

# Blockly Games | Form 1

## Objective

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Students will progress through an offline instance of Blockly Games (<https://blockly-games.appspot.com/>) over multiple class sessions, working independently and/or with each other as they see fit. Students will gain experience in problem-solving and thinking critically in a computational setting.

## Background

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After encouraging students to work on long-term group projects in MIT Scratch, then seeing a lack of motivation or ability to cumulatively progress on such projects over multiple class periods, I realized that a more incremental approach was needed, with greater hand-holding but also greater variation in student activity. Blockly Games, developed by Google and available freely, is a good fit for this. It also has the added benefit of exposing students to code occasionally, and of being built atop the generic Blockly interface, which I plan to use with the students after they have progressed through the game series.

## Lesson Observations

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Stream A	Stream B
04/03/2017 (40 mins): Students were introduced to the Blockly Games web application, shown how to get there, and completed the first game (Puzzle). All students were required to complete the Puzzle before anyone could move on to the next game, and all completed before class ended.	04/04/2017 (1 hour): Students were introduced to the Blockly Games web application, shown how to get there, and completed the first game (Puzzle). All students were required to complete the Puzzle before anyone could move on to the next game, and all completed before class ended. Students began to work on the series of Maze games.
04/04/2017 (1 hour): Students moved on to the series of Maze games. Some students reached level 7 by the end of class, most of the rest reached levels 4 or 5.	04/04/2017 (1 hour): Some students reached level 10 by the end of class, and most of the rest reached levels 5 or 6.
04/05/2017 (1 hour): Students were given the option to read the textbooks, play a game of their choice, or continue work on Blockly Games. Those who continued to work on Blockly Games were mostly those who had reached level 10 the day before, although no one succeeding in solving it. A hint and explanation was given to only stick to the left-hand wall, as indicated in the introductory prompt for that level.	