

WHAT IS THE MOBILE MAKER CART?

The Mobile Maker Cart is a portable station for making, tinkering, and creating.

The cart contains many resources, which are discussed in more detail in the following pages. Each section also includes some sample projects, though there are infinitely more! Most of the resources on the cart emphasize the use of familiar and unfamiliar materials. For example, through Squishy Circuits, students learn about circuits by using play-dough (a familiar material) and electrical components such as LEDs, wires, motors, and battery packs (potentially unfamiliar materials).

Cart resources

Below is a list of the cart's staple resources, though we are always adding new fun things to it:

- | | |
|---|--|
| 1. MaKey MaKeys (classroom set) | 8. LEDs |
| 2. Ozobots (classroom set) | 9. Drawdio (x1) |
| 3. Squishy Circuits (classroom set) | 10. Various craft/building items (balloons, pipe cleaners, popsicle sticks, etc) |
| 4. Paper and Fabric Circuit materials | 11. Soldering Iron + accessories |
| 5. Raspberry Pi computers (x6) + accessory kits | 12. iPad Minis (x6) |
| 6. 3D Printer | |
| 7. Breadboards | |

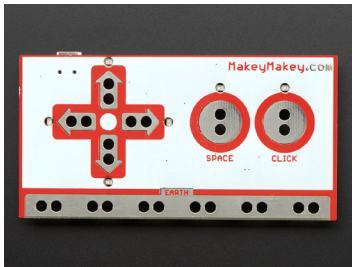
Why making, tinkering, and creating?

Ultimately, the resources on the Cart are all about creativity, imagination, and learning. The Cart provides students with a chance to creatively and imaginatively explore. There is no “one way” to use any of these materials. Because of this, students and teachers are encouraged to tinker, have fun, and see what they discover!

Making mistakes and learning from them is also a huge part of tinkering and the discovery process of making. Often, these materials will not work as expected right away, requiring students to try out numerous approaches and see what works.

CART INVENTORY

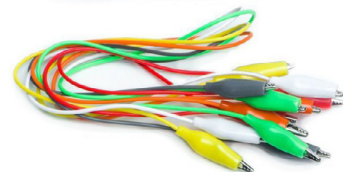
MaKey MaKeys



6 MaKey MaKeys



6 USB Cords



Assorted Alligator Clips

Ozobots



24 Ozobot Bits



3 Charging Ports



Markers



Code Sheets

Squishy Circuits



6 Battery Packs



6 Motors



Guide Book

Paper and Fabric Circuits



Copper Tape



Conductive Thread + Sewing Needles



3V Coin Cell Battery

CART INVENTORY continued

Raspberry Pi



6 Raspberry Pi Computers



6 Monitors w/ Speakers



6 Wifi Dongles



6 Pi Power Cables



6 Monitor Power Cables



6 HDMI Cables



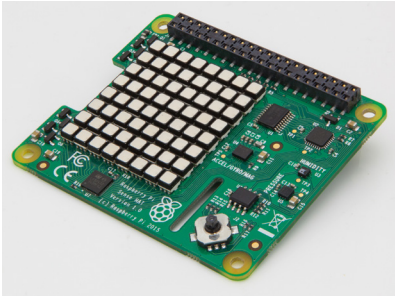
6 Computer Mice



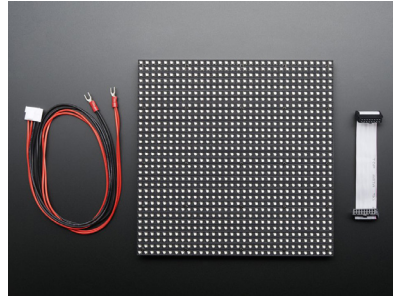
6 Keyboards

CART INVENTORY continued

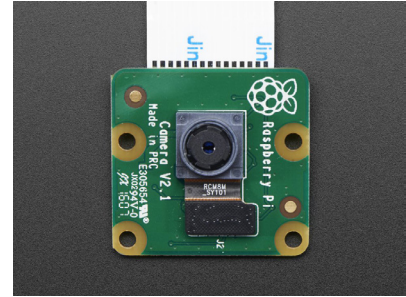
Raspberry Pi continued



1 Sense Hat



1 LED Matrix



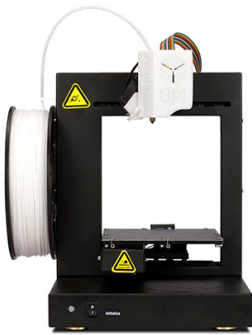
1 Camera



1 Spy Camera

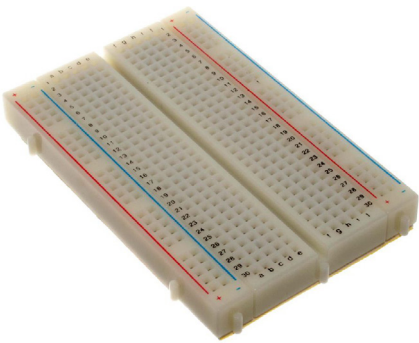
CART INVENTORY continued

3D Printer



UP! Plus 2 3D Printer

Breadboards + Accessories



Breadboards



Jumper Wires



Insulated Wire



Assorted LED lights



Assorted Resistors



Push Buttons

Drawdio



1 Drawdio Kit

CART INVENTORY continued

Soldering Iron



Soldering Iron



Soldering Wire



Solder Wick



Solder Sucker



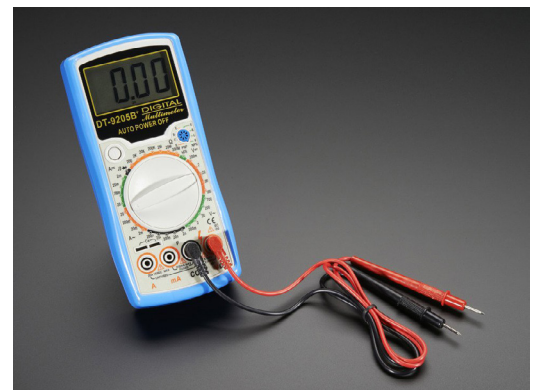
Vise



Solder Tip Cleaner



Soldering Stand



Digital Multimeter

CART INVENTORY continued

Assorted Tools



Flush Diagonal Cutters



Pliers



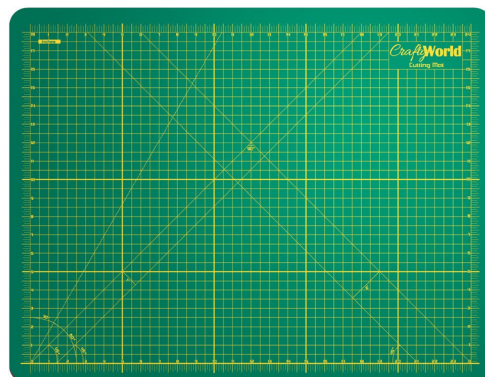
Hot Glue Gun



Wire Cutters/Strippers



Power Strips



Self-Healing Cutting Mat

CART INVENTORY continued

Assorted Tools Continued



Tweezers



Super Scissors



65-Piece Ratchet Screwdriver and Tool Bit Set



Rotary Cutter

CART INVENTORY continued

iPads



6 iPad Minis