

Telescope Binoculars Instructions

1. Begin by getting together your materials. You will need the following*:
 - a. **1 or 2 toilet roll sized cardboard tubes.** You will need two rolls for binoculars. If you have a long paper towel roll you can cut it in half.
 - b. **1 Flexible Mirror sheet**
 - c. **1 foam ball** (for binoculars only)
 - d. **Scissors and glue dots**

**Note: find online links to all materials following these instructions.*

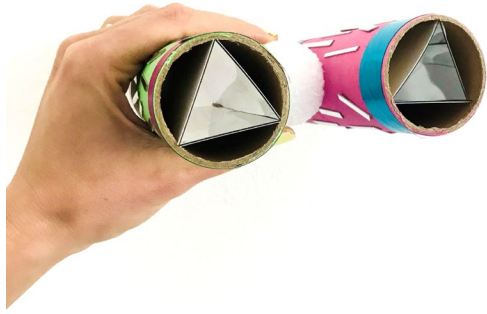
2. Using scissors or an Exacto knife, cut your mirror sheet into three pieces that are 1 5/16" each--this is the best estimate for the rolls we are using but if you are working from home try and measure the inside dimension of your paper roll for the best fit.
3. Your mirror pieces should fit snugly inside your cardboard tubes. Before peeling off the protective film, arrange the pieces into a triangle inside your tube or tubes to be sure you don't need to trim off any mirror pieces that are too large. If you cut the pieces to fit snugly you won't have to adhere them with glue.
4. Once you know that your pieces fit inside your tube/s take off the protective coating on your mirror pieces. Secure the pieces into your tube. You shouldn't need glue but don't hesitate to use some if you need to keep the mirror pieces in place.
5. If you are only making a singular telescope like the image below you can now decorate your tube!
Use mirror scraps, washi tape, stickers or if working from home any crafting supplies you would like to decorate your tube.



6. If you are making binoculars grab a foam ball (small size for kids and large for adults) to place between the cardboard tubes. Ask for help if you need to make sure they fit your face. Use two glue dots to adhere the foam piece to complete your binoculars. If you prefer you can even cut the edges of the balls to create a flat surface for the glue to better adhere to the tubes:



7. You did it! Go check out [Mobius Houston](#) using your new eyes, what do you see? If you are crafting from home start to look at your own surroundings, what types of patterns can you create looking at household items like blankets, toys, or wallpaper. If you can go outside take your craft with you and look up into the trees and clouds to see them in a new way!



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Links to specific craft supplies:

1. Craft tubes. If you want to use these pre-decorated tubes you can find them at your local hobby lobby or online.
2. Flexible mirror sheets via Amazon.com These are the hardest to find in stores but luckily the small company Qbics has these affordable mirror sheets via [Amazon.com](https://www.amazon.com).
3. Foam balls online and in your local Texas Art Supply store. Foam balls can usually be found at any craft store, just be sure to order the 1.5" or smaller size. You can also use household items like a large metal nut, a small rubber ball, a big wad of crushed cardboard remnant, or even packing peanuts.
4. Zots can also be found at Texas Art Supply and online. I like using Zots because they are cleaner than glue but you can also use whatever household glue you have on hand.

Don't have mirror sheets? A similar effect can be achieved using cardboard and mylar however the imagery won't be as clear. You can also simply make binoculars without the mirrors and use them to explore your imagination! What new perspectives can you see when you start to look with new eyes?