

Blockly Challenge 2

What is Blockly?

Blockly is a block-based visual programming tool. It is written in JavaScript, which is a popular programming language. We will be using Blockly to complete a series of maze challenges – this will introduce you to some programming fundamentals such as loops and conditionals!

The Second Maze

You should only work on this challenge if you've worked through the Blockly introduction/challenge one (and optionally, watched the video introduction).

Step 1 – As before, navigate <https://blockly.games> to and select “maze” – you can skip straight to challenge 2. If you're doing this straight after the second challenge, you'll probably have automatically been moved on to the third maze.

Step 2 – Complete the maze by choosing blocks and putting them into the correct sequence (creating an algorithm).

Step 3 – Click “Run Program” to test your program and if you're wrong, try again!

You could use a blank piece of paper or the back of this sheet to write down your workings out if you need to.

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Why Are we Doing This?

Blockly is a great introduction into the fundamentals of programming, and uses problem solving skills. The challenges are fun and can be quite challenging – this encourages computational thinking, and you'll start using loops and conditionals.

What You'll Need

Access to the internet and this handout. There is a video tutorial covering While Loops and If Statements and also another video covering how to use the website.

Programming Concepts

This is still reasonably simple, but now you'll be using a mix of blocks. The main programming concept covered here is algorithms. Algorithms are a set of instructions used to complete a task. The process of putting the blocks together in the right order is creating an algorithm.

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Solution

The solution for this is 5 blocks – move forward, turn left, move forward, turn right, move forward.

