

# Data Types & Display: School Zone Challenge

## School Zone Challenge

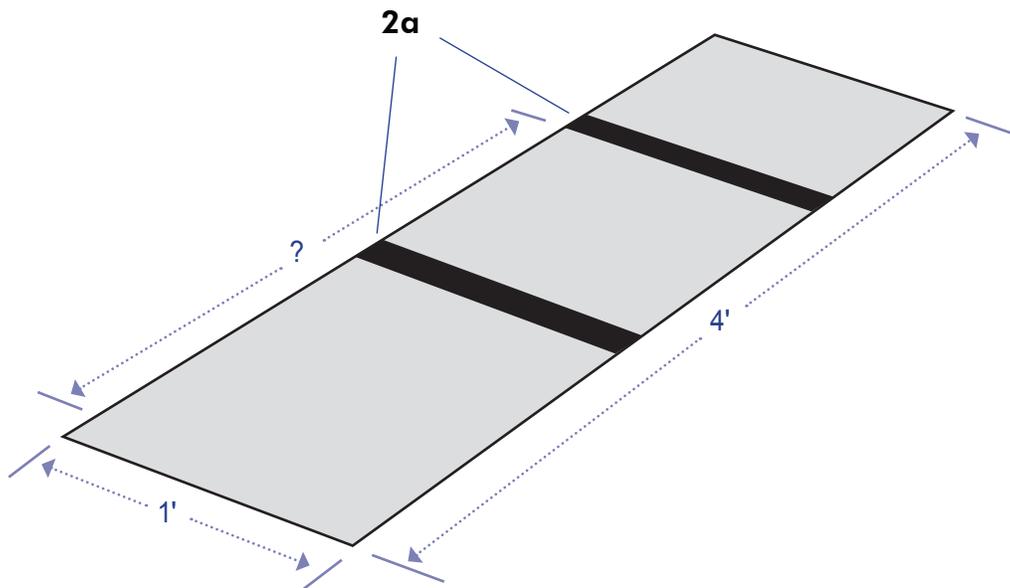
In this challenge, you must program a throttle and display so the robot can be driven at the right speed through a school zone.

### Materials

- Robot throttle (from Data Hubs “Continue” activity – hints on building one can be found there)
- 4' long light-colored smooth playing surface, at least 1' wide (hard floor, table, shelf, panel)
- Black removable tape to mark locations on playing surface

### Playing Field Setup

1. Use part of a standard 4'x4' gameboard or floor space
2. Using the board diagram below:
  - a. **School zone lines:** Make two dark tape lines to mark the bounds of the school zone
3. Complete the challenge as described in the Rules and Procedure section on the next page!



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### Rules and Procedure

1. Start the robot outside the school zone
2. Start the program
3. Use the throttle to drive the robot toward the school zone
4. Slow down in the school zone!
  - a. Reduce throttle to a maximum of 25% while within the school zone
  - b. Show your reduced speed by displaying the throttle setting on the robot's screen
5. Return to normal speed once you have exited the school zone
6. Beat the challenge by obeying the school zone traffic law!

