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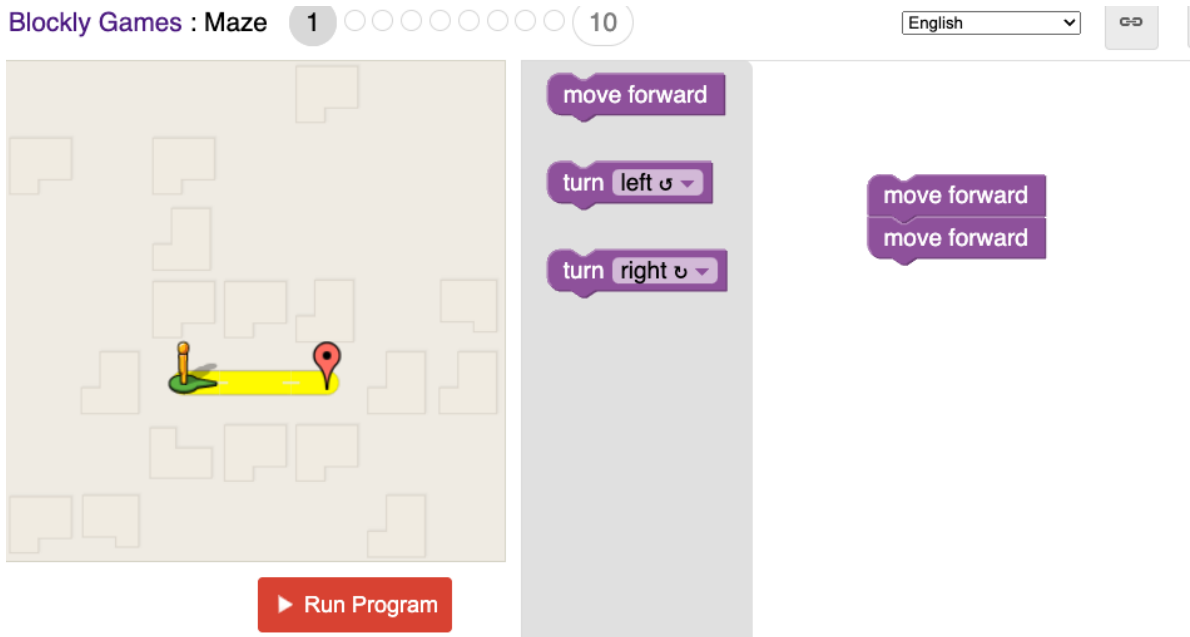
The following are the suggested answers to complete the maze. Level 1 - 10 .

1. Click this link to be directed to the Maze game website:
   https://blockly.games/maze?lang=en

2. Solution for Level 1.

3. Solution for Level 2.

move forward

turn left ↺

turn right ↻

move forward
turn left ↺
move forward
turn right ↻
move forward

X Reset

4. Solution for Level 3.

move forward

turn left ↺

turn right ↻

repeat until 📍
do

repeat until 📍
do move forward

You have **0** blocks left.

X Reset

5. Solution for Level 4.
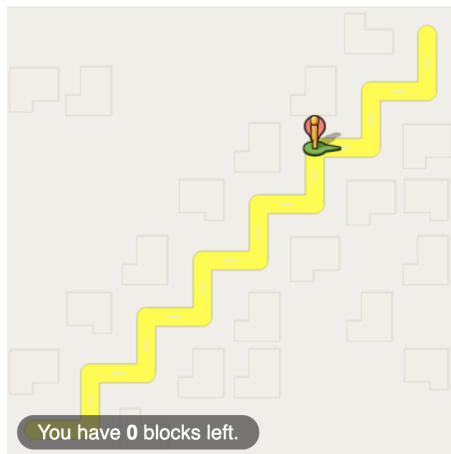
move forward

turn left ↺ ▾

turn right ↻ ▾

repeat until 📍
do

repeat until 📍
do   move forward
     turn left ↺ ▾
     move forward
     turn right ↻ ▾

You have **0** blocks left.

✕ Reset

6. Solution for level 5
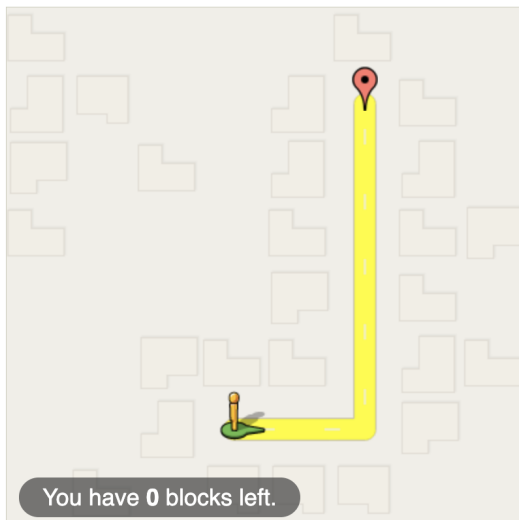
move forward

turn left ↺ ▾

turn right ↻ ▾

repeat until 📍
do

move forward
move forward
turn left ↺ ▾
repeat until 📍
do   move forward

You have **0** blocks left.

▶ Run Program

7. Solution for level 6

move forward

turn left ↺

turn right ↻

repeat until 📍
do

if path to the left ↺
do

repeat until 📍
do
  if path to the left ↺
  do
    turn left ↺
  move forward

You have **1** block left.
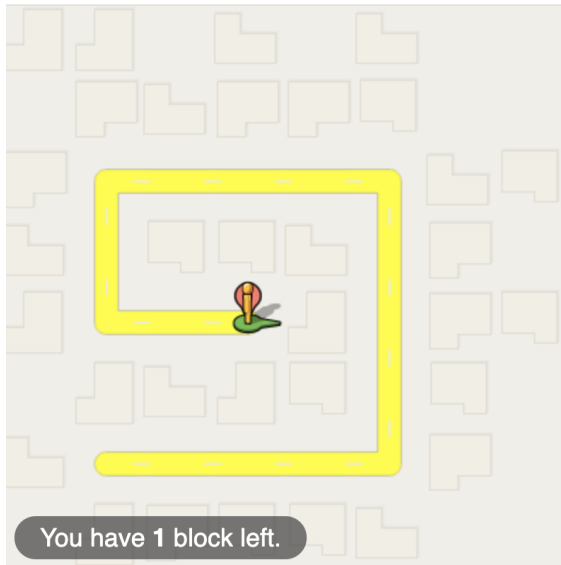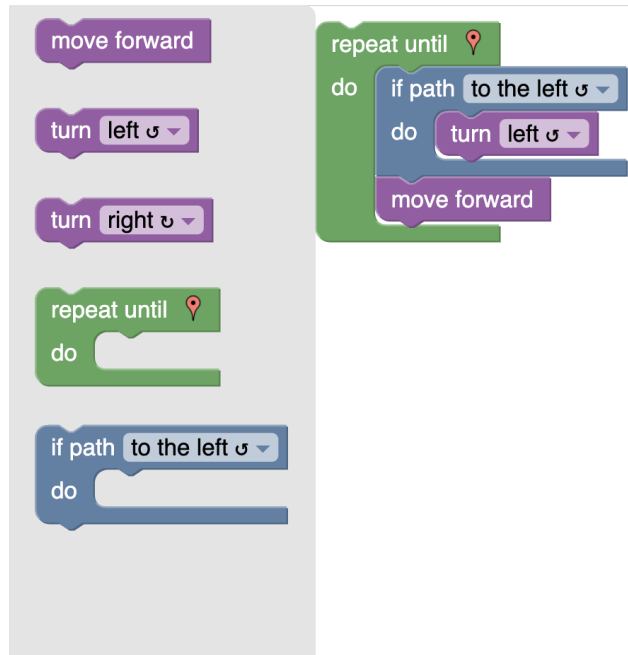
✕ Reset

8. Solution for Level 7:

move forward

turn left ↺

turn right ↻

repeat until 📍
do

if path ahead
do

repeat until 📍
do
  if path to the right ↺
  do
    turn right ↺
  move forward

You have **1** block left.
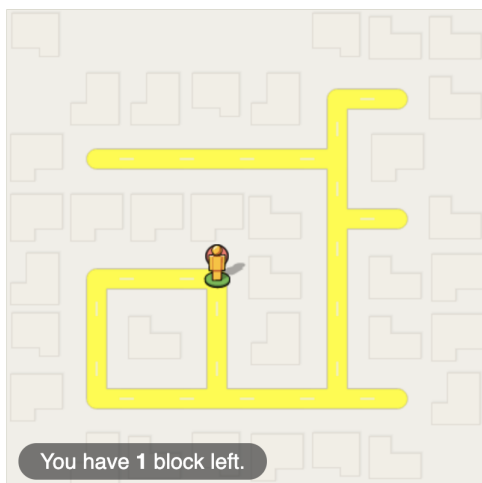
✕ Reset

9. Solution for level 8:

You have **4** blocks left.

✕ Reset

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10. Solution for Level 9:

You have **1** block left.

▶ Run Program

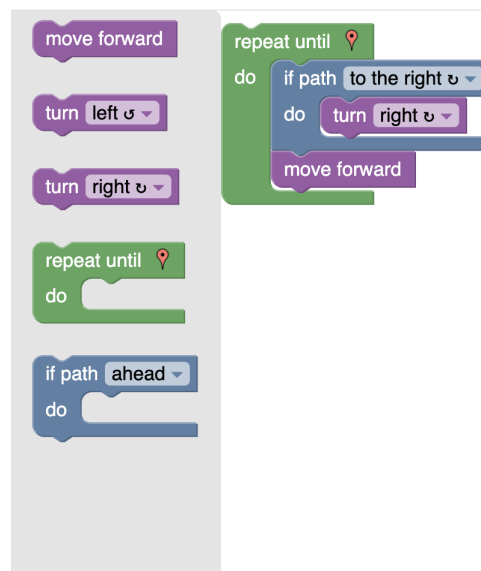**11.** Solution for Level 10:

Blockly Games : Maze   10   English

You have **0** blocks left.

✕ Reset

move forward

turn left ↺ ▾

turn right ↻ ▾

repeat until 📍
do

if path ahead ▾
do

if path ahead ▾
do
else

repeat until 📍
do   move forward
  if path ahead ▾
  do   if path to the right ↻ ▾
        do   turn right ↻ ▾
        else   if path to the left ↺ ▾
                do   turn left ↺ ▾
  else   if path to the left ↺ ▾
          do   turn left ↺ ▾
          else   turn right ↻ ▾