

Who we are

I am an Innovation coach and teaching assistant. I worked with a student to brainstorm some ideas on how we could use the Makey Makey to help our students learn. The Makey Makey got us thinking and we came up with **Helpful Hoops!**

What is it?!

A fun, interactive, customizable learning game for students of all ages and levels.



Make a category or word/picture ID game by playing a basketball like game with the Makey Makey.

Example Games

Make 5 baskets related to a story or topic (vehicles - car, train, bicycle, airplane, boat). Label each basket a different vehicle and record the name placing it in Soundplant. Once all the baskets are set up you can make a variety of games. You can show pictures of the vehicles and see if the student can match the word. Ask “Which one runs on tracks”, “This vehicle flies”, etc.

For older students you could make the balls different colors by marking with a sharpie or paint them to create teams. Label the baskets noun, verb, adjective, etc. Then give them a word and see if they can toss them in the correct baskets.

Materials

Makey Makey

Long wire

Alligator clips

Aluminum foil

Conductive tape

Masking tape

Hobby knife

2 Plastic juice containers or jugs(2 per basket-one for basket and one for collection/stand)

Styrofoam ball or other small balls

Computer

Microphone (if your computer doesn't have one built in)

Paper and markers to make signs

Software

Soundplant

Garageband or other recording software

Price

\$50-100 (I got most of my materials from my local surplus store for under \$10)

Difficulty

Moderate

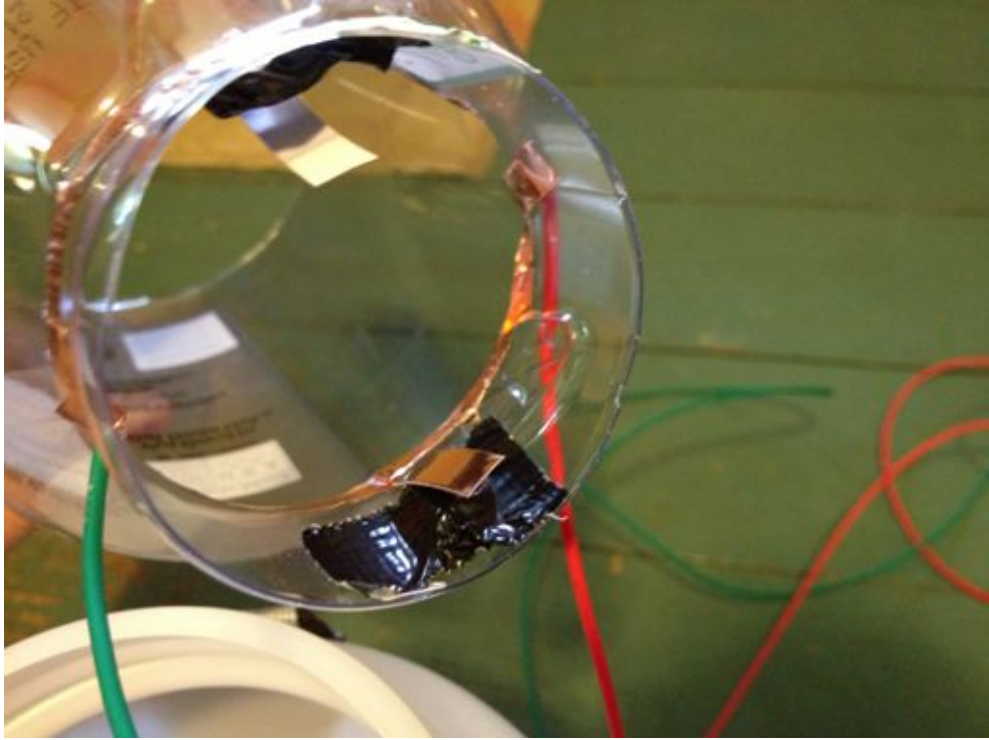
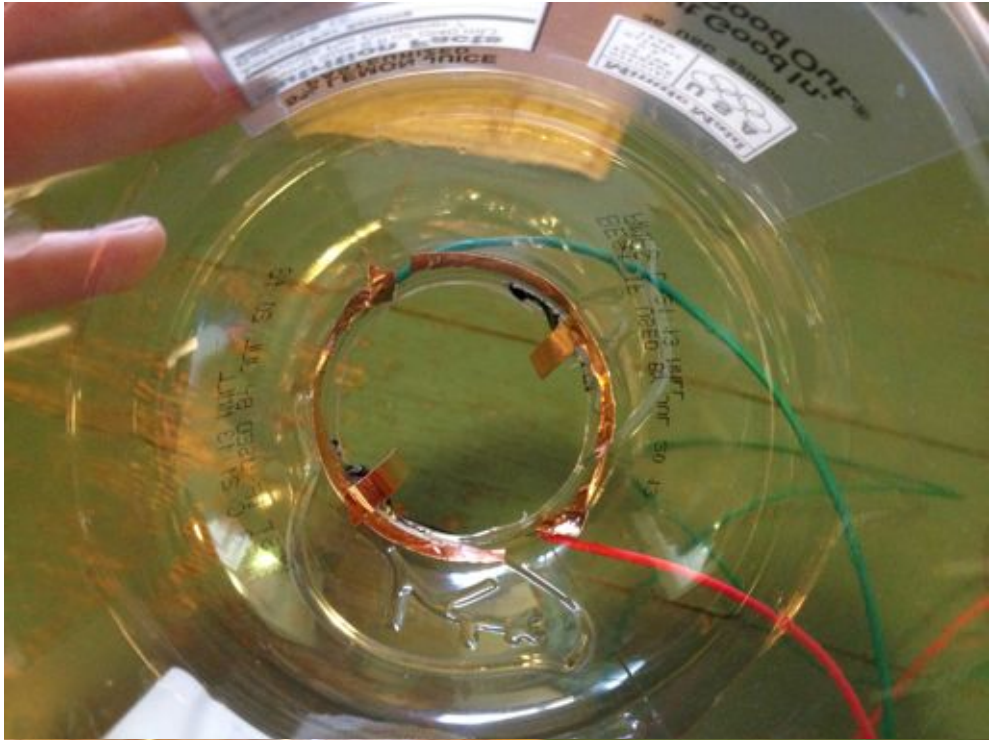
Step-by-step

Recording sounds

1. Use garageband and record the different words you would like to use
2. Export the audio files to your computer or into iTunes
3. Open Soundplant and drag your audio files onto the keys you would like to use
4. Save your file

Making the baskets

1. Cut the bottom and top off of one of the bottles (Basket)
2. Poke 2 holes on the neck of the first bottle (basket) for the earth and a wire
3. Cut the top off of the second bottle so the other one sits in it snugly and set aside
4. Cut a piece of conductive tape and line $\frac{1}{2}$ of the inside of the neck of the bottle (basket)
5. Cut another piece and put across from the first piece of tape making sure they do not touch
6. Take a wire (make sure the end is stripped) and push it through one of the holes on the neck of the bottle. Use the conductive tape to hold it in place
7. Repeat with the other wire
8. Cut 2 pieces of conductive tape about 1in long. Peel back a very small piece of the paper backing and trim leaving 80% of the backing on. Place the tape on one of the bands inside of the bottle so its pointing out the top (neck) of the bottle.
9. Repeat with the other side
10. Make a small ball with the masking tape and place behind each of the flaps you just made. This will keep the flap from sticking to the side of the bottle and make sure the balls that are thrown in make contact
11. Place the basket on top of the other bottle/jug
12. Loosely tape the wires to the bottom bottle so they don't move around
13. Loosely tape the top and bottom bottles together so they don't get knocked over (I use one piece of tape and make a hinge so it is easy to remove the balls)



Making the balls

1. Wrap the foam balls tightly in aluminum foil
2. Make sure they just fit through the neck of the bottle. You do not want them to get stuck



Putting it all together

1. Connect your earth and other wires to the Makey Makey and your baskets
2. Make sure Soundplant is open and the Makey Makey is connected
3. Test it out!

