

## U3-1.1f Challenge up: Doodle-bot challenge

You can program Edison to drive in patterns which make many different shapes. If you attach a pen to your robot, you will be able to get Edison to draw those shapes too!

### What to do

Attach a pen to an Edison robot. You can use EdCreate parts or any other materials you like.

Write a program in EdScratch so that when you run the program, your robot will draw a shape. Once you have built your pen attachment and programmed your robot, try running the program to see your shape!

1. Write about what you experienced in this challenge. What problems did you encounter? What did you do to overcome those problems? How did you attach the pen? What shape did you try to draw? Did it work?

Sample student answer: Getting the pen attached to the robot was hard. My first plan didn't work at all, and I had to start over. My second plan used rubber bands to attach the pen to the side of the robot and that worked. I programmed the robot to draw an octagon, but when I went to run it, the rubber bands were over the wheel, which meant that Edison couldn't drive. I finally attached the pen to the back of Edison using some building beams and rubber bands and got the robot to drive. Edison drove in the octagon shape but not didn't draw it very well because there wasn't enough pressure on the pen to hold it down against the paper.

