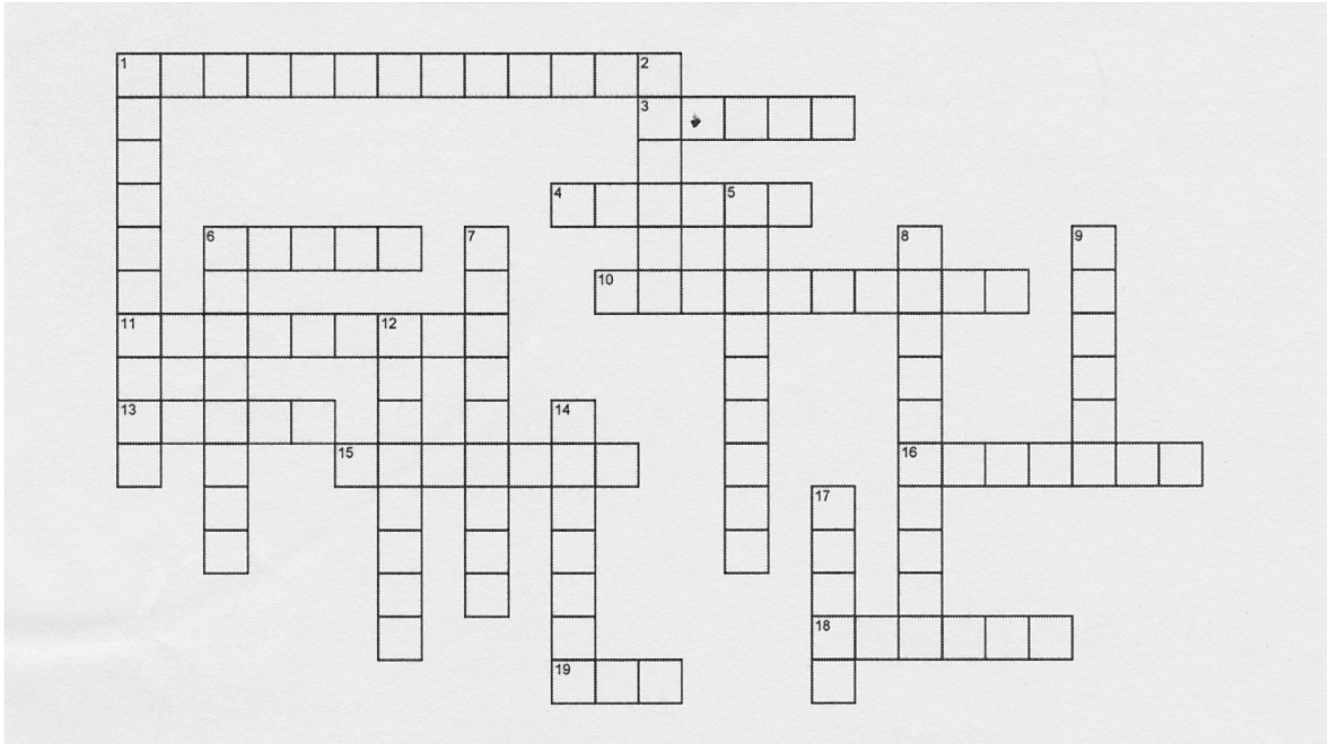




# UCI Observatory

## Night Sky Crossword Puzzle

Designed for use with February night sky map. Solution can be found at [http://www.physics.uci.edu/~observat/ns\\_crossword\\_soln.pdf](http://www.physics.uci.edu/~observat/ns_crossword_soln.pdf).



### ACROSS

1. A random grouping of stars on the sky that appears to form a specific shape
3. The number of planets in our Solar System
4. In the winter sky in Northern Hemisphere, the plane of the Milky Way crosses the plane of our solar system at a point that lies between the Gemini and \_\_\_\_\_ constellations
6. \_\_\_\_\_ is the brightest star in the Orion Constellation and a blue supergiant star 18 times more massive, 74 times larger in radius, and 130,000 times more luminous than the Sun
10. This constellation is known as "The Queen" and lies between the constellations Perseus and Cepheus
11. The nearest spiral galaxy, Messier 31, lies in this constellation
13. The \_\_\_\_\_ nebula is one of the nearest clouds of gas and dust in which new stars are forming
15. Stars move across the night sky at a rate of \_\_\_\_\_ degrees per hour (Hint: Consider the fact that the Earth rotates once on its axis, moving 360 degrees, every day.)
16. The stars in a star cluster are held together by this force of nature
18. A full moon is closest to the zenith at \_\_\_\_ P.M.
19. A full moon rises at \_\_\_\_ P.M.

### DOWN

1. Sirius, nicknamed the "Dog Star", lies in this constellation
2. A cloud of gas that shines because it is being ionized by the light of nearby stars
5. The North Star, Polaris, lies in this constellation
6. When the Sun begins to die in about 4 billion years, it will evolve to be this type of star
7. A \_\_\_\_\_ nebula is the remnant of a dying low-mass star that has cast off its outer layers and become a white dwarf star
8. \_\_\_\_\_ is the second brightest star in the Orion Constellation and a red supergiant star roughly 15 times more massive, 1000 times larger in radius, and 120,000 times more luminous than the Sun
9. This constellation is known as "The Twins" and contains the bright stars Castor and Pollux
12. The apparent path of the Sun on the celestial sphere during the course of a year
14. \_\_\_\_\_ is the brightest star in the Leo constellation and a main-sequence star 4 times more massive, 4 times larger in radius, and 300 times more luminous than the Sun
17. \_\_\_\_\_ percent of the celestial sphere is visible at any given time of the night