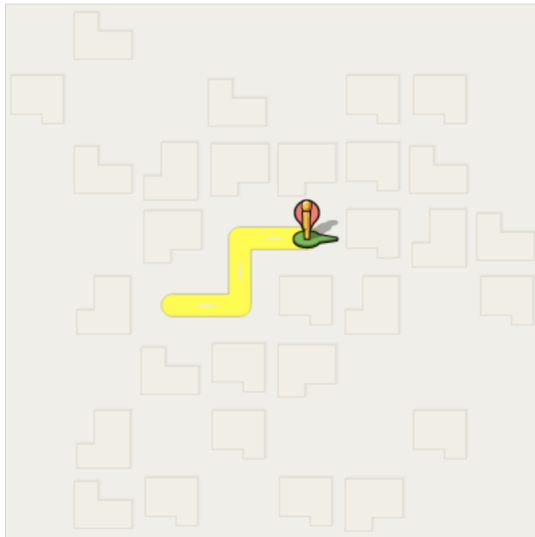
The screenshot shows the Blockly Games Maze interface. On the left is a maze with a yellow path leading from a green character to a red goal. Below the maze is a red 'Run Program' button. On the right is a code editor with a grey background. The code editor contains three blocks: a 'move forward' block, a 'turn left' block with a dropdown arrow, and a 'turn right' block with a dropdown arrow. To the right of the code editor is a stack of two 'move forward' blocks. The top bar shows 'Blockly Games : Maze' followed by a progress indicator with 10 circles, the first of which is filled and labeled '1'. There is also a language dropdown set to 'English' and a 'GO' button.

### 3. Solution for Level 2.

Blockly Games : Maze

2

10



Reset

move forward

turn left

turn right

move forward

turn left

move forward

turn right

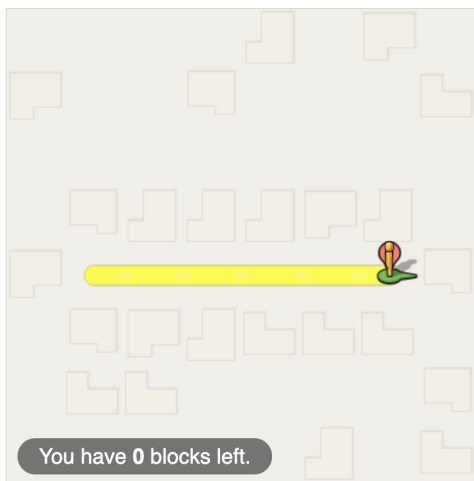
move forward

### 4. Solution for Level 3.

Blockly Games : Maze

3

10



You have 0 blocks left.

Reset

move forward

turn left

turn right

repeat until

do

repeat until

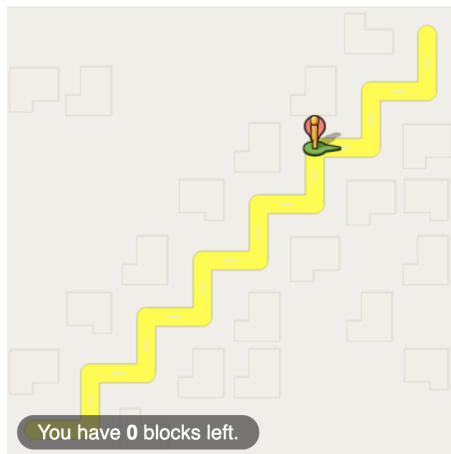
do move forward

## 5. Solution for Level 4.

Blockly Games : Maze

4

10



Reset

move forward

turn left

turn right

repeat until

do

repeat until

do

move forward

turn left

move forward

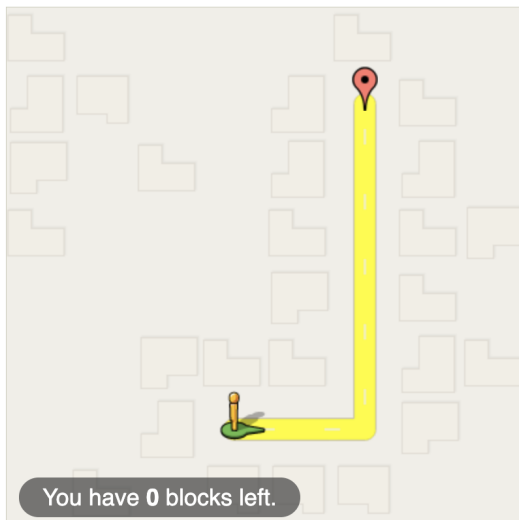
turn right

## 6. Solution for level 5

Blockly Games : Maze

5

10



Run Program

move forward

turn left

turn right

repeat until

do

move forward

move forward

turn left

repeat until

do

move forward

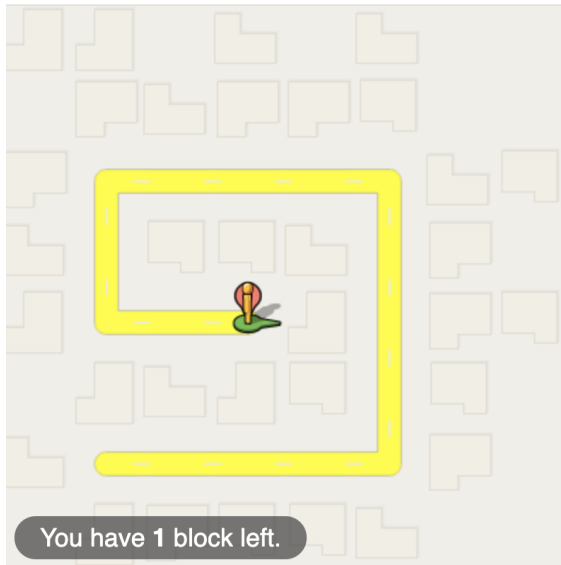
## 7. Solution for level 6

Blockly Games : Maze

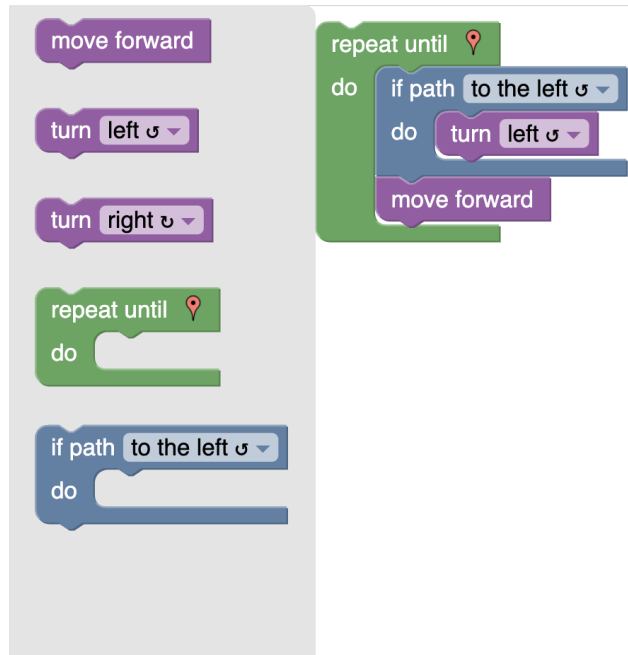
6

10

English



✖ Reset



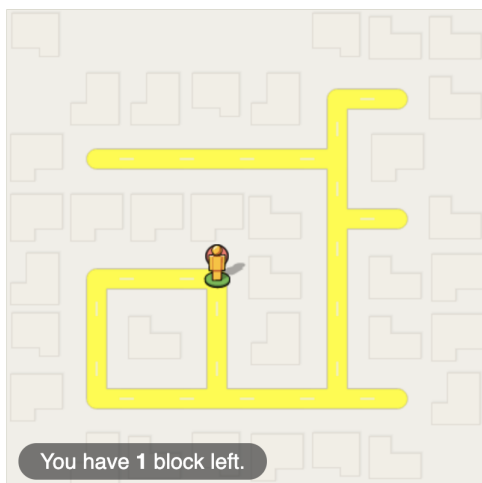
## 8. Solution for Level 7:

Blockly Games : Maze

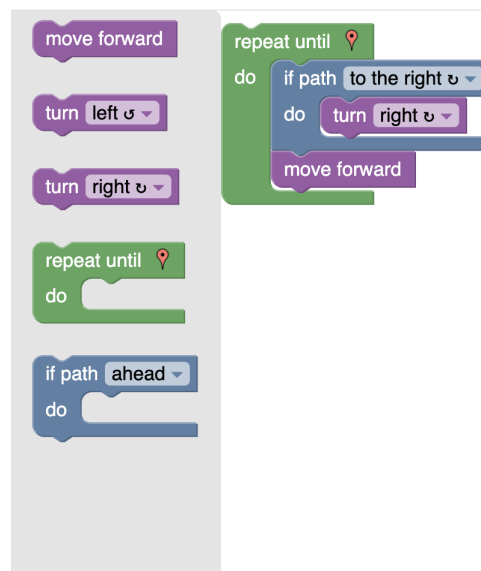
7

10

English



✖ Reset




**9. Solution for level 8:**

Blockly Games : Maze

8

10

English



You have 4 blocks left.

✕ Reset

move forward

turn left

turn right

repeat until

if path ahead

repeat until

do

if path to the left

do

if path to the right

do

move forward

**10.** Solution for Level 9:

Blockly Games : Maze

9

10

English

You have 1 block left.

Run Program

```

move forward
turn left
turn right
repeat until
do
if path ahead
do
if path ahead
do
else
if path to the left
do
turn left
move forward

```

## 11. Solution for Level 10:

Blockly Games : Maze

10

English

