Many items are just suggestions and can be adapted to whatever items you have on hand, in the basement, or in the recycling bin. Unless there are no other ways to accomplish a task, being creative with your materials use is encouraged—so don’t feel like this list is exhaustive!

Please look ahead and plan accordingly to get any materials you don’t already have at home or cannot substitute with another item. You may wish to place an order online or shop all at once by looking ahead to future units, or you may opt to purchase a few items at a time, unit by unit. Another option you have is to order a customized lab kit from Quality Science Labs. The kit contains the following items:

- Variety of batteries (1 each AAA, C, 9-volt, Disc/Button 3-6 volt, etc.)
- 20’ of ~16 gauge wire, insulated or not
- One 3v buzzer
- Three LED lights any color
- Three latex balloons of any size
- 8” 10-16 gauge pure copper wire
- Four zinc plated nails (or similar)
- Two ~2”x4” pieces of sandpaper
- 1.5-3v motor
- OPTIONAL PURCHASE NOT PART OF KIT: Multimeter

Please note: the kit includes several scientific items but students will still be responsible for providing their own perishable and commonly available household items.

In each unit’s list of items, those with an asterisk (such as wire) will be reused. If you do not want to dismantle projects to reuse some parts, you may choose to purchase more than the recommended amounts.

MaKey MaKey
*ORDER or BUY your MakeyMakey Classic now to allow for shipping time if necessary.
http://www.makeymakey.com/

Unit 1
All items for this unit are optional, so use what you have on hand and only purchase items you would like to have for future units (items with an asterisk will be used in future units.)

- cardboard
- tape
• aluminum foil
• paper
• magnets
• string
• *batteries (AA, AAA, C, 9-volt, Disc/Button 3-6 volt, etc.)
• *wire, insulated or not (click for example)
• buzzers (click for example)
• *LED lights any color (Click for Example)

Unit 2
• At least 2 latex balloons of any size
• Any small household appliance that can be taken apart and NOT put back together (fan, coffee maker, alarm clock)
• Tools to disassemble the appliance (screwdriver, hammer, gloves, etc)    □   Digital camera/cell phone to document the process

Unit 3
• At least 4 fresh lemons
• *At least 8” of copper wire, thick gauge (10-16 gauge) able to be cut into 2” segments (Click for Example)
• 4 Zinc nails/plates (Click for Example)
• 4 Pennies/Copper coins
• Sandpaper, any grit
• Knife
• Alligator clips/wires from the MakeyMakey kit □   OPTIONAL: Voltmeter/Multimeter

Unit 4
• *At least 2 LED bulbs LED lights any color (Click for Example)
• *Battery(ies) to power 2 or more LEDs
• Fresh Play Doh – as much or as little as you want!
• OPTIONAL: insulating material (paper, cotton ball, cardboard, etc)
Unit 5
- 1.5-3v motor ([click for example](#))
- *1.5-3v alkaline battery (NOT disc/button type)*
- *24” of wire, insulated or not. If insulated, ability to strip ends wire, insulated or not ([click for example](#))
- **OPTIONAL** - OR USE WHAT YOU HAVE ON HAND:
  - Cardstock/thick paper about 6” square for fan blades
  - Paper towel tube/2 toilet paper tubes
  - Duct/Packing tape
  - Small 8oz water bottle
  - Rubber band
  - Paper clip
  - Thumb tack

Unit 6
- Computer with Scratch Installed
- MaKey MaKey
- Another Human

Unit 7
- Computer with Scratch Installed
- MaKey MaKey
- Various household items for testing, no purchase necessary.

Unit 8
- Computer with Scratch Installed
- MaKey MaKey
- *1 LED bulb
- Aluminum foil
- scissors
- Tape – any kind
- Cardboard, about 12” square
- **OPTIONAL**: About 15 feet of wire that can be cut into segments.
Unit 9
- Computer with Scratch Installed
- MaKey MaKey
- 4 potatoes
- 4 small containers for water

Unit 10
- Computer with Scratch Installed
- MaKey MaKey
- Materials to be determined by student.

Units 11-12
- Computer with Scratch Installed
- MaKey MaKey
- Materials to be determined by student.