

SPECTROSCOPE

Materials required:

Cardboard Roll(Foil or cover roll), coloured paper, CD, tape, piece of cardstock, cutter and scissors.



1. Cover the roll with a colored sheet.(optional)



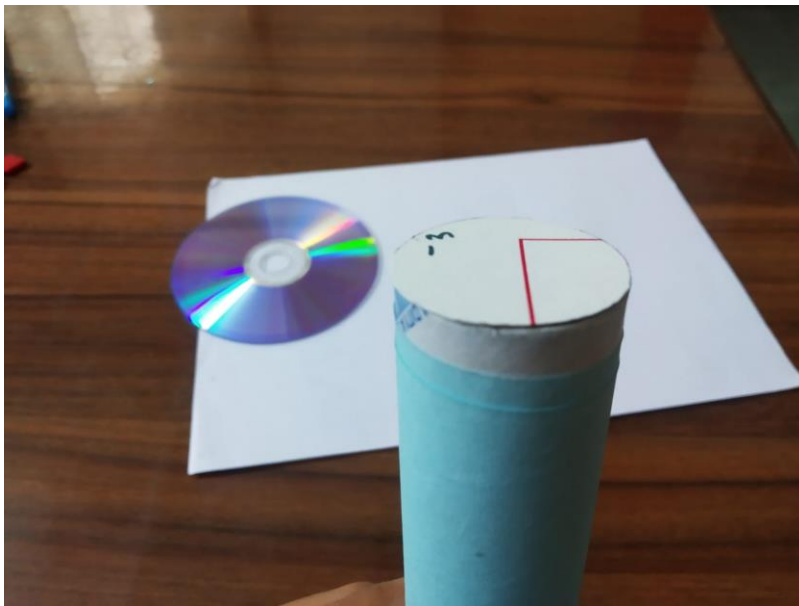
2. Make a slit at 45° near the base of the roll using a cutter.
TO BE DONE UNDER ADULT SUPERVISION.



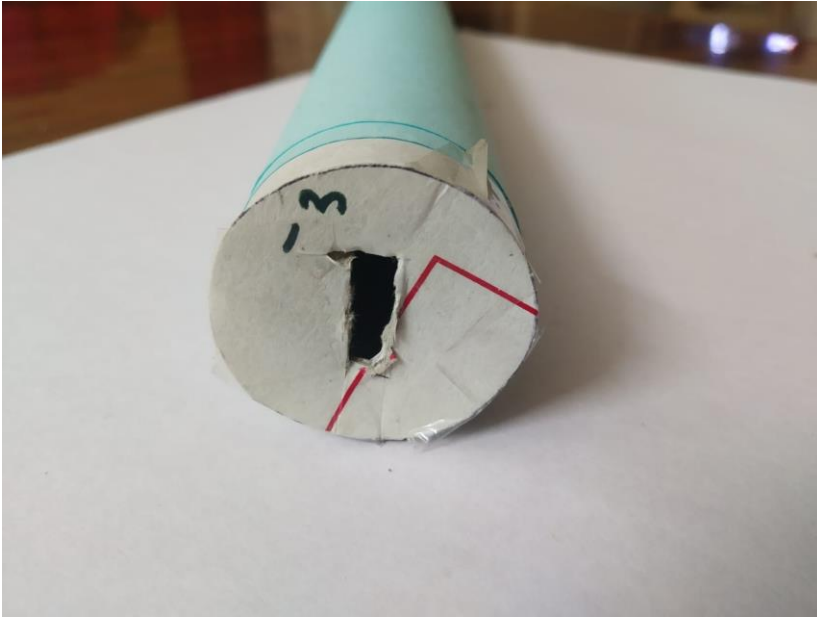
3. Just across the slit on the other side of the roll, make a square shaped cut using cutter and scissors.



4. Cut a circle about the size of the roll opening from the cardsheet and tape it onto the top edge.



5. Cut a slit in the center of the circle.



6. Insert a CD in the slit made in step 2. Make sure that the shiny side of the CD is facing upwards.



7. Now, point the top Part of the roll towards a light source. (slit made in step 4)
8. Look from the hole made in step 3. You will see a rainbow!

A tubelight looks like this.



CAUTION: DO NOT POINT THE SPECTROSCOPE DIRECTLY AT A VERY STRONG LIGHT SOURCE SUCH AS SUN. WHILE POINTING AT LIGHTS, DO NOT POINT IT VERY NEAR TO A VERY BRIGHT LIGHT.

Explanation:

Light enters the Spectroscope through the top hole, gets reflected by the CD and enters the eye from the slit.

White light splits into seven colours depending on the wavelengths (just like a prism splits light).