

Activity 5: Observing The Sun, our own Star

Introduction:

Sunspots and other features on the sun are directly visible, and change in real time over the course of minutes. This is an outdoor activity using a special solar telescope. We will do it during recess in the schoolyard each day if it is clear. We will bring a Safe Solar telescope that uses lenses and mirrors to project the [Sun](#)'s image onto a white screen. Students will be able to view the Sun's surface by simply looking at it, no eyepiece or electronics are involved.

Objectives:

- Examine the rotation of the Earth in relation to the position of the sun
- Identify and track sunspots

Vocabulary:

- Sunspots
- Rotation
- Solar Telescope

Materials:

- Solar Telescope
- Paper
- Pencil

Procedure:

1. Have students place paper on the screen and trace the features with a pencil.
2. The next day compare their tracing with the Sun again to see how much it has rotated.
3. Repeat for as many days as desired.

Variations and Follow-up Activities:

- The home-made spectrometers can also be used to safely view the sun, showing a beautiful bright rainbow.
- Instead of having students trace the image, take a picture of it and have students compare using the pictures.