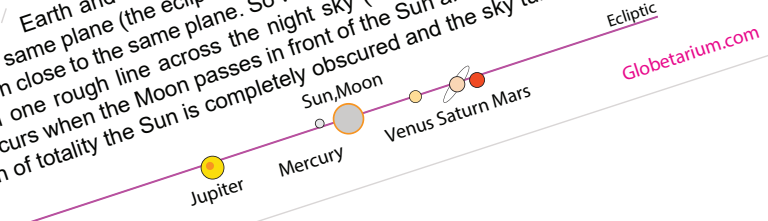


The solar eclipse will completely block the Sun for over four minutes on the Totality path. Each month the Moon passes between the Sun and Earth (New Moon), and each month it crosses the ecliptic plane twice. When it crosses between the Earth and Sun so it eclipses the Sun.

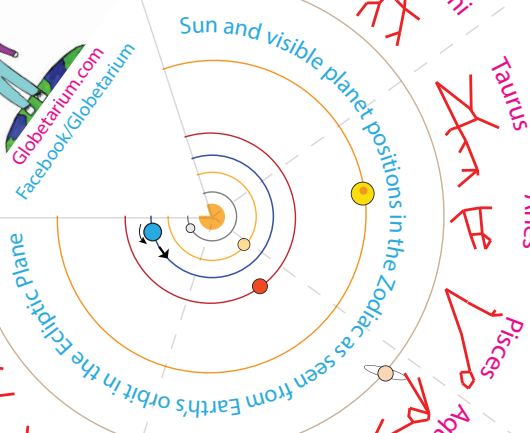
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Why are the Sun, Moon, and Planets in a line?

Earth and the visible planets orbit the Sun in nearly the same plane (the ecliptic plane), and the Moon orbits the Earth in close to the same plane. So we see the Sun, Moon, and planets in one rough line across the night sky (the ecliptic). A solar eclipse occurs when the Moon passes in front of the Sun along the ecliptic. In the path of totality the Sun is completely obscured and the sky turns dark.

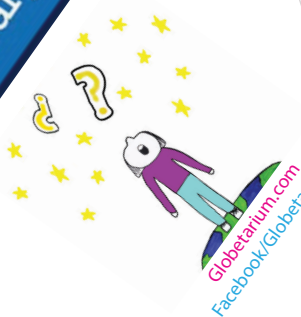
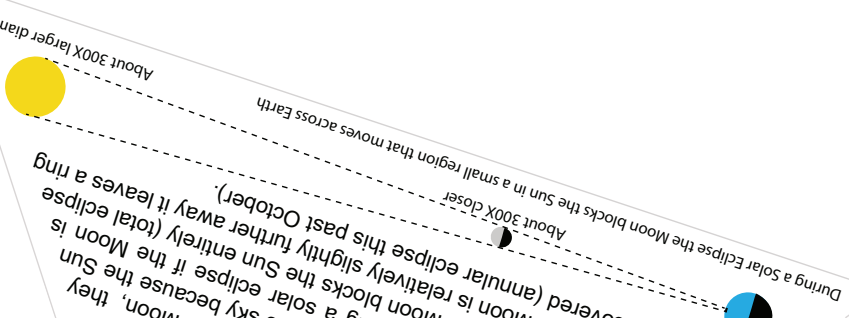


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Why do the Sun and Moon look the same size?

Although the Sun is much larger than the Moon, they appear to be about the same size in the sky because the Sun is also much more distant. During a solar eclipse if the Moon is relatively closer the Moon blocks the Sun entirely (total eclipse of the Sun uncovered (annular eclipse this past October)).



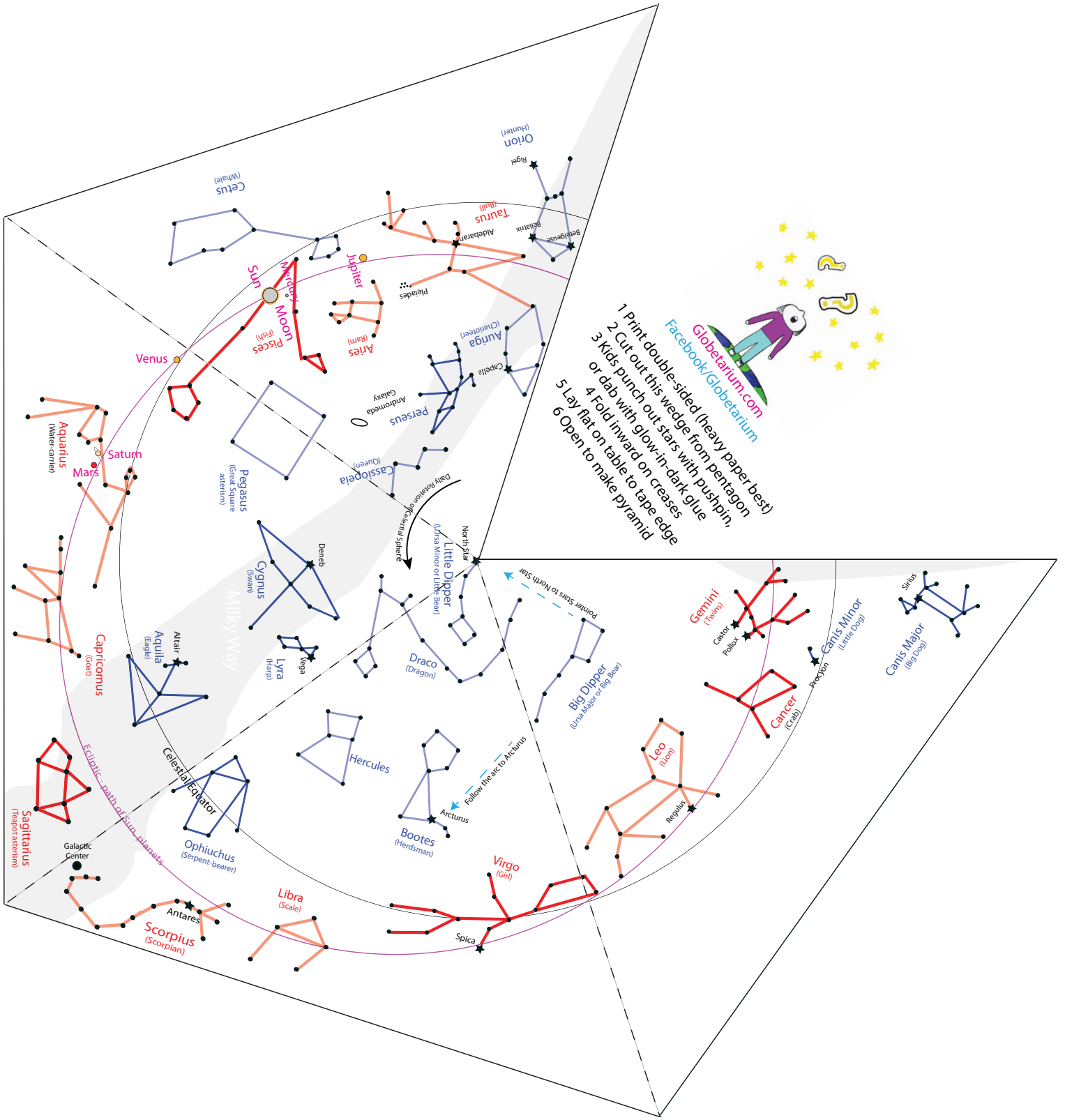
Sky During Total Eclipse April 8, 2024 starting 3:08 pm

After the partial eclipse starts around 2 pm from the right side of the Sun, the Moon will totally obscure the Sun in Warren starting at about 3:08 pm for over 2 minutes. During the total eclipse Venus and Jupiter, and maybe Mercury, Mars, and Saturn, will appear along the ecliptic.

Looking West

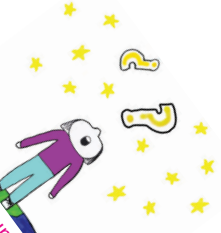
Looking South

Looking East



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- 1 Print double-sided (heavy paper best)
- 2 Cut out this wedge from pentagon
- 3 Kids punch out stars with pushpin, or dab with glow-in-dark glue
- 4 Fold inward on creases
- 5 Lay flat on table to tape edge
- 6 Open to make pyramid



Cetus (Whale)

Orion (Hunter)

Taurus (Bull)

Sun

Moon

Pisces (Fish)

Jupiter (Jamb)

Artes (Jamb)

Auriga (Charioteer)

Perseus (Hero)

Venus

Saturn

Mars

Aquarius (Water-carrier)

Pegasus (Great Square asterism)

Cygnus (Swan)

Lyra (Harp)

Capricornus (Goat)

Aquila (Eagle)

Altair

Celestial Equator

Ophiuchus (Serpent-bearer)

Galactic Center

Sagittarius (Teapon asterism)

Antares

Scorpius (Scorpion)

Libra (Scale)

Cassiopeia (Queen)

Andromeda (Galaxy)

Draco (Dragon)

Hercules

Bootes (Herdsman)

Virgo (Giri)

Spica

Leo (Lion)

Regulus

Cancer (Crab)

Gemini (Twins)

Castor

Pollux

Canis Minor (Little Dog)

Canis Major (Big Dog)

Silvis

North Star (Polaris)

Little Dipper (Polaris asterism)

Big Dipper (Ursa Major or Big Bear)

Follow the arc to Arcturus

Pointers Stars to North Star

Daily Rotation on Celestial Sphere

Milky Way

Ecliptic path of Sun, planets