Bring to Lab:

- 1. Robots
- 2. Dongles
- 3. Batteries
- 4. Markers and Sharpies
- 5. Ledger paper

Focus in the first lab is interactive usage of the robot.

- 1. Get correct Dongle based on your workstation.
- 2. Add batteries to robot.
- 3. Put Dongle on robot and _then_ turn on.
- 4. Launch Idle Application (in Apps folder -- will bring up "Python Interaction Window (called Python _shell_)
 - 1. Should see Python 2.4.6; IDLE 1.1.6
 - 2. Should see '>>>' -- interactive command prompt
 - 3. Try using as a basic calculator '2 + 3'
 - 4. Recall a previous command with command-p and a next command with command-n
- 5. >>> from myro import *
 - 1. Should see 'Myro version 2.8.14 is ready!'
 - 2. and back to interactive command prompt
- 6. >>> init('/dev/tty.scribbler')
 - 1. May get a dialog asking for 'Passcode'
 - 2. Enter 1234 and click ok
 - 3. If get 'Serial element not found. ..." look for passcode dialog. If enter passcode and still get Serial element not found, seek help from a TA or instructor
 - 4. When init completes, get fluke firmware 2.9.1 and scribbler firmware 1.0.2 -- if not, let TA or instructor know.
 - 5. Also get "Hello, I'm <name>"
- 7. >>> getName()
 - 1. Should report name of robot
- 8. >>> setName('Your new name')
 - 1. Note in parens, sequence of chars with single _or_ double quotes.
 - 2. Try with spaces before/after command (function) name, and around parens, and within character sequence
 - 3. After each try, retrieve new name with getName() function invocation
 - 4. Try turning off robot; then turn back on and repeat
 - 1. init('/dev/tty.scribbler')
 - 2. getName()
 - 5. Robot "remembers" its name
- 9. "Command" robot to beep its speaker
 - 1. General form: >>> beep(<time interval in secs>, <frequency in Hz>)
 - 2. Goal: Find lowest frequency where you and your partner can both still hear the tone from the speaker
- 10. Command robot to move
 - 1. Follow textbook, chapter 2, pages 18 to 22
 - 2. EXPERIMENT! Try things that might not be in the book
 - 1. Look at the Myro Reference page on the web for various commands to try, but still focusing on movement of the robot.
- 11. Define functions to collect together sequences of robot commands

- 1. Follow textbook, chapter 2, pages 22 to 25
- 12. Next goal: Write a function to draw a five-pointed star on the ledger paper with a marker or sharpee

When we get to end of class time, with 5 or so minutes remaining,

- 1. Disconnect bluetooth connection
- Exit the Python Shell
 Turn off the scribbler
- 4. Detach the Dongle
- 5. Put robot in box and dongle in correct plastic case
 6. Turn both in to TA or instructor