

### **DIY Spy Glass**

## **Supply list**

Paper cup

Empty toilet paper cardboard roll

Empty Cardboard roll from **tin foil**, or **plastic wrap** (thinner than TP roll)

Construction Paper (Black, light blue; or any colors!) (alternative: crayons, colored pencils)

Sticker backed felt, OR regular felt

Craft glue (or tape)

Marker

Scissors

Ribbon/yarn/string (any color(s)) (optional)

Decorative tape (optional)

Clear plastic (from disposable container) (Reuse a clear plastic to-go box container!) (optional)

## Steps:

1. Alright for this Telescope we are going to get our construction paper, grab a few sheets of the color or colors you want to use, some scissors, a pencil or pen, and either glue or tape! If you don't have construction paper and want to color your telescope, go ahead and start coloring it with crayons or colored pencils!

All we are going to do is mark how long our cardboard roll is on our construction paper, by lining up the cardboard on the edge of your paper... make sure to mark with your pen or pencil on the paper how long the cardboard tube is!

And then you can wrap the paper around the roll to see about how wide the construction paper it needs to be to fully cover it, and then add an inch or two extra of the paper for more room to glue or tape it, just in case. It should be able to wrap all the way around, you can always check again if you aren't sure, and when you're ready go ahead and cut it out!

- 2. Once we have our rectangle cut out, we are going to see how it fits on the roll, make sure it's the right way, and then we can glue or tape it.
- 3. Once you are done coloring or pasting our construction paper, you will want to grab your scissors and slice a "X" shape into the bottom of your cup so you can insert the roll from the tin foil (the longest tube). If you need help cutting an X into the bottom of your cup, ask a family member to help!
- 4. Next you will glue the toilet paper tube onto the cup. Allow to dry. If you don't have glue try some tape!



5. Next decorate as desired. This is where it gets creative, you can take your felt, some of you might have felt with a sticker back or you might have regular felt, feel free to add anything you want to yours!

I am also going to decorate it with some string around the outside, I have some yarn, which is thin so I am going to make a thicker mini rope by twisting or braiding multiple pieces of thread together, making sure to tie both ends. I am going to wrap it around the edge, and glue it into place, and repeat it for each part that I want to add it to!

5. Once you are done with your decoration, if you were able to find some thin clear plastic that you don't need anymore, like from a disposable to go container, we are going to grab that, our marker, and our cup. We want this to be the lens, if you weren't able to find it, no worries this is just an option.

Take your cup, and put it upside down on your clear plastic. We want the large side of the cup down, and we are going to trace that onto our plastic.

Next, we want to cut out a piece of clear plastic, plastic can be hard to cut so if you need to ask someone to help you please do! Use permanent marker to draw the ocean and a ship's silhouette onto the plastic if you would like to see a ship in your Pirates Spy Glass!

Lastly, we are going to glue the plastic to the large end of the cup, press it down and let it dry, and then you have finished your Pirate Spy Glass!

## Next we will be making Q-Tip Launchers to defend your Pirate's Booty (loot)

# **Supply List**

4 craft sticks (or popsicle sticks)
1 rubber band (make sure it is a wider rubber band!)
2 buttons
Plastic straw
Craft Glue or tape
Scissors
Cotton swap / Q tip
Colored markers (alternative: crayons)



#### **Steps:**

Step 1 – With your colored markers, color two of the craft sticks one color, and two another color. You will be gluing them together so that is why we colored ours to be matching, but really, they don't need to match. Just color them however you want, if you don't have markers try crayons!



Step 2 – Using your craft glue or tape, stick the two popsicle sticks together. Then glue the other two together. We are doing this for two reasons. First, it makes the structure stronger. Second, the end of the handle becomes an anchor point for the rubber band while loading the Launcher.

Step 3 – Choose which is going to be the handle and which is going to be the crossbar. Place the crossbar about 1/4 of the way from the top of the handle and glue in place.

Step 4 – Make sure your crossbar is on the bottom (so you have the smooth surface of the handle on top). Now glue your buttons on the crossbar about 2 cm in from the ends.

Step 5 – Cut your straw about 6 – 8 cm in length should work.

Step 6 – Glue the piece of straw on top of the handle so it is above the crossbar near the front. Let the glue set for a few minutes.

Step 7 – Wrap the rubber band around the end of the crossbar on one side, then repeat on the other side. Pull the long side of the rubber band and anchor it on the end of the handle. Your Launcher is now ready for action!

#### **USING THE CRAFT STICK LAUNCHER**

To use the launcher place a Q-Tip cotton swab in the end of the straw. Carefully lift the rubber band off the end of the handle and pinch the Q-Tip and elastic between your index finger and thumb. Pull back until the Q-Tip end is just inside the straw. Make sure your other fingers are out of the way, and then LET GO!

Pro Tip! Challenge your kids to design their launchers with various lengths of straws. The longer straws will allow great pull on the rubber band, resulting in launches covering greater distances, but they also require more finger strength. Test it out to find the optimal design for the best launches!

The cotton swabs may get a little fuzzy which can cause friction and cause issues during launching. If this happens, you have two options. Roll the ends of the Q-Tip between slightly moistened fingers to help tighten up the fibers. Or you can wrap a little clear tape around the ends of the Q-Tip to keep things neat and moving smoothly through the straw, just make sure it is really smooth so the tape doesn't cause friction.