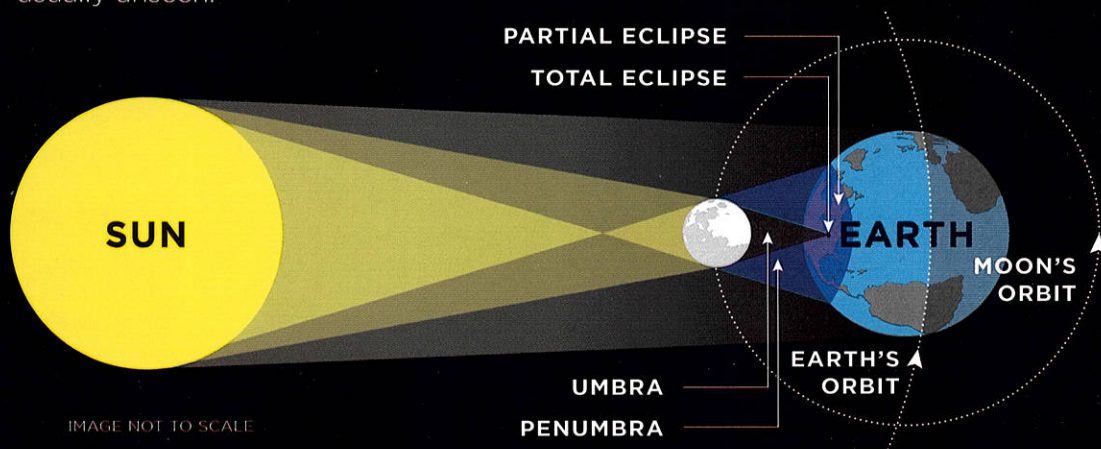


What is an eclipse?

During a **solar eclipse**, the moon passes between the Earth and the Sun. A solar eclipse will be viewable across large parts of the United States on **August 21, 2017**. From many points of view here in North America, the moon will seem to cover the sun entirely! While the moon blocks the intense light produced by the sun's bright surface – the **photosphere** – the outer atmosphere of the Sun called the **corona** will become visible as a pearly white halo around the sun. Here in Columbus, we will see about 90% of totality at 2:30pm, giving us a brilliant “crescent sun” in the sky! The eclipse is a rare opportunity to view a part of the sun usually unseen!



Why do we need eclipse glasses?

The sun supplies the radiant energy needed for life on Earth! However, the strong **ultraviolet light** from the sun can damage the **retina** of your eyes – the light-sensitive membrane that translates light into electrical signals your brain can read (our sense of sight). You should never look directly at the sun. **Eclipse glasses** contain purpose-built solar filters that even very dark sunglasses don't have. Indirect observation through a camera, telescope, binoculars, or any other optical device can be dangerous. To safely view the sun – even during a partial eclipse – eclipse glasses are required!



BUILD A PINHOLE CAMERA

If you can't use eclipse glasses to view the eclipse, a pinhole camera can allow you to project the sun's light and watch the eclipse with a few simple supplies!

SUPPLIES

2 sheets of white cardstock, aluminum foil, tape, pin or paper clip, scissors

DIRECTIONS

1. Cut a square hole in the center of one sheet of cardstock
2. Tape a square of aluminum foil over the hole
3. Use a pin or paper clip to poke a small hole in the foil
4. Place the second sheet of cardstock on the ground to act as a screen. With the sun behind you, hold your pinhole camera (foil facing up) to project the sun onto the cardstock below.



Join the COSI Solar Eclipse Celebration

The COSI Solar Eclipse Celebration is happening all over Central Ohio. Visit COSI to participate or enjoy no-cost programming at these Columbus-area sites from **1:00 - 4:00 PM on Monday, August 21st.**

Columbus Metro Parks

Battelle-Darby Creek Nature Center

Blendon Woods Metro Park
Cherry Ridge Program Area

Blacklick Woods Metro Park
Nature Center

Highbanks Metro Park

Homestead Metro Park
Barn Shelter

Rocky Fork Metro Park
Milestone Shelter

Three Creeks Metro Park
Confluence Area Shelter

Columbus Metropolitan Library

Canal Winchester

Martin Luther King

Driving Park

New Albany

Dublin

Northern Lights

Franklinton

Northside

Gahanna

Parsons

Hilliard

Reynoldsburg

Hilltop

Shepard

Karl Road

South High

Linden

Southeast

Livingston

Whetstone

Main Library

Whitehall

Marion Franklin

Land Grant Brewing Company

Easton Town Center

COSI

You can also join us at COSI for exciting hands-on experiments and eclipse viewing (weather-permitting)

View live digital eclipse content at cosi.org/eclipse

ENLIGHTENING THOUGHTS

- Over 64 million moons the size of the Earth's could fit inside of the Sun, but during a solar eclipse the moon appears to cover the Sun! **How could that be?**
- Before humans developed a deeper understanding of celestial bodies (planets, stars, etc) and the predictable patterns of movement in our solar system, many cultures on Earth would've been surprised by the sky suddenly darkening and the sun "turning black" with a white halo during the middle of the day! **What kinds of stories do you think they might have told about this phenomenon?**
- Even in parts of the continent that view the eclipse "totality" (with the sun's disc entirely obstructed by the moon), light from the sun will still reach Earth. **How do you think that could be?**
- Find out more about these enlightening thoughts and discover even more about the 2017 solar eclipse at <https://eclipse2017.nasa.gov/>