# Supplemental Materials for Code.org's Classic Mazes on Monarch

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Overview: This lesson/activity focuses on using the Tactile Viewer to examine supplemental materials for Classic Mazes course on Code.org.

Age Range: Novice braillist/ elementary ages

## Activity A

The student will access the mazes using the Tactile Viewer. To access the Tactile Viewer, the student should:

 1) Press the circle button on the front edge for home

 2) Use the arrow buttons to navigate to the Tactile Viewer

 3) Access the open button on the viewer

 4) Select the location of the file (in this case, a USB drive)

 5) Select Maze 1

 6) Begin to explore the maze tactually

Note: students will be at different levels of proficiency. Practice is key, however it is recommended for the teacher to assist and guide the student in order for the student to achieve success. Proficiency should be noted and recorded.

## Activity B

 The student will use tactile viewer to tactually examine Maze 1 (and subsequent mazes thereafter) to complete the puzzles. The following skills should be practiced:

 1) Zooming in and out

 2) panning left, right, up and down

 3) maintain orientation in the maze

 4) location-specific gestures

 5) using scroll bars

## Activity C

The student should be able to work with a peer to complete the puzzles for the Classic Mazes unit on Code.org. Each maze has been created and can be shared both with paper and using the Monarch. The student should use commands, such as "move \_\_ steps (up, down, left, right) to complete the puzzles, or solve the simple algorithms. In peer coding, one student could analyze the maze while the other student inputs the directions into the computer. There are some accessibility issues still at this time with this unit of Code.org, however the braille student should be encouraged to complete the following tasks fairly independently:

 1) read the challenge for each maze using a refreshable braille display

 2) navigate to all buttons and links on page

 3) use the Monarch to access the mazes digitally

 4) tell or write specifically what is needed to be done to solve each maze.

## Activity D: Real- World Object: optional activity

Students should be encouraged to use legos to build their own mazes with parameters given. Students can then share their mazes with their classmates and take turns solving each maze.

## Conclusion:

As a computer science, braille and assistive technology teacher, I want to make sure that visually impaired students are able to enjoy the coding activities alongside their sighted peers. Through adapting the mazes and using the Monarch, the students will be able to access each maze alongside their peers and give ideas and input in real-time. At the younger ages, mazes and hands-on activities, such as the coding critters, make learning coding fun and engaging. I hope adding the classical mazes on Code.org will prove to be a great addition to my coding curriculum.

## Key to Classic Mazes 1-20

an = angry bird

Np = naughty pig

ao = acorn

sq = squirrel

## Resources:

* [Code.org Mazes for the Monarch (PDF)](https://www.aph.org/app/uploads/2024/08/Code.org-Classic-Mazes-Final.pdf)
* [Code.org Maze Instructions for the Monarch (BRF)](https://www.aph.org/app/uploads/2024/08/Code-org-Classic-Mazes-Final.brf)