

Here are some Tech Toys that we have used in our outreach programs. There are many more out there, so when planning for programming it's good (and quite fun!) to explore what's available.

## CIRCUIT SCRIBE



**Skill-Set Category: Electronics**

Learn More:

<https://www.circuitscribe.com/>

### **What is it?**

Circuit Scribe is a creative kit that allows users to build circuits using special Circuit Scribe conductive ink pens, magnetic modules, and any kind of printer paper.

### **Supplies needed (in addition to kit):**

- Paper and extra batteries
- Some circuits require little extras like a paperclip or other small conductive items

### **Program Pluses:**

- A fun, creative way to teach basic circuitry
- Easy to set-up/pack up
- Doesn't require a device/internet connection

### **Possible Program Hang-ups:**

- Pens run out very, very fast and are expensive to replace (\$19.99/pen)
- If considering this kit make sure you pre-make some of the projects as templates that patrons can build

## LITTLEBITS



**Skill-Set Category: Electronics**

Learn More:

<https://littlebits.cc/>

### **What is it?**

LittleBits are easy to use magnetic electronic building blocks that can be puzzled together to make anything from a simple LED light to a complex flashlight.

### **Supplies needed (in addition to kit):**

- Extra batteries
- Basic crafting supplies for special projects

### **Program Pluses:**

- Very easy to explain and use
- Easy to setup/pack up
- Doesn't require a device/internet connection

### **Possible Program Hang-ups:**

- Some patrons may grow tired of these- be engaging, have some possible combinations already setup for users to see working
- Many components have small switches/buttons that require strong fine motor skills

# MAKEY MAKEY



## **Skill-Set Category: Electronics Programming**

Learn More:

<http://makeymakey.com/>

### **What is it?**

Makey Makey is a simple invention kit that allows you to create interactive projects, like a banana piano, using alligator clips and a simple circuit board (the Makey Makey) that sends commands to your computer.

### **Supplies needed (in addition to kit):**

- Laptop with internet connection
- Various conductive objects (even people work!)

### **Program Pluses:**

- Very easy to explain and use
- Easy to setup/pack up
- Interactive and great as a group activity
- Affordable

### **Possible Program Hang-ups:**

- Patron completes the connection meaning patrons with dry hands sometimes have a difficult time completing the connection
- Tech dependent- needs a laptop or computer
- Don't forget your bananas!

# OSMO



## **Skill-Set Category: Educational Gaming**

Learn More:

<https://www.playosmo.com/en/>

### **What is it?**

Osmo is an educational gaming accessory that incorporates digital with tactile play through various apps such as Coding Awbie, Tanagram, and Masterpiece.

### **Supplies needed (in addition to kit):**

- iPad or iPhone with access to camera (see website for specifications)
- Paper and markers depending on the app

### **Program Pluses:**

- Apps are very diverse teaching everything from coding to spacial skills
- Great for patrons who want to work solo
- Varying levels of difficulty available

### **Possible Program Hang-ups:**

- Requires some setup and takes time to switch between activities/apps
- Can be used with small groups, but easier to use with one patron at a time
- Tech dependent- Apple products only, requires apps

# OZOBOT



**Skill-Set Category: Basic Coding**

Learn More:  
<http://ozobot.com/>

## **What is it?**

Ozobot is an intelligent robot that is programmed to follow drawn lines and perform certain actions by following color-coded sequences.

## **Supplies needed (in addition to kit):**

- A good supply of paper
- Want to make it fun?- try other colors of chisel/thick tipped markers

## **Program Pluses:**

- Good way to introduce the concept of coding
- Easy to set-up/pack up
- Varying levels of difficulty- patrons don't have to code if they don't want to
- Affordable

## **Possible Program Hang-ups:**

- Robots can be very temperamental
  - Needs reset often
  - Lines/codes need to be drawn perfectly
- Needs frequent charging and does not come with a wall charger (USB cord only)

# SNAP CIRCUITS



**Skill-Set Category: Electronics**

Learn More:  
<http://www.snapcircuits.net/>

## **What is it?**

Snap Circuits teaches electronics by building circuits using various components that snap together on a grid unit.

## **Supplies needed (in addition to kit):**

- Extra batteries
- Some circuits require little extras like a paperclips or other small conductive items

## **Program Pluses:**

- Comes with project books with easy to follow instructions
- Easy to set-up/pack up
- Great as a group activity
- Doesn't require a device/internet connection

## **Possible Program Hang-ups:**

- Snapping items into place may be difficult for patrons with low strength/motor skill complications
- Not as flashy as some other tech toys- you may need to sell this one
- Do not stray from the project books when getting to the more complicated projects

# SPHERO



**Skill-Set Category:**  
**Educational Gaming**

**Learn More:**  
<http://www.sphero.com/>

## **What is it?**

Sphero is an app-driven robot that fosters a broad range of skills such as coding, programming, and problem solving through various educational apps.

## **Supplies needed (in addition to kit):**

- Apple or Android touchscreen device with location and Bluetooth enabled (see website for specifications)
- Optional items if you want to do an activity like Sphero bowling or creating a maze

## **Program Pluses:**

- Great way to introduce patrons to digital devices
- Apps are easy to use and diverse (some are just driving apps, there is also a table-top gaming app)
- Very flashy and interactive

## **Possible Program Hang-ups:**

- Some patrons may not be comfortable with using the touchscreen
- Tricky to connect if tablet has been used with multiple Spheros
- Needs to be recalibrated often (any time it bumps something or gets picked up)
- Only one patron can use a Sphero at a time
- Tech dependent- needs a compatible Apple or Android device and associated apps