
Make Easy

— Easy make recipes —

Introductions

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The All-Ages Maker Lab

Serving a crowd- 30 people labs, 100 people labs

Budget- \$100 a month, 8-10 programs. About 30-50 cents a head.

MAKE EASY: Everyone is welcome, Everyone can make.



Survivor Lab

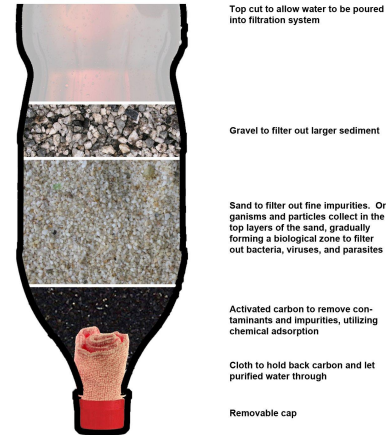
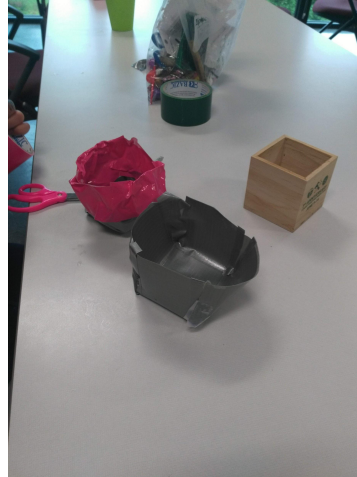
Compass supplies:

- Duct tape
- Needle
- Bottle cap, cork or scotch tape to float
- Cube or bowl for shape
- Magnet



Super Shelter supplies

- Clear plastic sheet
- Mylar blanket
- Heat source
- Shelter structure (box tables, chairs, etc)
- Tape



Vibrating Motor Robot

Bill of Material

- Vibrating motor – available on amazon 10 for \$7.99
- CR2032 coin battery
- Pom poms all sizes and anything else to inspire creation of fun creatures.
- Hot glue, tape



How to

- Strip the insulation of the wires of the motors to have a better area of contact before the event
- Flat +ve side of battery forms the bottom of the robot
- Attach the motor to the –ve side of the battery
- Attach the –ve (black wire) of the motor to the –ve side of the battery with tape.
- Bend the +ve wire (red wire) of the motor so that it is just below the +ve side of the battery. When this assembly is put down it should start vibrating.
- Create your creature and attach it to the top of the assembly.
- Your robot is ready to move.



Night lamp with Paper Circuits

Bill of Material

- Paper coffee cup with lid
- CR2032 coin battery
- Copper tape
- LED, Old magazines, Scissors, glue

Switches are the magic wands that make a cool paper circuit into a Wow! paper circuit.

How to

- Run some copper tape from the +ve side of the battery to the positive lead of the LED. Tape the battery down to the lid with the +ve side down. Leave some of the -ve side of the battery open to make the connection.
- Run some copper tape from the -ve side of the battery all the way to the upper edge of the lid
- Run another piece of copper tape from the -ve lead of the LED parallel to the above tape to the edge of the lid
- Add copper tape to a part of the rim of the cup.
- When this part of the cup bridges the gap between the 2 parallel lines of copper tape (one from the battery and one from the LED) the night light turns on.



Screen Prints

Tools and supplies:

- 110 mesh
- Embroidery hoops
- Transparency sheets + Cricut
- Screenprint Ink
- Cardboard
- Fabric/cardstock squares
- Spoons
- Cups
- Water
- Painter's tape



Screen Prints



Hebocon: Crappy Robotics Competition

Tools and supplies:

- Robot base (Dollar Tree Car)
- Random junk
- Tape & hot glue

Program Setup:

- 1 hour build
- 30 min check in, audience favorite
- 1 hour competition
 - Single elimination bracket
 - Randomly assigned
- Prizes
 - Most Destroyed
 - Audience favorite
 - Champion Bot



Hebocon: Crappy Robotics Competition

Build Restrictions:

- Technologically poor (not fancy)
- Can't deliberately destroy other robots
- Not over 20"x20" (no height restriction)
- Less than 2 pounds

Match Rules:

- No longer than 1 minute
- Both machines start at the same time from opposing sides.
- The robot to exit the ring first loses.
- If a robot falls over, it loses.



April 2019

Teens:

Open Lab—

What will you create? Bring your ideas, inventions and projects to share or get help with.

Gaming Club—

Join others for tabletop and Wii U games.

Scrapbook Making—

Use the makerspace's equipment, laser cutters, craft cutters, printers, Photoshop and more to start your one-of-a-kind scrapbook. Tell your story through pictures.*

Teen Council—

Making Retro Games with Fantasy Computers—

If you like pixel art and old-school games, come to this workshop with Pixel Arts Game Education. A little programming experience in Scratch or any other language is helpful, but not required.*

Delicious Shakes and Smoothies—

Learn to make satisfying drinks you won't even know are healthy with a combination of fruits, vegetables and seeds. We will make a Mayan power drink, a mango and ginger lassi and a green strengthener.*

Kids/Teens:

Girls Who Make—

An open lab with the option to participate in a focused activity. Designed to inspire the next generation of people who identify as girl designers, creators and engineers. For kids and teens in grades 4-12.

Adults:

Open Lab—

What will you create? Bring your ideas, inventions and projects to share or get help with.*

Teens/Adults:

Open Lab—

What will you create? Bring your ideas, inventions and projects to share or get help with.*

Sunday Monday Tuesday Wednesday Thursday Friday Saturday

	1 Teen Open Lab 3-5:30 pm Adult Open Lab 6-7:45 pm	2 Teen Open Lab 3-5:30 pm Adult Open Lab 6-7:45 pm	3 Gaming Club 3-5:30 pm	4 Girls Who Make 3-5:30 pm	5 Teen Open Lab 3-5:30 pm	6 Teen/Adult Open Lab, 10 am-12 pm Scrapbook Making for Teens 2-4:30 pm
7 Adult Open Lab in Spanish 2-4:30 pm	8 Teen Open Lab 3-5:30 pm Adult Open Lab 6-7:45 pm	9 Teen Open Lab 3-5:30 pm Adult Open Lab 6-7:45 pm	10 Teen Open Lab 3-5:30 pm Gaming Club 3-5:30 pm	11 Teen Council 3-5:30 pm	12 Teen Open Lab 3-5:30 pm	13 Teen/Adult Open Lab 10 am-12 pm Making Retro Games with Fantasy Computers for Teens 2-4 pm
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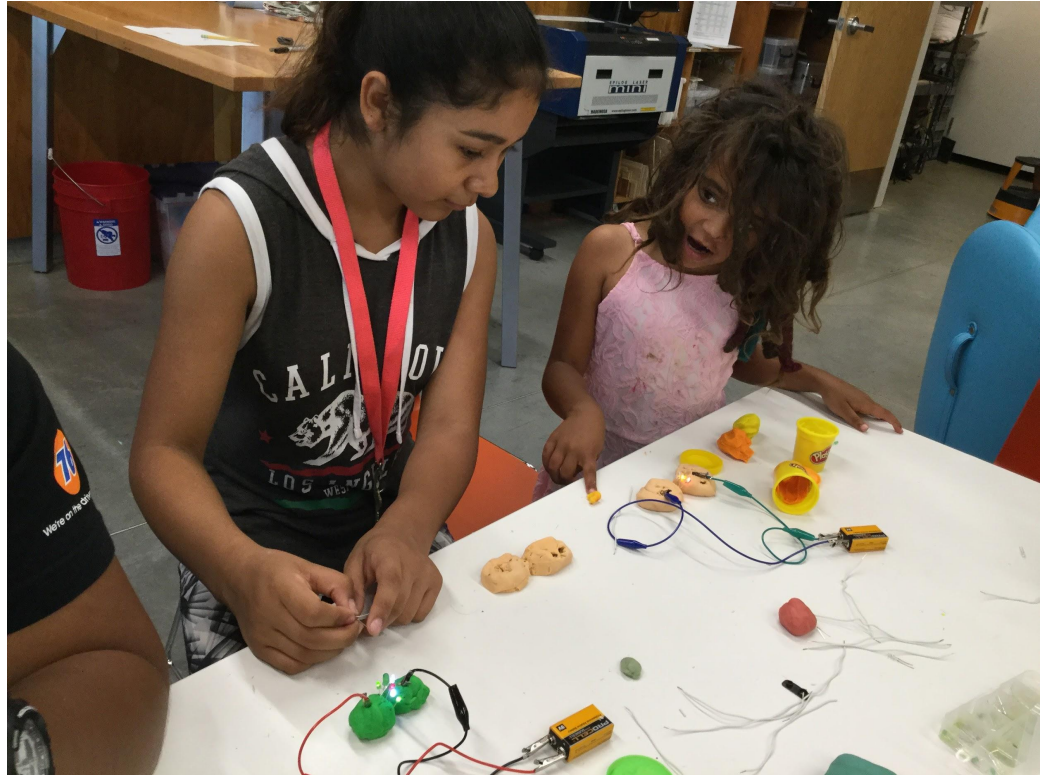
*Online registration required.

Rockwood makerspace programming is made possible by gifts to The Library Foundation.

Squishy Circuits

Tools and supplies:

- LED's
- 9 Volt Batteries
- Jump wires
- 2 types of play-clay
 - Conductive (Play-doh)
 - Non-conductive (modeling clay)
 - You can make the clay or you can buy it.



Makey Makey

Tools and supplies:

1. Makey Makey
\$50 for traditional
\$20 for Makey Makey Go
2. Computer
3. Literally anything that can conduct electricity

<http://www.makerspaceforeducation.com/makey-makey.html>



Makey Makey And Squishy Circuits

A Natural Pair

Tools and supplies:

1. Makey Makey
2. Conductive clay
3. Non-conductive Clay
4. Computer



Resources

<https://www.exploratorium.edu/tinkering/projects/squishy-circuits>

<https://labz.makeymakey.com/remixes>

<http://bit.ly/2018hebocon>

<http://bit.ly/2018screenprint>

Let's Make Something!

— Light Up Tissue Flowers —

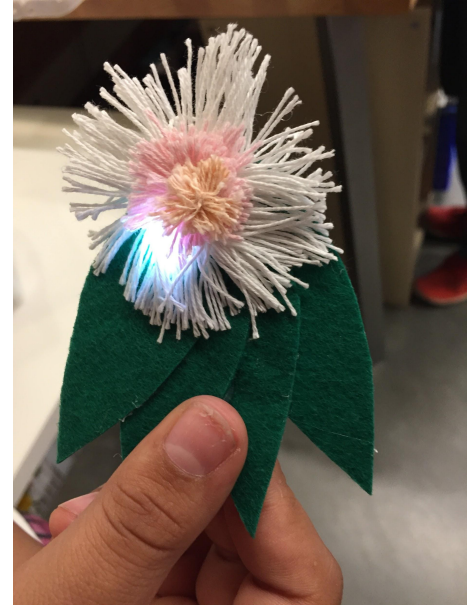
Make More

— More from the Make Easy Oven —

Put an LED on it ...

Light Up Yarn Flower

- LED
- Coin Cell Battery
- Yarn pom-pom
- Felt
- Electrical tape
- Safety Pin (optional)
- Scissors



Night Light Bracelet

- Duct tape
- Copper Tape
- LED
- Glue dots
- Neodymium magnet
- Coin cell Battery
- Scissors



Light up Emoji Pillows

- Fabric
- Stuffing
- LED's
- Coin Cell battery
- Coin cell battery holder
- Conductive thread
- Scissors
- Needles
- Regular thread



Cardboard Chair Design Challenge

Rules:

An 160 pound adult must be able to sit on the chair and the chair will not collapse.

The chair must be specified dimensions (determined by participants).

Only Materials:

- Cardboard
- Glue
- Tape
- Box cutters
- Protective gloves/ goggles



Cardboard Costumes

- Cardboard
- Hot glue
- Tape
- String (optional)
- Box cutters
- Safety Gloves



Craft Foam Cosplay

- Craft foam
- Sticky Backed Craft foam
- Scissors
- Paint
- Glue
- String or Velcro



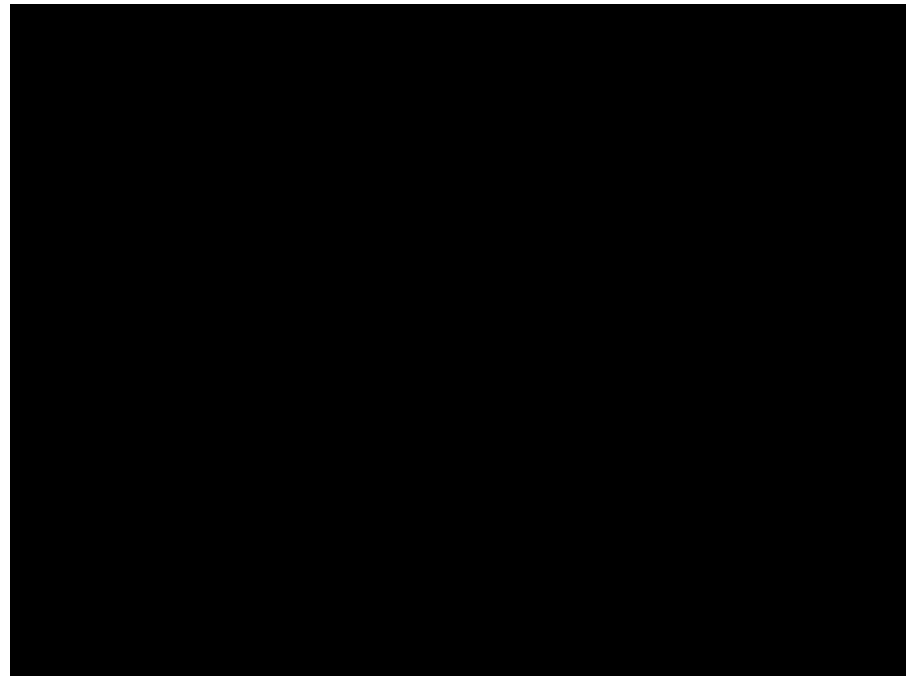
Electroscopes

- Aluminum pie tin
- Aluminum foil
- Foam cup
- Tape
- String
- Items to be statically charged



Massive Marble Runs

- Cardboard, especially dense edge pieces
- Bouncy balls, ping-pong, etc
- Tables, chairs, structure
- Make-do cardboard saws
- Scissors, cups, extras



Tech Take-Apart

- Broken Stuff
- Gloves
- Safety Glasses
- A lot of screwdrivers
- Spudgers



Light Up Trees

- Clothespins
- Bottle tops
- Copper foil tape
- LEDs
- Pipe cleaners
- CR2032 batteries

