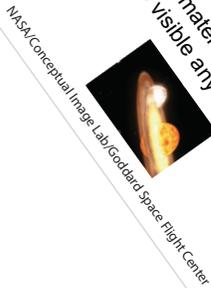
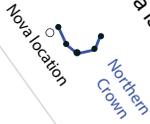


# SCIENCE FEST

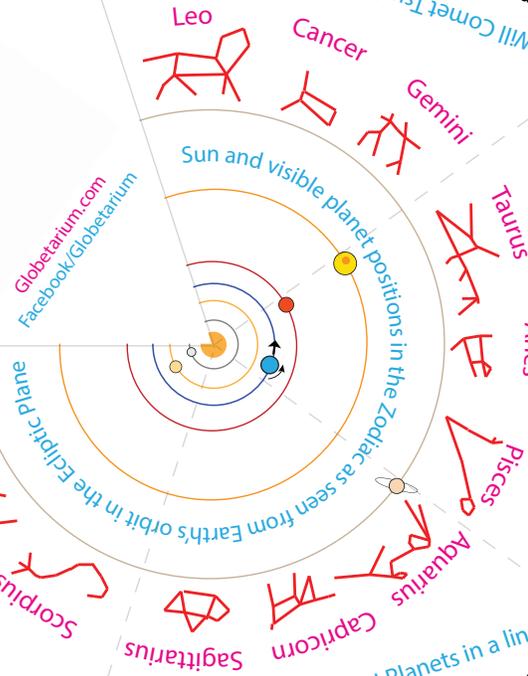
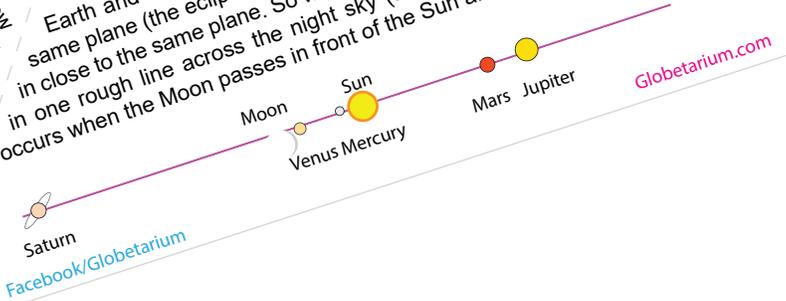
**"New Star" likely in next few months**

About every 80 years a bright "nova" or seemingly new star appears in the Northern Crown (Corona Borealis) constellation. A white dwarf star suddenly explodes when its mass reaches a critical level after steadily absorbing enough material from its companion red giant star. The nova is expected to be visible any day.



## 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.



## Evening Sky October 5, 2024

Venus should be visible right after sunset in the West next to the waxing Crescent Moon, while Mercury will likely be lost in the Sun's glare. Saturn will be rising in the East. The bright star Antares of the constellation Scorpius will be visible in the West, and the teapot asterism of Sagittarius will be visible in the Southwestern sky.

Looking East

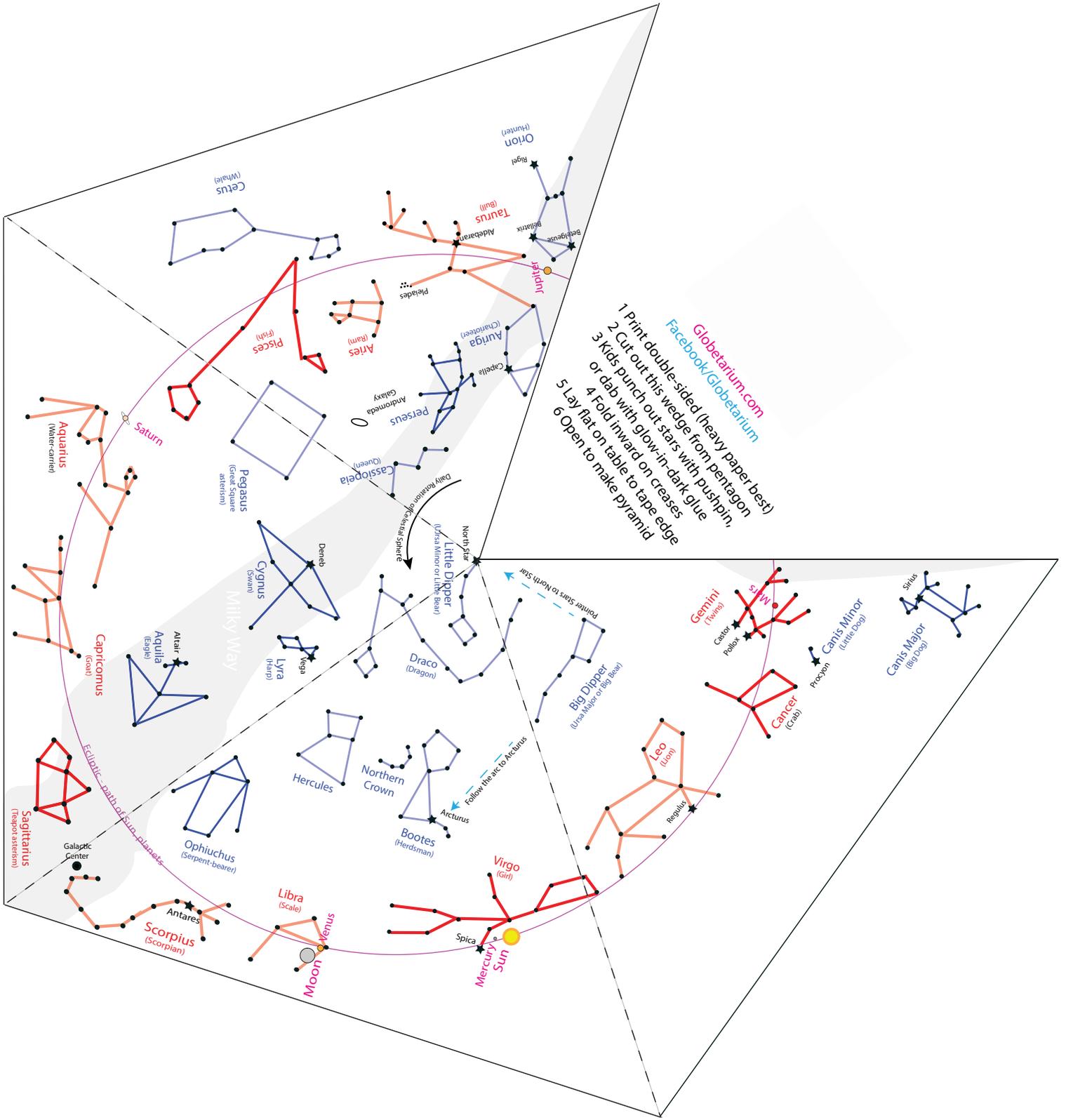
Looking South

Looking West

Will Comet Tsuchinshan outshine Venus?

Originating in the Oort Cloud around the Solar System, the Sun and will be closest to Earth on October 12th, though probably still difficult to see right after sunset in the Western sky. As it rises in the Western sky, it might appear even brighter than Venus.





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[Globetarium.com](https://www.globetarium.com)

- 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

Orion (Hunter)  
 Rigel  
 Betelgeuse  
 Saiph  
 Taurus (Bull)  
 Aldebaran  
 Pleiades  
 Jupiter  
 Auriga (Charioteer)  
 Capella  
 Perseus  
 Cassiopeia (Queen)  
 Andromeda Galaxy  
 Cetus (Whale)  
 Pisces (Fish)  
 Aquarius (Water-carrier)  
 Saturn  
 Pegasus (Great Square asterism)  
 Cygnus (Swan)  
 Deneb  
 Vega  
 Lyra (Harp)  
 Milky Way  
 Capricornus (Goat)  
 Altair  
 Aquila (Eagle)  
 Ophiuchus (Serpent-bearer)  
 Sagittarius (Teapon asterism)  
 Galactic Center  
 Antares  
 Scorpius (Scorpion)  
 Moon  
 Venus  
 Libra (Scale)  
 Hercules  
 Northern Crown  
 Arcturus  
 Bootes (Herdsman)  
 North Star  
 Little Dipper (Ursa Minor or Little Bear)  
 Draco (Dragon)  
 Follow the arc to Arcturus  
 Pointer Stars to North Star  
 Big Dipper (Ursa Major or Big Bear)  
 Leo (Lion)  
 Regulus  
 Virgo (Girl)  
 Spica  
 Mercury  
 Sun  
 Gemini (Twins)  
 Castor  
 Pollux  
 Cancer (Crab)  
 Procyon  
 Canis Minor (Little Dog)  
 Canis Major (Big Dog)  
 Sirius