



Jawn-o-graphy

A simple twist on finding your way

Project Type: Geography & LED/Copper tape

Group/Individual: Collaborative or Individual

Lesson Plan Audience: Maker Mentor

Time: 1 Hour +

Hard Skills: Circuitry, Drawing

Soft Skills: Collaboration, Research

Ideal # of Participants: 2-3 for small project, 5-7 for large projects

Age Group: 7+

Ideas for Taking it Further

- Gather an atlas and other books about geography and tourism from your library and have them on display.
- Create a Push Button map with multiple participants/lights per page. I.E. Sam's house lights up when you press his name, and Sally's house lights up when you press her name. *Push Button action is for those participants with a bit more patience.*
- Have participants draw their own map before showing them a real map. What do they think their neighborhood/city looks like, or what do they think the country looks like? Where are all the landmarks? Roads and highways?
- Use different colored lights for different locations (favorite restaurant, school, store, etc...).

Difficulties/Tips

Participants may have very little knowledge of local geography.

Copper tape circuits can be difficult to manipulate on regular bond paper. Proceed gently.

Google or Bing Maps helps orient participants.



Materials

A printed map of Philadelphia, or the city, neighborhood, country in question (available via Google image search). Try different types of maps, too. Ones with labels are good for beginners, ones without labels are good for seasoned professionals

LEDs

Coin Cell Batteries

Copper Tape

Markers/Writing Instruments

Steps

1. Have each participant find where they live and mark the location with a pencil or marker. Use Google maps if the process is too hard.
2. Create the copper tape circuit using an LED as the participant's location. Instructions on how to create copper tape circuits can be found here: <http://highlowtech.org/?p=2505>.
3. Have Participants explain how they would get from their *current* location to home or school.
4. On maps that cover larger areas, have participants discuss and mark familiar spots like their school, a nearby park, or their favorite food joint. You can also work with them to find and mark places they want to visit, or some more distant places that they have visited before.

