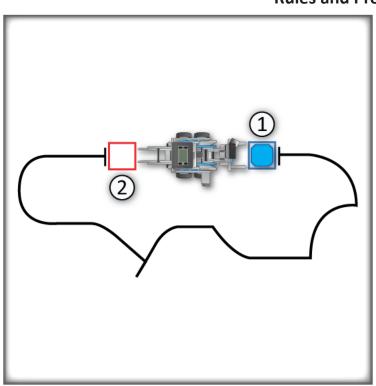# CHAPTER 10: Line Tracking Challenge

In this challenge, you must program your VEX IQ robot to pick up a box and transport it to a drop off zone by tracking a line. Use multiple line tracking behaviors to transport the box as quickly as possible. The robot must restart the challenge if it deviates from the line.

Rules and Procedures:

- Build the course shown above using black electrical tape on a light surface.
- The robot must pick up the box from the pick-up zone (blue) using its arm, then follow the line to the drop-off zone (red), and release the box there.
- Program your robot to deliver the box in the shortest time possible!

Hints:

- You can use a RepeatUntil Loop Block to adjust when a Line Track behavior ends. The program will then run whatever comes next, even another Line Track!
- Use multiple line tracks with different turning "sharpness" one after another to handle parts of the board.
- Adjust the "sharpness" of the robot's motions using the motor speeds in the second and third boxes of the lineTrack command blocks.
- You may find it advantageous to track the right side of the line in some places. Which way should the robot go when it sees Black to get to the right edge of the line? Which way should it go to get back after it drives off?