



Rainbow Chandelier

by [LostRite](#) on March 12, 2012

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Intro: Rainbow Chandelier

This 'ible will show you how to make a pretty and colorful chandelier out of test tubes and food coloring. The project was originally intended to use chemistry indicator solution to act as an artsy demonstration of pH dyes. However, due to a faulty indicator dye that I ordered, we decided to use food coloring instead (it is also prettier). The project was used with the faulty indicator dye (and later switched to food coloring) as a demo for my homeschool teaching position. For older students, indicator dye is a good experiment for observing pH in everyday objects and learning to use pH sensitive materials (the dye and litmus paper as well). For younger students, the coloring could use the food colorants to have some fun mixing colors while trying to make a color wheel. Either way, its really fun!

The inspiration for the entire project came from tumbling across the last image on this step. (source fails to be cited!)





Step 1: Materials

Materials:

Wood for the wheels supporting the test tubes

String or wire to hold them up

Food coloring (water-based works best, but any kind will do)

Test tubes

I ordered my test tubes via Carolina Biological Company

<http://www.carolina.com/category/equipment+and+supplies/glass+and+plasticware/tubes.do>

They sell boxes of 48 test tubes for around \$10 to \$15 and have decently priced shipping. A good company!

Equipment:

A 1/2" drill was used to drill the holes for the tubes

a bandsaw was used to cut the circles for the wood form (use whatever you want here though)

and a tiny drill bit was used to drill holes for the string



Image Notes

1. Food Coloring
2. syringe
3. Test tubes
4. water
5. disposable pipettes and bulbs



Image Notes

1. Food coloring



Step 2: Wooden Frame

Decide approximately how big you want your chandelier (I went with 9" diameter for the larger circle). Outline the circle. To do this I used a funnel since it has a circular rim to trace. Using the bottom of a paint can or a dinner plate would also work.

Use the bandsaw (or whatever you have, handsaw, etc) to cut out your circle.

Now the tricky part!

Make sure to leave room for the 1/2" holes you are to drill later, but you need to cut out an inner circle.

You need (want) to cut out the inside of the circle to make it a donut shape. I cut through the rim and just went crazy with the bandsaw until I had the center cut out. You can then glue the rim back together with wood glue (or elmers even would work fine).

Make a similar scaled down clone using the same method. This is the second ring and is a few inches smaller. Mine is about 6.5" in diameter.

If you want simplicity, you do not have to make this second ring, it will still be cool!!!

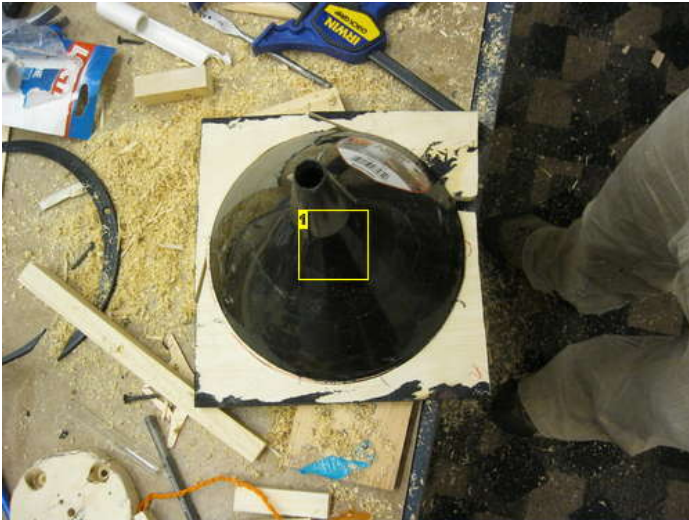


Image Notes

1. funnel to trace out outer circle

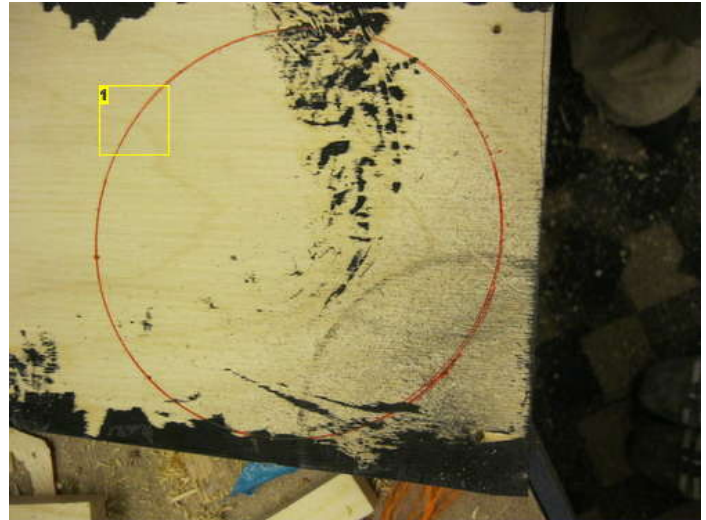


Image Notes

1. cut-line



Image Notes

1. used a bowl to trace out smaller circle

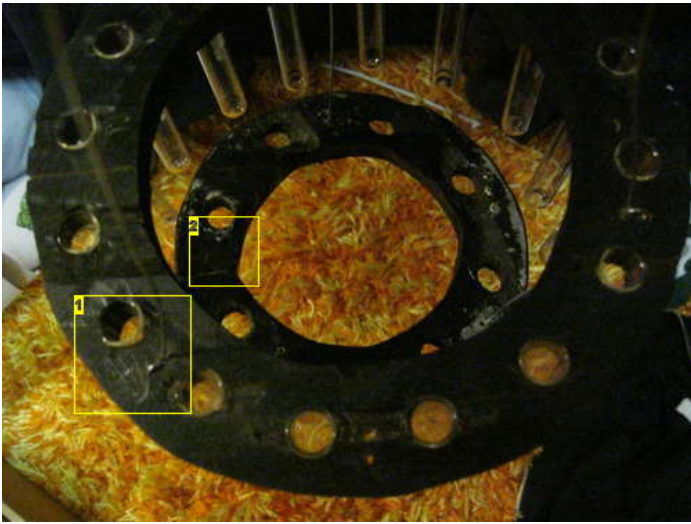


Image Notes
1. outer circle
2. inner circle

Step 3: Drilling Holes

First, decide how many test tubes you will be using. I used two rings of test tubes. The first ring had 16 tubes, the second had 8 tubes.

I made approximate marks for where to drill each hole for the test tubes. And then drilled them with 1/2 inch drill bit.

Now would be the time to paint the wood if you want to. I spray painted them black with a hint of red.

As a substep, drill holes in the circle's edge. I drilled 3 holes (approx. at 1/3 intervals) for the wires to hold them up. Then thread the wire through these holes. It should be hang-able now!



Image Notes
1. 1/2 " drill bit



Image Notes

1. test tube rack made on the side

Step 4: Color the tubes!

This is the fun part! Fill each test tube about 2/3 ~ 3/4 full with water. Now pick whatever colorants you want and try to make as many pretty combinations as you have test tubes for!!! The simple pretty ones are making pure red, pure green, pure blue, and pure yellow. Next you could try one drop of each colorant. From here you can try whatever you want!

Precaution: your sink may become messy (as will hands, clothes, anything nearby). It IS washable but fair warning!

Hint / Note: purple is hard to make!

This step shows a bunch of pictures of the colors i made.

Please post pictures! Especially if you make a nice purple!



Image Notes

1. messy sink :)





Related Instructables



Dimensional Silhouette Chandelier by davidandora



Coffee Cup Chandelier by KandKsilas



Christmas Glass Icicles (Photos) by logannebell



Budget Venetian Chandelier by rwistort



Decorative Earring Frame by aznliu



Halloween Chandelier How-To by xsforis

Comments

1 comments

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jessyratfink says:

Very cute! I love anything with test tubes. :)

Mar 13, 2012. 10:10 AM [REPLY](#)
