Build BOTS 1 – Supply List by Week
kathyceceri.com

Online List: https://www.kathyceceri.com/build-bots-materials-public-list

Where to find supplies:

- Get the **BOTS** book and all the electronics needed for class in the BOTS parts savings bundle from Adafruit.
- Order just the parts you need using my Adafruit shopping list.
- Order the parts you need using my Amazon shopping list, which are not top quality but usually adequate (may earn me a commission).
- Get my book BOTS directly from the publisher Nomad Press.

Week 1 – Walking Robot Dog

For the walking robot dog:
- index card or rectangle of heavy paper or thin cardboard
- pen, pencil, or marker
- scissors

Optional:
- ruler (or markings on strip of paper)
- tape
- 2 paper clips

For the test ramp:
- stiff cardboard or book — if it's too smooth, cover with a piece of rough paper
- something to prop up the ramp, like a pile of books

Week 2 – Motorized ArtBot

- body —recycled materials, such as:
  - disposable cup
  - recycled container
  - small cardboard box
  - section of pool noodle
- 1.5 volt DC toy motor, with wires (like this one: https://www.adafruit.com/product/711)
- one AA battery
- wide, short rubber band that fits snugly around a AA battery (such as a broccoli rubberband like these: https://amzn.to/3zNPJg2)
- electrical tape
- a small cork or other soft weight (like a pencil eraser or glob of poster-hanging wall putty)
- 4 thin washable markers
- large piece of paper for the robot to draw on

Optional:
- foam tape or other two-sided tape
- hot glue gun
- wooden shapes, beads, etc. to add weight to cork
- glue dots
- decorations:
  - googly eyes
  - pipe cleaners
  - s, etc. Tip: to design and build your own robot bodies. As you search, think about how you could attach arms, legs, motors, microcontroller boards, and batteries to them, and other decorations

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Week 3 – Fin Gripper

- Fin Gripper templates, or two sheets of cardstock
- scissors
- tape or glue
- paper straw

Week 4 – Pencil Pressure Sensor

- Pressure Sensor template, or index card
- conductive tape, such as aluminum foil tape (or kitchen foil and a glue stick)
- 1 LED light with long wires (such as 5 mm, https://www.adafruit.com/product/4203)
- 3-volt coin battery (CR2032, such as https://amzn.to/3tjk97y)
- pencil with soft lead (No. 2, HB, or softer)

Week 5 – Programmable Cardboard Robot

Note: If you don't have a microcontroller board, you can do the programming activities using the simulated board in MakeCode.

Electronics
- microcontroller board with USB data cable and battery case, such as Adafruit Circuit Playground Express or BBC Micro:bit
- alligator clip to male header test wires (such as https://www.adafruit.com/product/3448)
- 9g micro servo motor (such as https://www.adafruit.com/product/169)

Body
- 2 small cardboard boxes, one for the body and one for the head (or other recycled materials)
- glue dots and/or peel-and-stick Velcro dots