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)
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
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
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