Maker Challenge

Robotics: LEGO **EV3** (grades 6 & up)

Complete the following steps with LEGO EV3 set

◼ Install LEGO EV3 Education app on your device.

◼ Complete the following:

Setting Up (45 mins)
1. Installing the software
2. Unboxing the core set and sorting the bricks
3. Powering up your EV3 Brick
4. Labeling key components

Learning the Basics (45 mins)
1. Connecting your EV3 Brick
2. Building your first program
3. Experimenting with the Large Motor
4. Trying out the Touch Sensor
5. Getting creative with the Color Sensor

Creating & Controlling Your Robot (up to 90 mins)
1. Building a Driving Base Robot
2. Moving your Robot in a straight line
3. Moving your Robot in a curve
4. Building an Object Detector
5. Making your Robot detect an object

◼ Complete any other lesson/unit focused in coding/EV3/grades 6-8
https://education.lego.com/en-us/lessons?subjects=Coding&grades=Grades+6-8&products=MINDSTORMS%C2%AE+EV3+Core+Set

Resources

Books at NPL about Robots & Coding:

See booklist attached

Kits available:

LEGO Ev3 kit with activities notebook & lessons   (NPL STEAM2GO kit)

Links for LEGO Mindstorms EV3

https://education.lego.com/en-us/downloads/mindstorms-ev3/curriculum

Finished the Challenge?

Return the LEGO Mindstorms EV3 Kit to the library. Congratulations! You have completed this Maker Challenge. Remember to fill out the Challenge Completed Form to enter the monthly Maker prize drawing and to track your progress through the challenges.