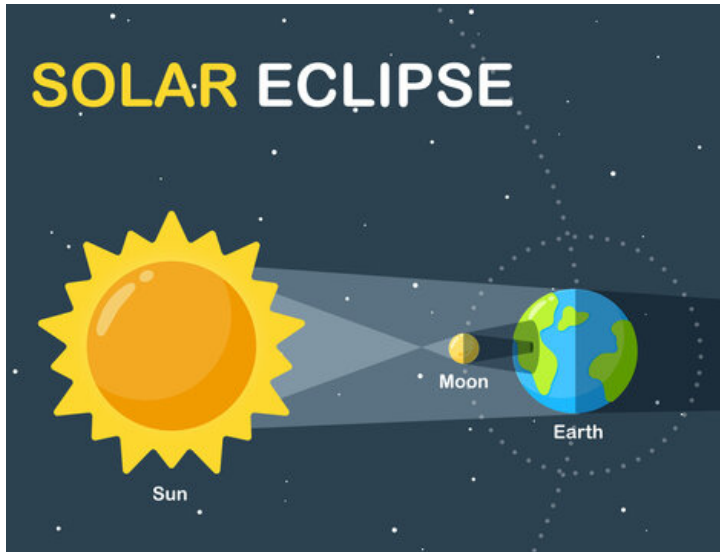




Lake Erie Nature & Science Center

SOLAR ECLIPSES



A total solar eclipse is one of the coolest things you will see in the sky. What is a solar eclipse? Well, the Moon orbits Earth approximately every 27 days. A solar eclipse is the cosmic coincidence when the Moon passes exactly between the Earth and the Sun, thereby casting a shadow onto Earth and blocking our view of the Sun. Solar eclipses happen about once every 1-2 years.

On **April 8, 2024**, the path of totality (or the shadow of the Moon) will cross North America, passing over Mexico, the United States, and Canada. In Northeast Ohio, we will see the Moon completely cover the Sun, revealing the Sun's outer atmosphere otherwise known as the solar corona.

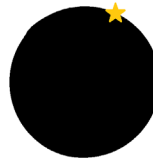
To safely observe the eclipse, you must wear eclipse glasses or number 14 welder's glass. Look for these different parts of an eclipse:



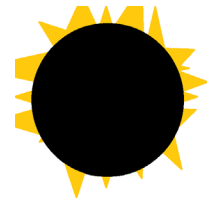
Partial



Bailey's Beads



Diamond Ring



Totality

Partial Eclipse: The Moon only covers a portion of the Sun.

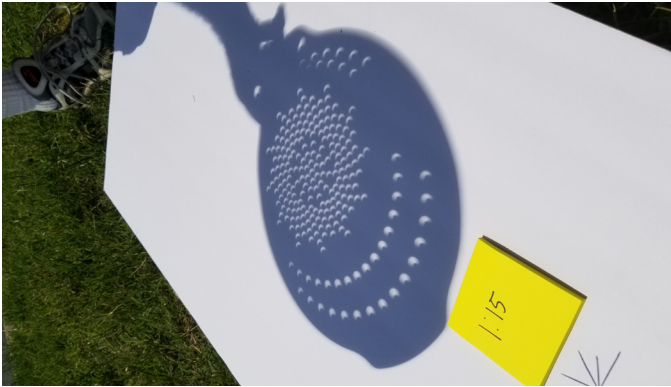
Bailey's Beads: The sunlight is focused on the mountains and valleys on one edge of the Moon, resembling a string of pearls.

Diamond Ring: The sunlight is focused on one mountain and valley space, shining brightly like a diamond.

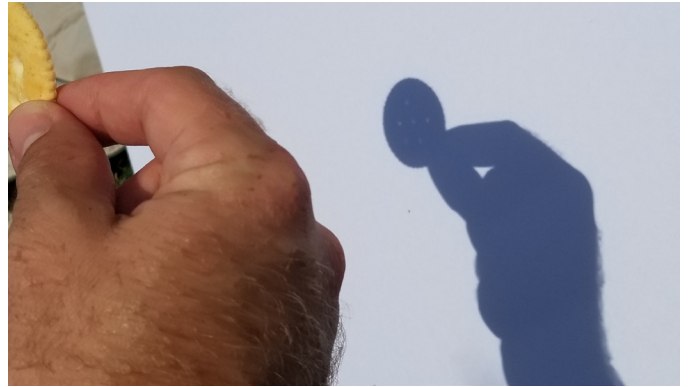
Totality: The Moon completely covers the Sun and the coronasphere (outer atmosphere of the Sun) is visible. We typically cannot see this part of the Sun because it is too bright. During totality, you may take off your eclipse glasses as enough of the Sun is covered and therefore safe to observe with only your eyes.

Activities you can do during the total solar eclipse

Remember, you should never look directly at the Sun. You can use eclipse glasses to directly view the Sun or try these fun activities! If you try these activities on a day other than April 8, 2024, you will only see circles. But on **April 8, 2024 between 2:00 p.m. and 4:30 p.m.** you will see crescent shapes as the Moon passes to cover the Sun. It is best to complete these activities on a piece of white paper or poster board to really see the shadows.



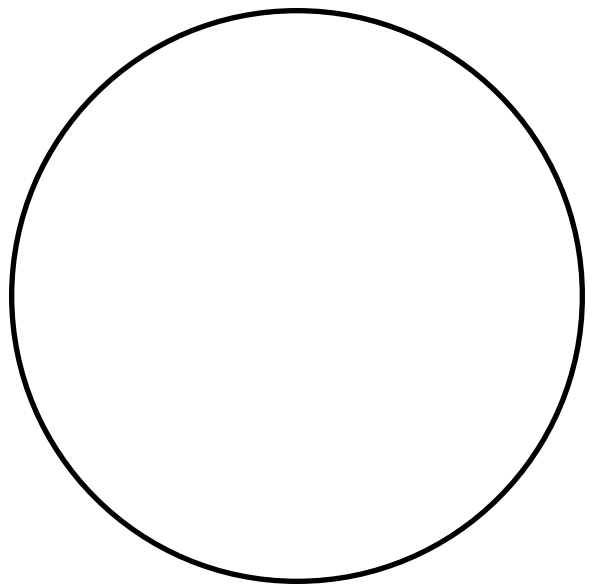
Take your kitchen colander outside and see many little crescents at once!



Do you have any crackers or other foods with holes?



The gaps in leaves and tree branches make great pinhole projectors, too. It is nature's way of celebrating the eclipse!



Draw what you see in the shadows!