

ECLIPSE CHALK ART —

by Jessica Henricks



What Is This About?

Observing a total solar eclipse can be an exciting, once in a life time experience! Long before there were cameras or telescopes, eclipse watchers recorded what they saw in the sky in words, drawings, and paintings. You can have fun creating your own picture of a solar eclipse with chalk and paper!

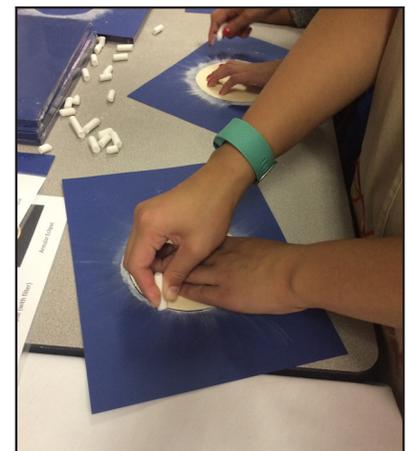
Materials — (you provide)

- Paper, dark blue or black. Smooth card stock paper works best (not construction paper).
- White, non-toxic chalk
- Pencil
- Scissors
- Masking tape
- Circle templates cut from card stock, file folders or cereal boxes
- OPTIONAL Brightly colored construction paper or foam sheets for cut-out horizon detail.



To Do —

- Make circle templates on stiff paper. Trace around the masking tape roll with a pencil, and cut out the template. Make several for group activities.
- Place the template on a piece of dark paper. Secure with a loop of masking tape or simply hold down with one hand.
- Draw a thick circle of chalk around the template. Go around 2 or 3 times. It does not need to be neat.
- Holding the template in place, smudge the chalk away from the center of the circle using a finger to create the corona of the Sun.
- When you are done smudging, remove the circle template.
- Add words, pictures, or fun designs.
- You've made total solar eclipse art!

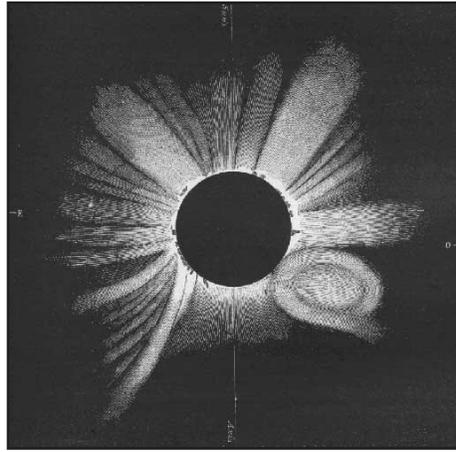


Images above—

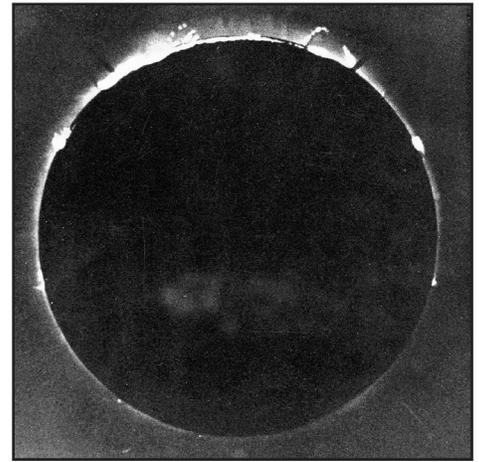
Credit: J. Henricks, Girl Scouts of Northern California

Space Science Tie-In —

Until the advent of sophisticated and highly specialized ground and space-based solar telescopes, the only opportunity anyone had for observing the Sun's corona was during a total solar eclipse. Eclipse photography was not in use until about 1860. Before that, astronomers would sketch what they saw at the eyepiece of their telescopes.



Sketch of 1860 total solar eclipse by G. Temple showing a coronal mass ejection. Credit: G. Temple



First photograph of a solar eclipse by Charles A. Young, July 18, 1860. Credit: C. Young

National Aeronautics and Space Administration

CORONA
The outermost layer of the solar atmosphere. The corona is made of a tenuous ionized gas called plasma, with temperatures up to many millions of degrees Fahrenheit. It is visible to the naked eye only during a total solar eclipse.

PROMINENCES
Structures in the corona consisting of cool plasma supported by magnetic fields. Prominences are bright structures when seen over the solar limb, but appear dark when seen against the bright solar disk. Prominences seen on the disk are also known as filaments.

HELMET STREAMERS
Large caplike coronal structures with long pointed peaks that usually overlie sunspots and active regions. We often find a prominence or filament lying at the base of these structures.

POLAR PLUMES
Bright structures of outflowing gas that occur along magnetic field lines in coronal holes. These field lines extend into the solar system. Although plumes usually occur at the poles, they can appear anywhere there is a coronal hole.

CORONAL LOOPS
Found around sunspots and in active regions. These structures are associated with the closed magnetic field lines, which connect magnetic regions on the solar surface.

Credit: S. Habbal, M. Druckmüller and P. Aniol

Credit: NASA

For More Eclipse Information and Images —

American Astronomical Society: <https://eclipse.aas.org>
NASA: <https://eclipse2017.nasa.gov>