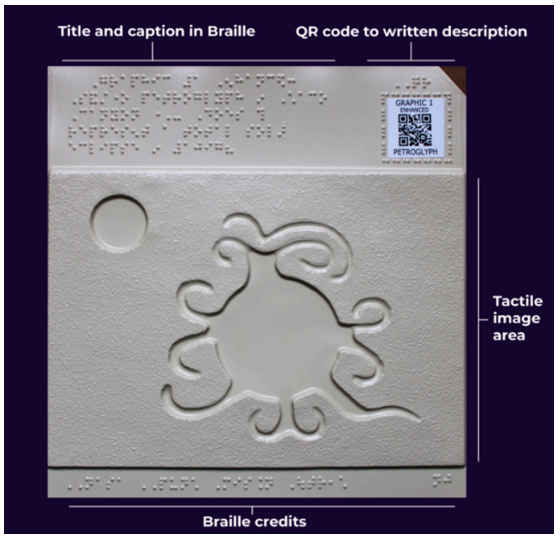
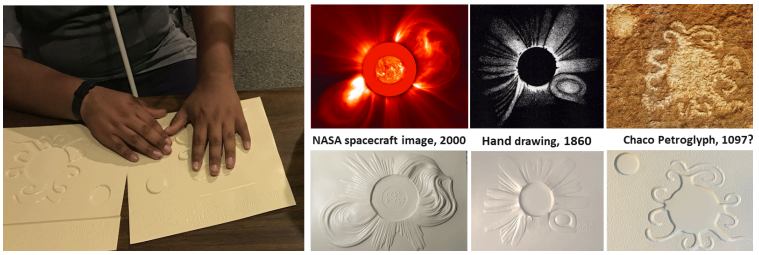
Quick-Start Guide: Tactile-Art Representations of the Solar Corona

Greetings! Thank you so much for your interest in our Thermoform Tactile-Art Representations of the Sun's outermost layer called the solar corona. The PUNCH Outreach team developed these tactiles in collaboration with blind and low-vision learners for use by *all l*earners. There are four resources related to the use and enjoyment of these thermoform tactiles.



The Petroglyph Inquiry for Blind, Low-Vision, and Sighted Learners

Use a set of seven visuals and/or corresponding tactile-art representations to evaluate the strengths and weaknesses of the hypothesis that a mysterious ancient petroglyph in Chaco Canyon is an Ancestral Puebloan impression of the 1097 total solar eclipse with a storm in the solar corona. Authentic inquiry at its finest. Consult our facilitator resources for further detail.



Seeing the Sun's Corona with your Hands (for sighted learners)

Explore tactile-art of the Sun's corona with your sense of touch only. A tactile is placed in a box or bag out of sight with a matrix of six images visible on top. Participants reach in to "see with their hands," trying to determine which image the unseen tactile is representing. Excellent for "Relaxed Nights".

3D Printed Tactiles of Chaco Petroglyphs

Explore our 3D printable models based on spiral and curlicue petroglyphs at the *Rock of the Sun* site in Chaco Canyon, NM.



Rock of the Sun in Chaco Canyon (5-min video)

View a 5-min video that introduces an unusual, curlicue petroglyph (rock carving) located in Chaco Canyon, New Mexico at a Sun-watching site we call *Rock of the Sun*. This petroglyph *might* be humanity's first known representation of a solar storm in the Sun's corona.



Email Contact: punchoutreach@gmail.com **Version Date**: 15 Feb 2025

NOTE: *The next pages contain a thumbnail for each of the seven thermoform Graphics (1, 2, 3, 4a, 4b, 5a, and 5b) used for the Petroglyph Inquiry. Each thumbnail includes the title as it appears in Braille on the Graphic, and the image being represented on that Graphic. To support set-up and communication among sighted and blind learners and facilitators, the thumbnail pages can be copied and cut out along the horizontal lines. The strips can then be taped to the back of the thermoform Graphics.*

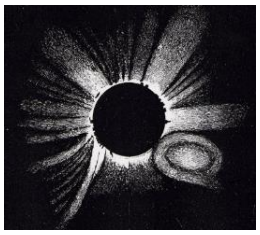
CUT HERE = cut horizontally along this line of text to make visual thumbnails for the Graphics

Graphic 1: Sandstone petroglyph in Chaco Canyon
Does this represent a total solar eclipse in **1097?**



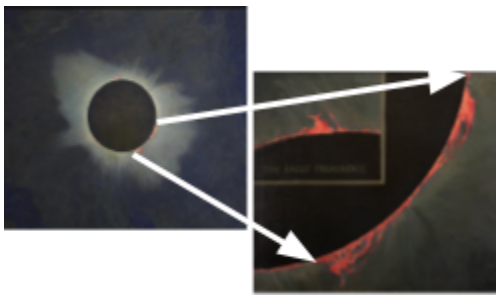
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Graphic 2: 1860 Hand drawing of total solar eclipse with a solar storm in the Sun's corona

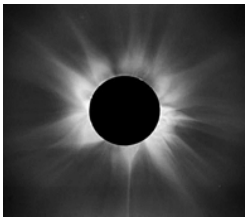


CUT HERE = cut horizontally along this line of text to make visual thumbnails for the Graphics

Graphic 3: 1918 Painting of total solar eclipse during a time of solar maximum

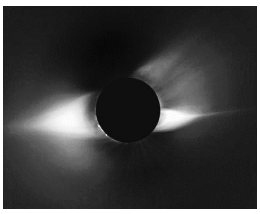


Graphic 4a: **1980** Ground-based photograph of total solar eclipse during a time of solar maximum



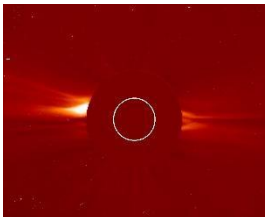
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Graphic 4b: **1994** Ground-based photograph of total solar eclipse during a time of solar minimum



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Graphic 5a: **1996** NASA spacecraft image using an occulting disk to mask the Sun and reveal its outer corona during a time of solar minimum



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Graphic 5b: **2000** NASA spacecraft image using an occulting disk to mask the Sun and reveal its outer corona with two solar storms during a time of solar maximum

