

# TECKNOWLODGY NEST

Athens Tech Library Room F-129



# A sample list of what we have:

- Xbox One
- PS4
- 3D Printers: MakerBot and Afinia
- DJI Phantom 2 Vision+ Drone
- Lego Mindstorms Robot
- Arduino ultimate kit
- LittleBits deluxe kit
- 7Tech 3D Printing Pen
- Raspberry Pi 2 Model B
- Makey Makey
- Sphero/Ollie Robotic Ball



# Drone: DJI Phantom 2 Vision+

A drone is a UAV (unmanned aerial vehicle) intended for recreational and commercial aerial cinematography and photography.

**We have all your need for an enjoyable and educational flight:**

- DJI Phantom 2 Vision+ with carrying case
- 2 extra batteries for extended flying time
- Propeller guards ideal for inexperienced pilots
- 32 GB microSD card ready for filming your video
- microSD card reader



THE FUTURE OF POSSIBLE

PHANTOM

# Drone: DJI Phantom 2 Vision+

Come to the NEST with:

- Your smart phone with DJI Vision app installed.
- Your USB stick to transfer the awesome footage taken with our drone!





# 3D Printing

**3D printing is one of many various processes to create a three-dimensional object. These objects can be of almost any shape or geometry.**

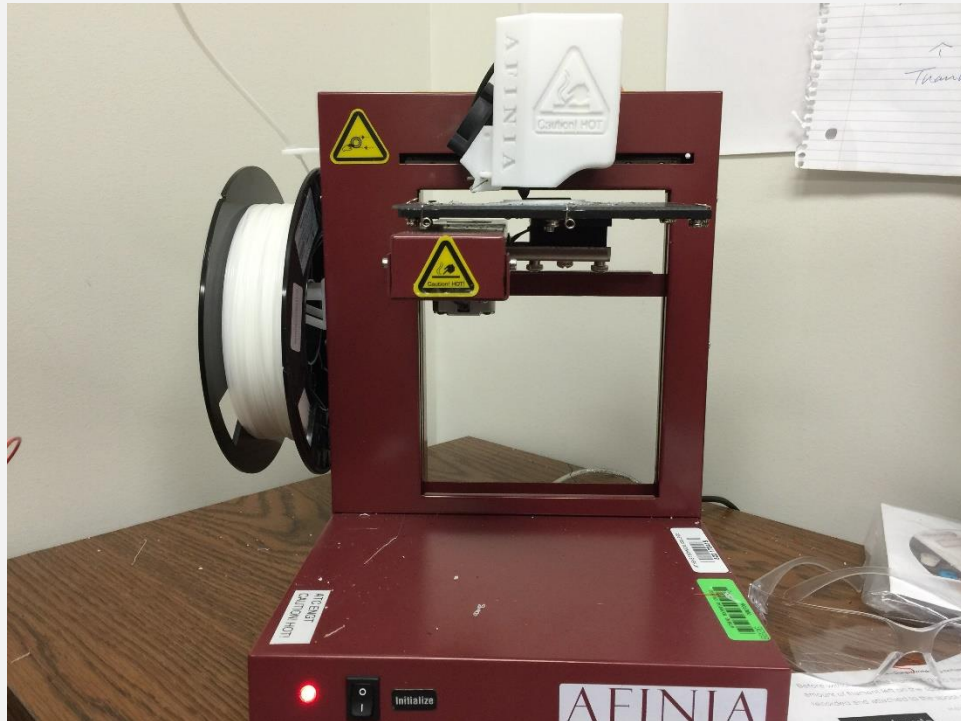
Some ideas of what you can print:

- Necklace, keychain, bracelet
- Cookie cutter, Tupperware
- Christmas ornaments, decorations
- Game pieces, chips, replacement parts
- Tools

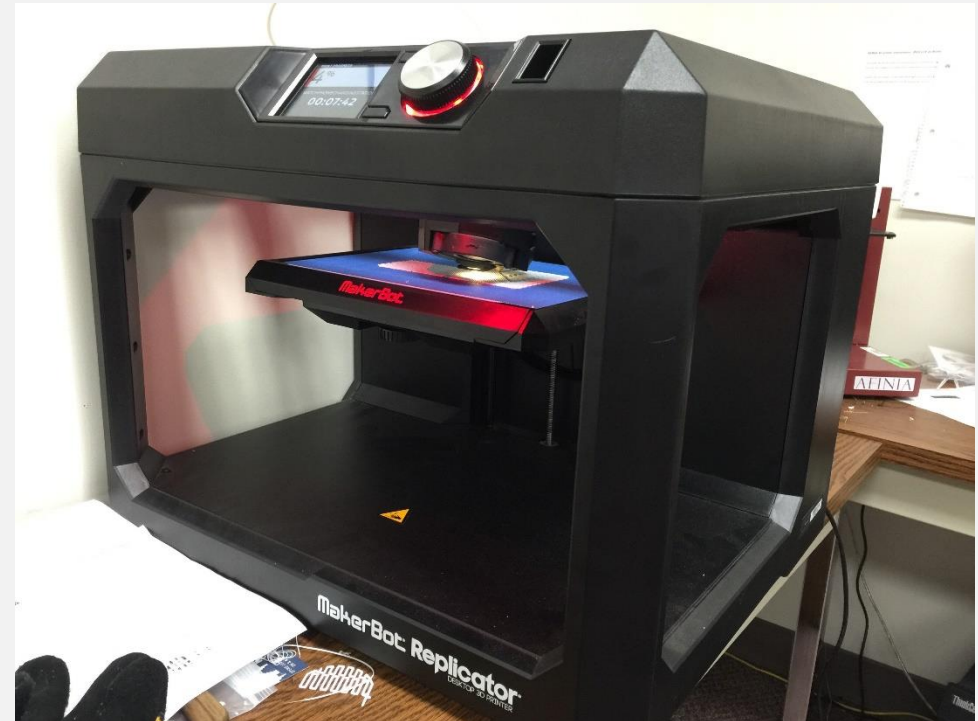


# Our 3D Printers In Action

Afinia H480



MakerBot Replicator



# 3D Printing Pen

3D printing pen works by extruding heated plastic that cools almost instantly into a solid, stable structure, allowing for the free-hand creation of three-dimensional objects.



What we have available:  
7Tech 3D Printing Pen



# Arduino Ultimate Kit

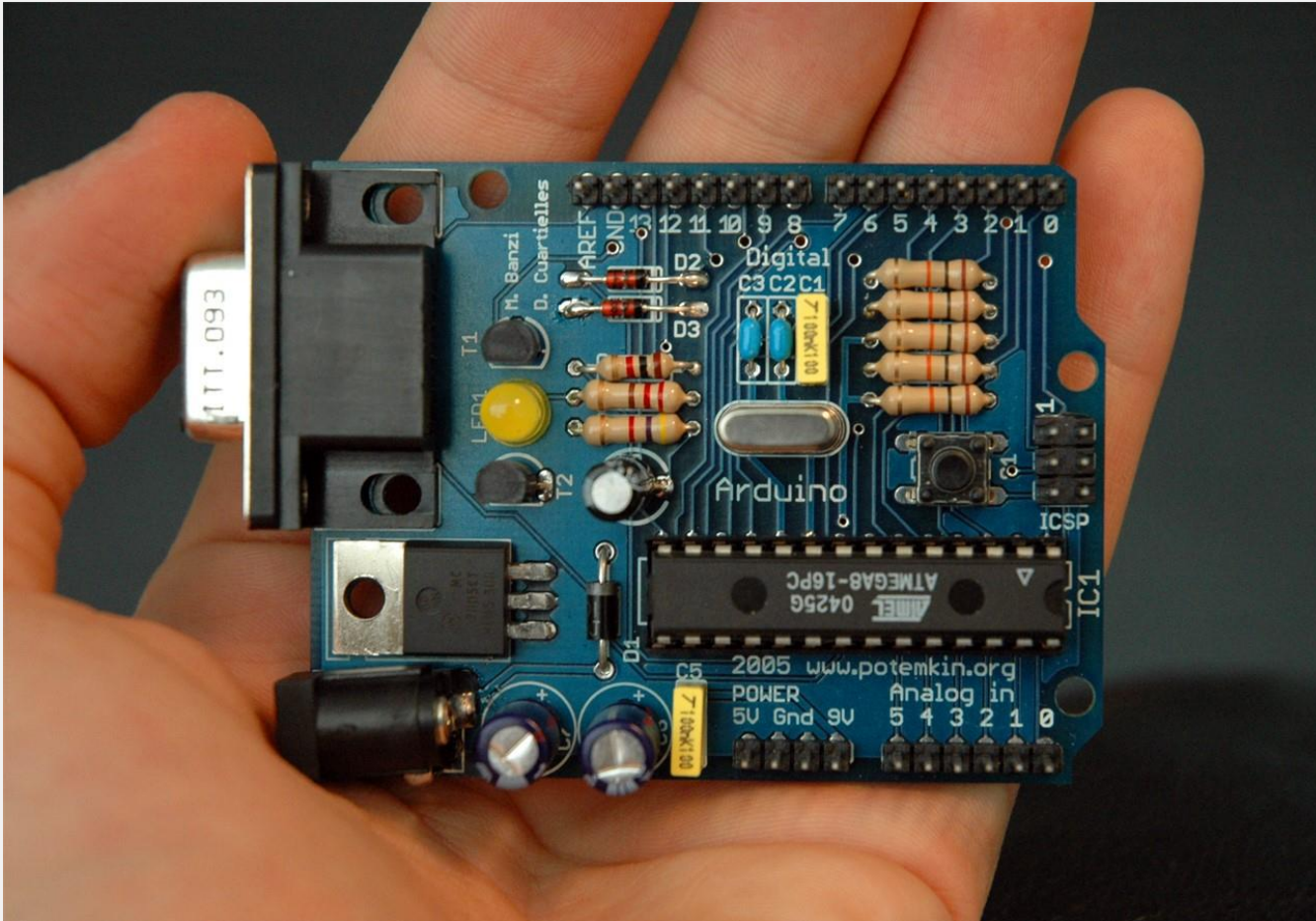
*Arduino is an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. It's intended for artists, designers, hobbyists, and anyone interested in creating interactive objects or environments.*

- No prior knowledge necessary.
- Workshop coming up!





# Arduino Ultimate Kit



## Sample projects:

**Spaceship Interface:** Design the control panel for your starship

**Love-O-Meter:** Measure how hot-blooded you are

**Color Mixing Lamp:** Produce any color with a lamp that uses light as an input

**Mood Cue:** Clue people in to how you're doing

**Light Theremin:** Create a musical instrument you play by waving your hands

**Crystal Ball:** A mystical tool to answer all your tough questions

# AUGMENTED REALITY

Augmented reality (AR) is a live direct or indirect view of a physical, real-world environment whose elements are augmented (or supplemented) by computer-generated sensory input such as sound, video, graphics or GPS data. It is related to a more general concept called mediated reality, in which a view of reality is modified (possibly even diminished rather than augmented) by a computer. As a result, the technology functions by enhancing one's current perception of reality.



*Made Possible by: PS4/Xbox One*



# LittleBits



**LittleBits:**

**Electronic  
LEGOS for the  
iPad generation.**

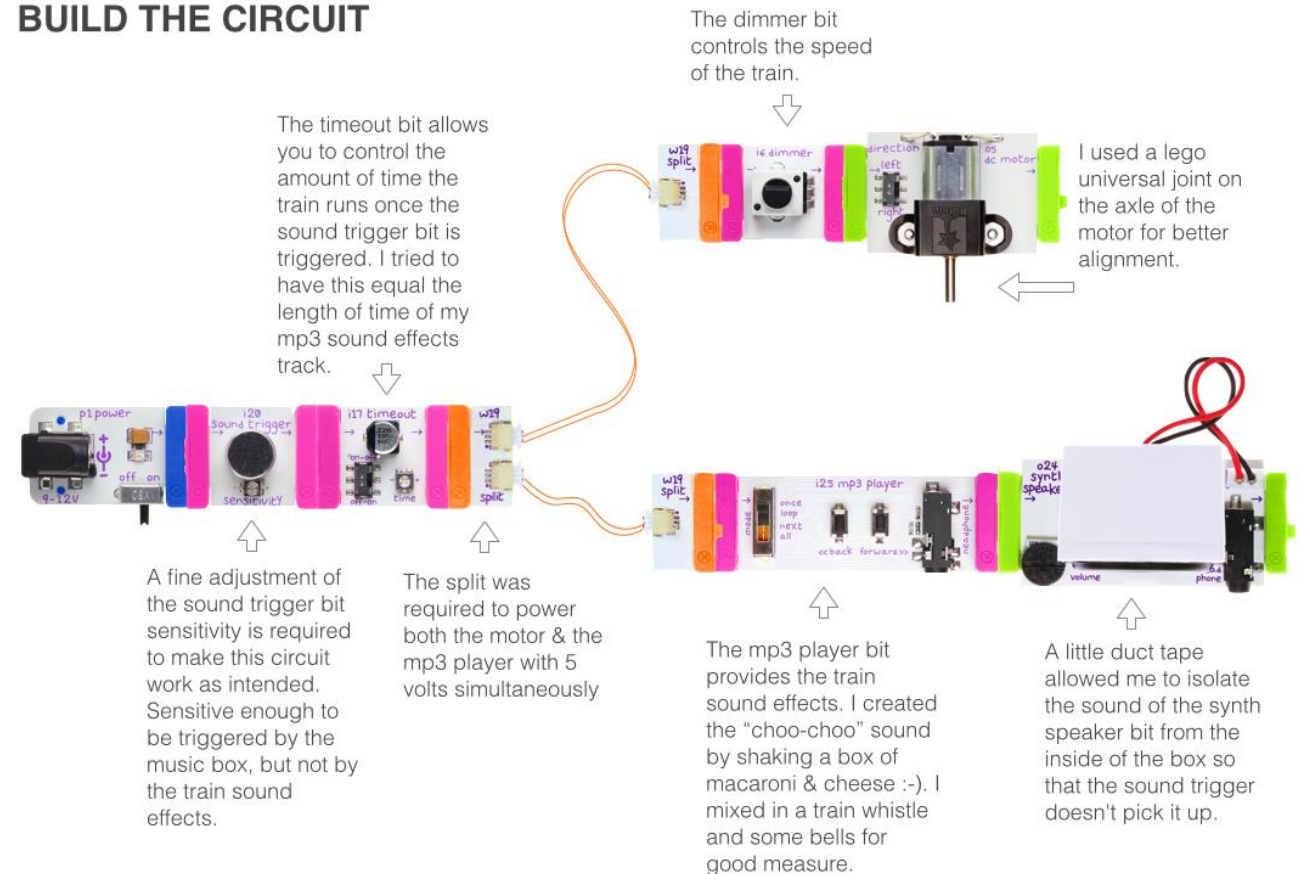


# LittleBits

## SAMPLE PROJECTS:

- Tickle Machine
- Prank Handshake
- Auto Greeter
- Truck Crane
- Birthday Candle
- Surprise Party
- Cat Nap
- Honking Tricycle
- Robot
- Flickering Lantern

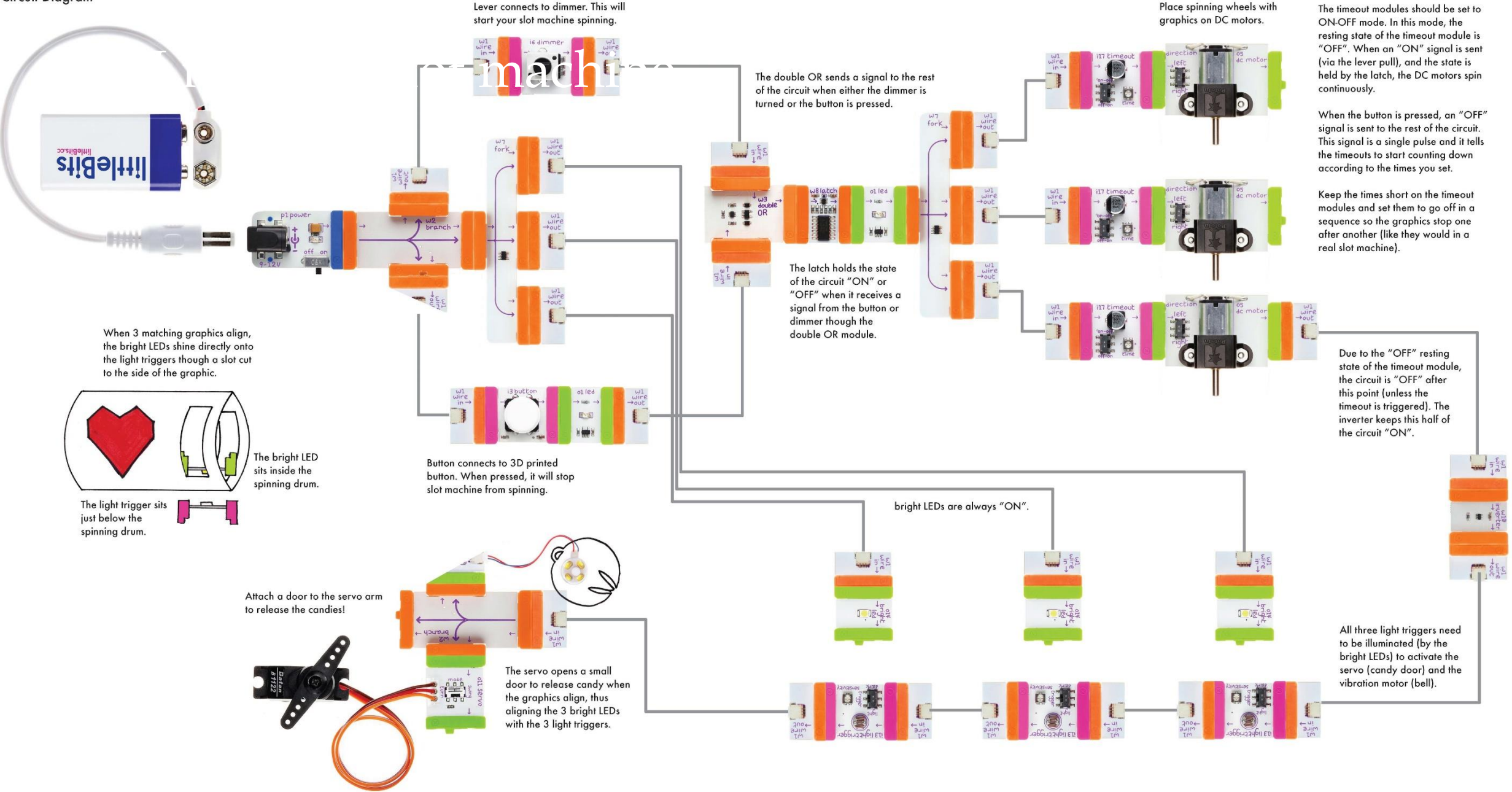
### BUILD THE CIRCUIT





LITTLEBITS SLOT MACHINE

Circuit Diagram



# MakeyMakey

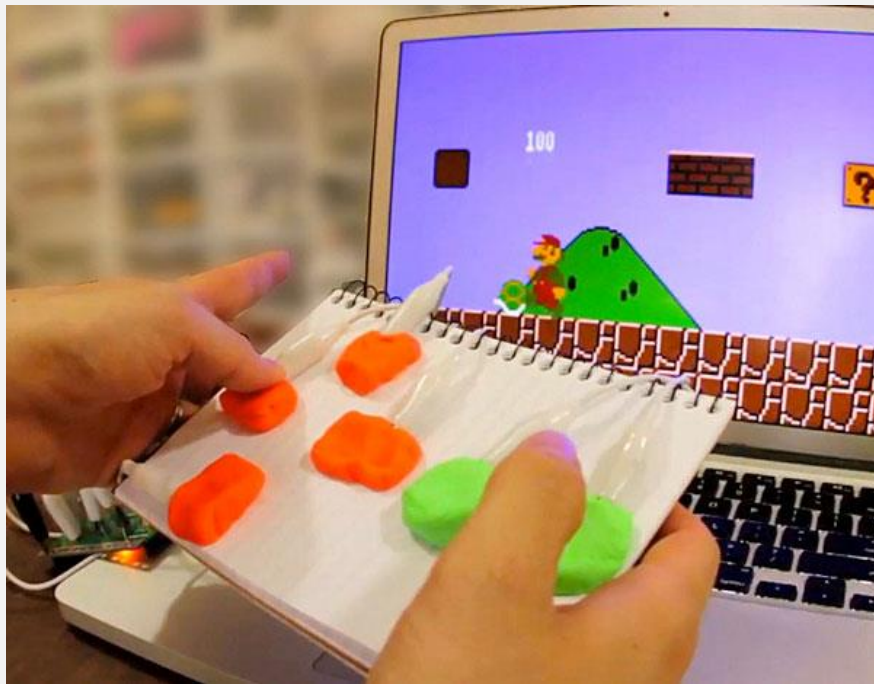
*Welcome to the world of MaKey MaKey! A world where everyday objects are much more than what they appear. Bananas are more than just a curvy fruit - they're keys to a virtual piano. Play-dough isn't just a tasty child's toy - it's the controlling force behind Pacman's up/down/left/right. And your simple pencil drawings are a portal to Portal.*



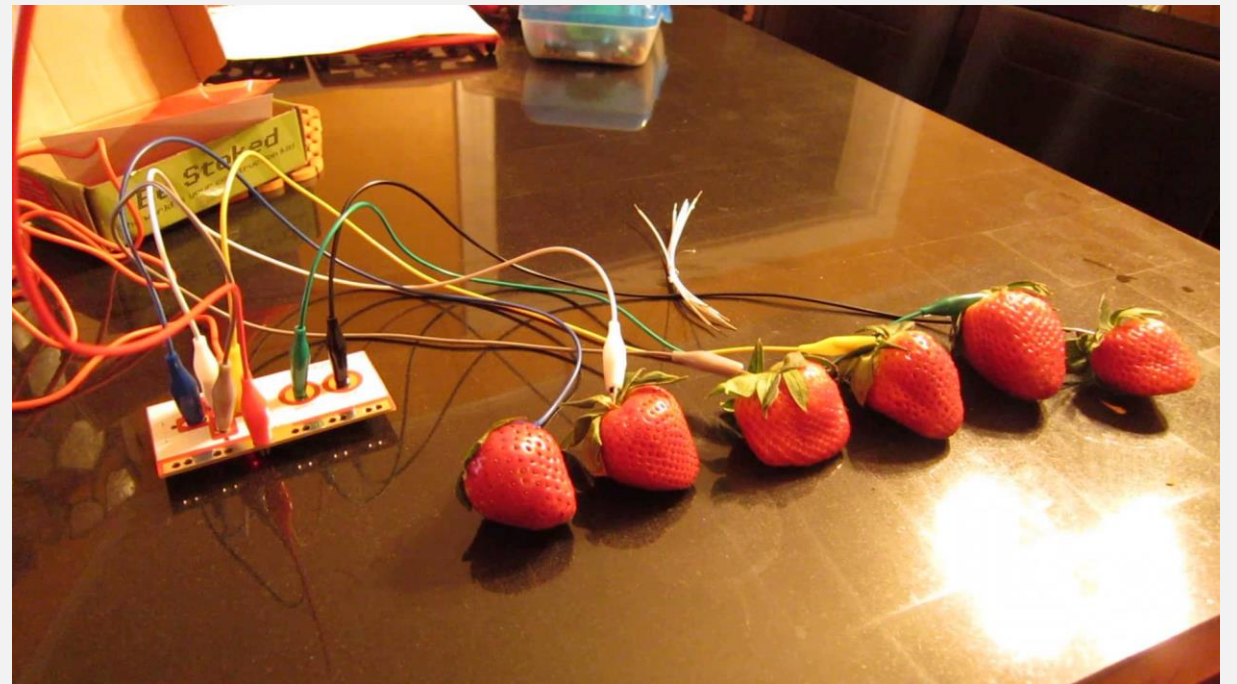


# Makey Makey Projects

Video game controller made of clay and Makey Makey:



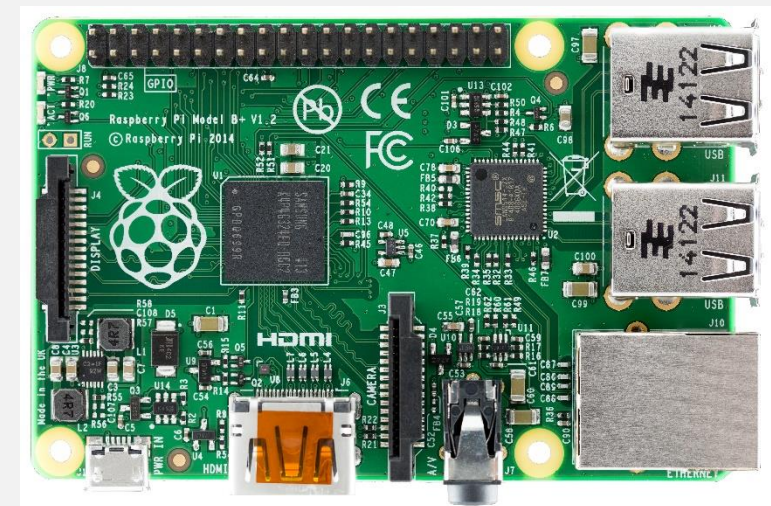
Piano made with strawberries and Makey Makey:



# RASPBERRY PI 2

The Raspberry Pi 2 is a credit card sized computer that plugs into your TV and keyboard. It's a little but super powerful PC that can be used for many of the things that your desktop PC does, like spreadsheets, word processing and games.

- No prior knowledge necessary.
- Workshop coming up!

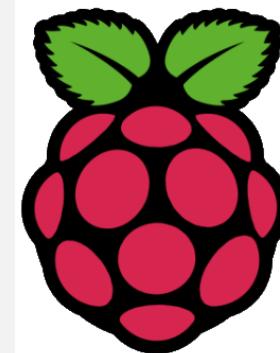




# RASPBERRY PI 2



Come take a  
byte out of the  
Raspberry Pi!



RaspberryPi

# LEGO Mindstorms

- Create and command robots that walk, talk, think, and do anything you can imagine.
- Create TRACK3R, R3PTAR, SPIK3R, EV3RSTORM and GRIPP3R and bring them to life with an easy, intuitive and icon-based programming interface.
- Grab the remote control and take on challenging ready-made missions or download the free app and command your robot using your smart device.



# LEGO Mindstorms



# Ollie and Sphero

## Sphero

Meet Sphero - the app-enabled ball that does it all. Intelligent and well-rounded, Sphero lets you play, learn, and explore. Create obstacle courses, upgrade family game night with multiplayer fun, or learn to program with our free SPRK lessons. This virtually unstoppable companion is waterproof, pet-proof, and ready for any adventure. It's time to upgrade your play.

## Ollie

Meet Ollie – the app-enabled robot driven by adrenaline. Launch over the competition at floor-warping speeds. Spin, drift, and flip with app-powered tricks. Then switch up your ride with custom tires and hubcaps. Ollie is engineered for speed, programmed for tricks, and customized by you.





# Ollie and Sphero



Bring your  
smart device  
and let the  
fun begin!

- More than 25 apps available!
- Speed up to 6 feet per second!



# ollie

## Ollie and spero

CORE EXPERIENCE:  
DRIVING & TRICKS

USB CHARGING  
(1 HR DRIVE TIME)

4 APPS - DRIVING,  
PROGRAMMING

14 MPH (6M/S)

IOS, ANDROID

BLUETOOTH LE  
(INSTANT CONNECT)

OUTRUNS PETS  
& HATES WATER

Driven by adrenaline, Ollie is the app-controlled robot engineered for speed, programmed for tricks, and customized by you.



# vs



# sphero

CORE EXPERIENCE:  
VARIED GAMEPLAY

INDUCTIVE CHARGING  
(1 HR DRIVE TIME)

30+ APPS - DRIVING,  
MULTIPLAYER, ARCADE,  
AUGMENTED REALITY,  
TABLETOP, PROGRAMMING

4.5MPH (2M/S)

IOS, ANDROID, WINDOWS

BLUETOOTH  
(MANUAL CONNECT)

WATERPROOF  
AND PET-PROOF



Intelligent and well-rounded, Sphero is a brave explorer, a teachable robot, and an entirely new way to play.

# Virtual Reality

*Virtual reality replicates an environment that simulates physical presence in places in the real world or imagined worlds and lets the user interact in that world. Virtual reality artificially creates sensory experiences, which can include sight, hearing, touch, and smell.*

**Made possible by: Google Cardboard**