Mobile Maker Labs
Coordinated by the OCPL Content Creation Service Response Team

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To reserve any Mobile Maker Lab please contact Karl Wasmuth at [kwasmuth@onlib.org](mailto:kwasmuth@onlib.org)

Cubelets (beginning robotics)

Cubelets are magnetic robot blocks that snap together to make an endless variety of robot toys. Without wiring or programming, you can build thousands and thousands of tiny robots! Library participants discover basic robotic principals while creating robots, jazzing them up with Legos, and racing each other.

**For ages six and up.**
Osmo fosters learning with iPad games in key areas such as: creative problem solving, art, and STEM (science, technology, engineering and mathematics). “Monster” is designed for ages 4–9, and the other Osmo games are for ages 5–12. Osmo changes the way children interact with an iPad.

- “Coding” teaches logic and problem solving skills.
- “Tangram” fosters spatial relational skills.
- “Words” teaches spelling and critical thinking skills.
- “Newton” fosters creative problem solving skills.
- “Masterpiece” teaches drawing and creative confidence.
- “Numbers” teaches counting, addition and multiplication.
Stop Motion Animation For Beginners

Using foam core for a backdrop, objects to move around frame-by-frame, and an iPad Mini 4 on a tripod to photograph each movement, children can create stop motion animated movies. This STEAM program allows children to use their imaginations to write stories, “act” them out using objects such as toy animals or LEGOS, and complete a short, finished animated movie in two hours or less. The Mobile Maker Lab comes with all necessary props and equipment. Children may also animate their favorite toys they bring with them from home. For ages seven and up.

Stop motion animation is a film making technique that makes inanimate objects appear to move on their own. You place an object in front of a camera and snap a photo. You then move the object a tiny bit and snap another photo. Repeat this process many times, play back the sequence of photos in rapid succession with special computer software, and the object appears to move fluidly across the screen.
Button Maker Machines Produce 1.5” Pinback Buttons

Two button maker machines are now available. No waiting! The machines are easy to operate, come with instructions and supplies, and are suitable for ages 6 and up. The finished pinback button is 1.5” in diameter. Any artwork created on paper may be used for the button face. **For ages six and up.**
K’NEX® STEM Projects

Bridge Building
The Real Bridge Building set is designed to assist participants in learning about the history, function, structural design, geometry and strength of bridges. They will also investigate concepts related to the physical properties of materials and their application in the placement, design, and construction of bridges. For ages 10 and up.

Amusement Park
The K’NEX® Education Amusement Park Experience Set provides an opportunity to combine real-world applications with STEM concepts in a fun, library makerspace environment. Using K’NEX® materials, participants will be engaged and energized as they experience the interrelationships and further their knowledge and understanding of the science, technology, engineering and math concepts associated with such rides and structures. For ages 10 and up.
littleBits Electronics

Bits snap together with magnets to create circuits instantly. Detailed, step-by-step instructions are included to start building inventions. The littleBits system is modular so every bit works with every other bit in the system. One kit accommodates 24-32 individuals or 8 groups of inventors with 20 Bits each. For ages eight and older, tweens, and teens.
MaKey MaKey

What is MaKey MaKey? MaKey MaKey is an invention kit for the 21st century. Turn everyday objects into touchpads and combine them with the Internet. It’s a simple invention kit for beginners and experts doing art, engineering, and everything in-between!

Any materials that can conduct at least a tiny bit of electricity will work with MaKey MaKey including, but not limited to, foods, play dough, finger paint, aluminum foil and hundreds more.

Here is a photo of a seven-year old using MaKey MaKey. She invented a “knife-and-log” interface for cutting virtual wood in an online game.

The MaKey MaKey Mobile Maker Lab will come with eight laptops and materials to provide a fun learning experience for up to 16 children. For ages seven and up.
3Doodler Decorative Arts

Library users will enjoy making endless creations with 3Doodler Pens. The plastic filament heats up inside the pen. The user “draws” 3-dimensional objects with the melted plastic which then hardens almost instantly. All materials are supplied. Eight pens are available at one time. For ages 16 and up.