## **V**E**X** IQ Practice Activity

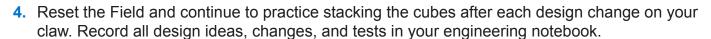


## Improve Your Arm

Test out your arm designs as you drive your robot to pick up and stack a cube!

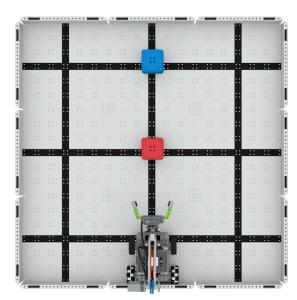
## How to Practice

- 1. Set up a 3'x3' Field with your robot as shown to the right. One blue and one red cube should be positioned on the Field as shown.
  - Your robot should begin with the back wheels touching the wall.
  - Your initial test of the arm should use the 4-bar arm that is part of the <u>Clawbot</u> build.
- Complete the initial test by using the Controller to drive your robot from the starting location to pick up the red cube and stack it on top of the blue cube.
- After completing the initial test with the Clawbot, iterate on your arm! Change the design of your robot to better stack the red cube on top of the blue cube.





 Add a Third - Want an additional challenge? Add a third cube to the Field and practice creating a stack that is three cubes high! Iterate on your driving skills or robot design to make stacking easier.



## **Pro Tips**

 Make your arm more stable! Creating a more stable arm can help you to complete the task more reliably and efficiently. An unstable arm could cause your robot to misplace cubes or tip!