



Activity 2: Solar Viewer

How can I study the sky safely?

The only safe way to view the sun is using a special solar filter on glasses or on a telescope. You can also build a simple solar viewer at home to watch solar changes such as solar eclipses or sunspots.

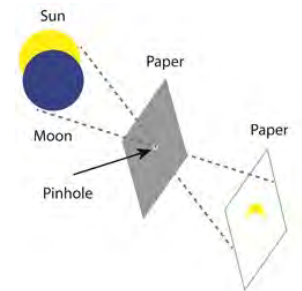


Materials

- two sheets of white cardstock
- one pin
- Tracking Sunspots using real data from Soho
<https://sohowww.nascom.nasa.gov/classroom/docs/Spotexerweb.pdf>

Instructions

1. Carefully use your pin to poke a hole into the centre of one of the sheets of cardstock.
2. Stand with your back to the sun and be very careful not to look directly at the sun.
3. Hold the sheet of cardstock with the hole in it so that light from the sun passes through the hole and projects onto the other sheet of cardstock (the screen).
4. Move the two sheets of cardstock closer together to make your image smaller. Move them farther apart to make your image bigger.
5. You can use this solar viewer to view a solar eclipse. Check the *NASA* website to see if any solar eclipses will occur soon.
6. Record the location of any sunspots that you can see on the sunspot tracker.
7. Go outside everyday and use your solar viewer to record the location of the sunspots. Do this for 7 to 10 days in a row.
8. You can construct a flipbook using your sunspot tracker images, or you can scan them into your computer to make a slide show. This will show you the sun's rotation over the period of time during which you made your observations.



You can see an example of what this might look like using the sunspot diagrams Galileo made from his observations. Research them on the Internet.