

Name:

Date:

Class:

Line Follower Challenge Post-Quiz **Answer Key**

1. Explain the logic you used in your “line-follower” program.

With the color sensor set to detect light reflectivity, it follows the edge of the line, directing the robot to turn one way when it detects more light reflectivity (whitish color) and turn the other way when it detects less light reflectivity (darkish color). By continuously doing this, sensor input and the programming come together to direct the robot to follow the tape edge.

2. Where might “follow the line” be used in the real world?

This idea can be turned into technology that is suitable for running buses and other mass transit systems, and may end up as part of autonomous cars navigating freeways. Engineers are designing future highways where cars will travel in lanes without drivers; a Google car has been tested to do this. Smarter versions of line-follower robots are used to deliver mail in office buildings, move items through factory assembly lines, find and collect products in a warehouse, and deliver medications in hospitals.