Name:	Date:	Class:

Navigating a Maze Worksheet

Answer the following questions related to the program design:

- 1. Define the task you would like to perform:
- 2. Write a set of instructions in English (such as: go forward X inches, turn Y rotations left, etc.) that the robot needs to do to successfully navigate the provided maze structure.

3. Are other solutions possible?

Answer the following questions related to the EV3 software:

- 4. What are the three choices for the "Direction" option on a Move Block?
- 5. What does "Steering" control? How do you change the steering?

6. What does "duration" mean? What is a rotation?

- 7. How many inches does one rotation typically make the robot move?
- 8. Assuming that the steering pointer pulled all the way in one direction, how many rotations is generally a good, 90-degree turn?
- 9. Brainstorm about possible programming solutions and write below the one that your group thinks is a good one.

10. Did you have to "iterate" (make changes to the program, etc.) to make it work?
How many iterations did you have to perform?

