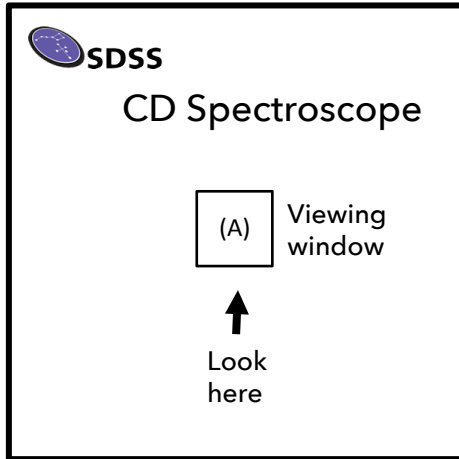




SDSS

Make an SDSS CD Spectroscope

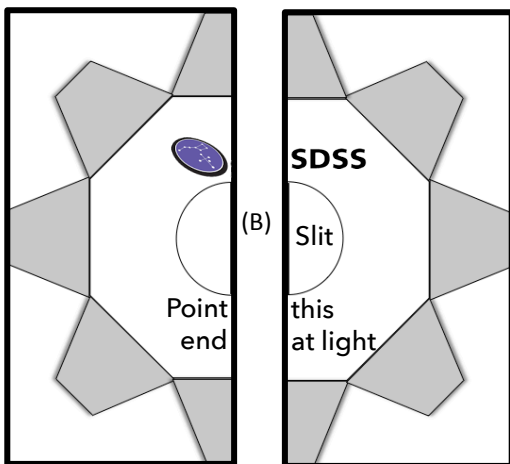


Instructions

You will need:

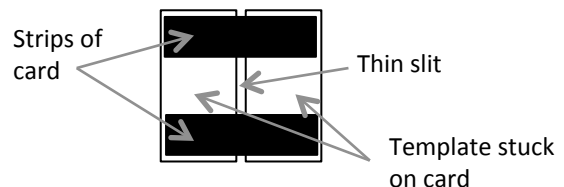
1. An old/unwanted CD (broken)
2. A cardboard tube (inner tube of toilet roll or kitchen roll; or a roll of thin dark card)
3. Thin card (dark colored is better)
5. Dark sticky tape
- (e.g. electrical tape, or duct tape).
6. Glue and scissors

Start by cutting out and sticking the templates at left onto card.



1. Make a very thin slit

The slit (B) needs to be very thin and sharp, and ultimately be the only way for light to get into the spectroscope. Stick the two slit head templates together using card strips perpendicular to the strip.



2. Make your grating

Cut out the viewing window (A)

Use a piece of sticky tape to peel any remaining reflective (silver) coating from a piece of broken CD that is large enough to cover the window. Tape the piece to the back of the window.

3. Assemble your Spectrograph

Using dark tape attach the squares of card to each end of the cardboard tube. The idea is to make sure no light can get into the tube except through the slit. You will get the best results if you line up the lines on the CD with the slit.

4. Investigate Light Sources

Now use your SDSS CD Spectrograph to investigate the spectra of light sources (WARNING: never look directly at the Sun).