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| **Challenges:** | |
| |  | | --- | | **Challenge 1:** Write a program that makes the left wheel spin slowly clockwise for 5 seconds.  Now modify your program to make the wheel spin faster and then in the opposite direction.  Try to make the wheel turn for a longer time. Try the other wheel.  **Note:** Use the rv.motor\_left(speed,time) and rv.motor\_right(speed,time) functions available from the Fns>Modul>ti\_rover>I/O>Outputs menu.  Speed values can be 0 (off) to 255 (full power)  Note: Be sure to flip Rover on its back before running your program. | | |  | | --- | | **Challenge 2:** Write a program to make the Rover drive a straight path down the lane that is setup in your classroom.  Do you think you could backup down the lane?  **Note:** Use the rv.motors(“Left direction”,Left Speed,”Right Direction”,Right Speed,time) function available from the Fns>Modul>ti\_rover>I/O>Outputs menu.  Directions are clockwise (“cw”) or counterclockwise (“ccw”).  Speed values can be 0 (off) to 255 (full power) | |
| |  | | --- | | **Challenge 3 Part 1:** Write a program to drive your Rover straight down the challenge lane and make it stop as close to the final target as possible without making contact.  You will use the rv.forward(distance,”unit”) to explore the time that it takes Rover to drive different distances.  **Part 2:** Predict how long it will take your Rover to reach the mark.  Use rv.forward(time) to drive your Rover.  Can your Rover be the closest?  **Note:** rv.forward(distance,”unit) and rv.forward(time) are found toward the bottom of the Fns>Modul>ti\_rover>Drive menu. | |  |