

Assembling & Programming Your EV3

40 pts.

First: Parts Check

I will give you a handout showing all the parts that should be in each tray. Please circle and notify me of any missing parts – there are a number of features that you will not be able to create unless you have all the parts. Circle the parts that are missing – and initial the handout. I will get the part for you. After this class, you will be held responsible for any missing parts.



Student checked and reported any missing parts.	5pts.
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Step #1: Assembling the EV3 & Basic Coding

Go to the class site. It will direct you to a step-by-step guide that will show you how to assemble a “Cuboid”, “EV3” and how to program your robot. The instructions are color-coded – you will find them simple and clear.

- First: Assemble the Cuboid
- Second: Assemble the EV3



Fundamental Coding



- To test whether you have successfully assembled your EV3, follow the visual coding steps on. If done correctly, your robot should drive straight for 2 seconds, stop, make a sound for 2 seconds and then stop. Have the teacher give you your points before moving onto the next step.

The EV3 successfully moved forward for two seconds, stopped, played a sound for two seconds and then stopped.	5pts.
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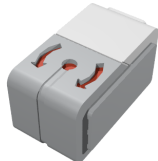
• Install Sensors



Ultrasonic Sensor

- Ultrasonic Sensor

The EV3 moved forward and stopped when its ultrasonic sensor came within a few inches of the cube.	5pts.
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- Gyro Sensor

The EV3 moved forward for a few seconds and then turned 45 degrees and moved forward for another few seconds.	5pts.
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• Install Front Arm Lift



The EV3's front arm lift closed down over the cube and then dragged it backwards for a few seconds.	5pts.
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• Install Sensors



Light Sensor

- Color Sensor

Down: The EV3's came to a stop when the color sensor crossed a color line.	5pts.
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Forward: The EV3's move for a few seconds when the blue portion of the cube was placed in front of the color sensor.	5pts.
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Touch Sensor

- Touch Sensor

The EV3's will emit a sound and drive backwards for 1 second after the touch sensor is touched.	5pts.
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