

BE A CITIZEN SCIENTIST



(Note: The comic above was first published in a year when the eclipse was on a Saturday. The 2024 eclipse is on a Monday.)

On April 8, 2024, the United States will experience a solar eclipse. A total solar eclipse will only be seen in certain areas, while others in the U.S. will see a partial eclipse.

NASA conducts many experiments during a solar eclipse to learn more about the Sun and how it affects Earth. You can be a scientist, too — a citizen scientist! With your teacher or an adult, follow the steps below to gather data at school or in your neighborhood for two days before the eclipse and on the day of the eclipse. Record your data in the table.

Part 1: Watch the visualization of the temperature data collected during a 2017 solar eclipse at <https://www.youtube.com/watch?v=yiNF1PEV5f8>. (Learn more here: <https://observer.globe.gov/hidden/science-connections/eclipse2017>.)

- a. What variables would affect the temperature data, aside from the shadow of the Moon?

- b. How are the temperature changes during the solar eclipse experienced differently by people in the path of totality and those outside the path?

Part 2: Gather and record data. Go to <https://www.timeanddate.com/eclipse/solar/2024-april-8> to determine the time of day and type of solar eclipse that will occur at your location.

Time: _____ Type of eclipse expected (partial or total): _____

Part 3: Use the chart below to make observations at the approximate time of the solar eclipse during the two days before the eclipse and on the day of the eclipse.

	Location (school or home)	Time (near the time of the eclipse)	Time of maximum eclipse	Temperature	Cloud description
Day 1					
Day 2					
Eclipse Day Monday, April 8, 2024					

Part 4: Analyze your data after the eclipse. *What was different during the eclipse? Why do you think those differences happened?* Write about it on the back of this sheet.

FAMILIES! Want to get a head start on viewing the next solar eclipse? Check out <https://www.timeanddate.com/eclipse/list-annular-solar.html> to learn when the next annular solar eclipses will occur worldwide over the next 10 years.

