

Notes to the Future

Cheshire Cat/ Erase a Face

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Building the experiment: We suggest making a box out of PVC pipes and placing it on a square table. Decide how big you want to make the box based off of the dimensions of the table. Go to Home Depot and buy approximately five pipes at .75 inch width (that is the most common size.) Buy a lot of three-way connectors that look like this. Do not waste your time looking for mirrors: go to Michaels and buy a square 1'x1'.



Attach it to a .5 inch PVC pipe so it can swivel. (The project isn't really on the internet so you'll have a hard time trying to find the fundamental principles. After a ton of researching I figured out that it is about "bifocal rivalry" so look that up.)

Notes Mr. Baird gave us: Come prepared with the whole experiment built by the day Mr. Baird asks to see it. If you build it correctly and have a mirror that will swivel around, Mr. Baird probably won't have many critiques for you. Make sure if your mirror has sharp edges that you put something around those edges so that the kids and parents won't cut their faces or poke their eyeballs out.

Notes about set-up: Make sure to get there on time, because if you don't, you won't get a good spot. Also, you should measure the doorframe of Mr. Baird's room before hand to make sure you can actually fit the project through the door; it was a very close call for us but we barely managed to squeeze the thing through the door. We had our own table that was the perfect size for the contraption we built, but you can probably use one of Mr. Baird's tables.

Notes about Open House/ Exploratorio: This lab can be done outside, and if it isn't too windy that day, you should think about doing it outside because the kids and parents will have to walk right past you to get into the room, so they will be more likely to want to do your experiment. Also it is helpful to do it outside because there is a lot of room and good lighting. Make sure you have a bright poster to draw people's attention to your lab. If the experiment doesn't work, it's a good idea to have an iPad or some tablet so you can show the kids/parents an optical illusion that uses the same principle as this lab but is easier to see. We used the optical illusion from this link

<http://www.moillusions.com/disappearing-dots/> For most people though, even the parents, it worked so you shouldn't be too troubled with that. One important step is to make sure they know which is their dominant eye. The dominant eye should always be the one looking in the mirror. It'll be hard for kids to be able to figure out how this works but the looks on their faces when they see their friend disappear is definitely worth it.

