

Eclipse Weather Observing

Learning objectives: Timelines, safe observing techniques (sample TEKS below)

- TEKS 112.6 Use tools and make observations
- TEKS 112.18 et al. Use tools, make observations, collect, record and analyze data

Supplies: Thermometer, anemometer (if available)

Activity: Take measurements of air temperature (keep the thermometer in the shade), and wind speed and direction if available. Cloud cover: estimate the fraction of the sky covered by clouds.

Start 30 minutes before first contact, and take measurements at 5 minute intervals until first contact, then 2-3 minute intervals until the Moon leaves the sun at 4th contact.

Use sample data chart on next page.

Note: estimate the “fraction of the Sun covered” but then afterwards get the best information from <https://timeanddate.com/eclipse> .

CITIZEN SCIENCE: If you want your data to join others around the country, download the “GLOBE OBSERVER” smart phone app. (free from the app store). The app will be live for data taking on eclipse days.

Analyze: Afterwards, make a plot of the air temperature at your location versus time. What was your maximum temperature drop? When? Did the winds die down or pick up where you were? Did it become more or less cloudy?

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