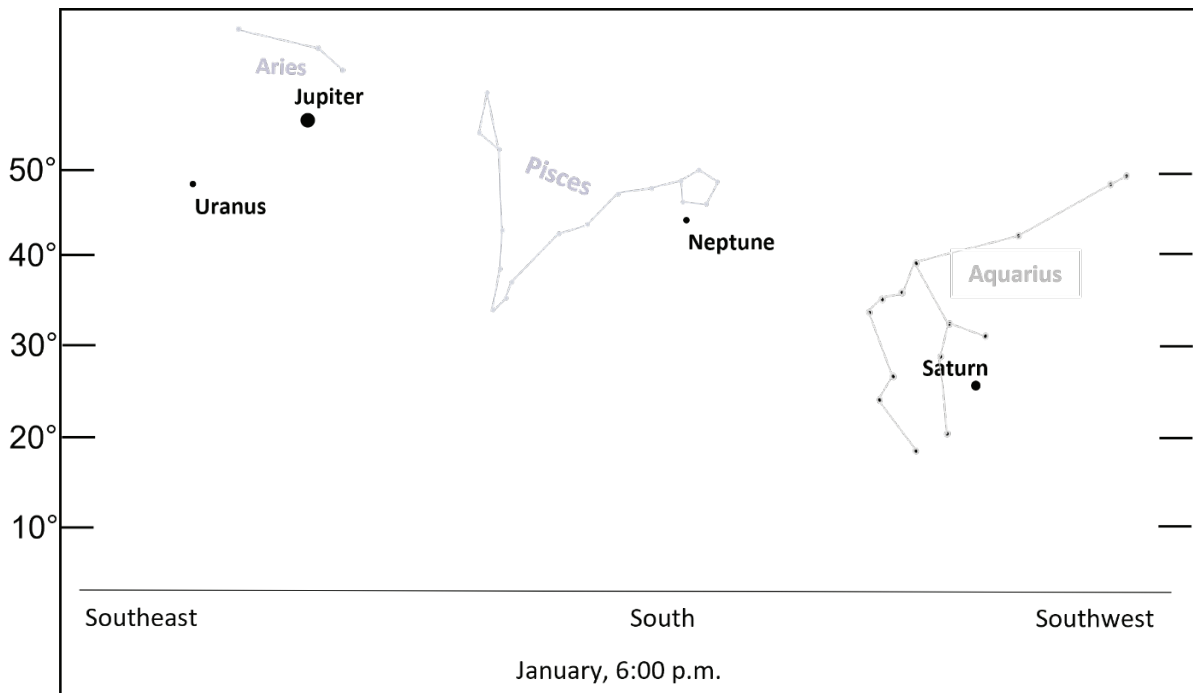


# WHAT'S UP?

Hello! Even though we are now past the Winter Solstice and the nights are getting shorter, there is still plenty of nighttime for looking at the sky. To start with, did you see any meteors from the Geminid meteor shower around the 13<sup>th</sup> and 14<sup>th</sup>? We were outside from about 11 p.m. until midnight on the 13<sup>th</sup> and counted 20 meteors. One was very bright and another streaked into the atmosphere, disappeared, and then brightened again along the same line. I'm not sure what happened. It either skipped out and reentered, or was actually two pieces that entered at slightly different moments, but on the same trajectory. That was very cool! Regular readers of this column might be starting to recognize our winter constellation friends. Taurus, Orion, Auriga, the Pleiades...they are all in the east by nightfall. I'll remind you of some of the great sights to be found there in the next *What's Up?* Maybe, you will have a new telescope to turn their way!



**Planet Roundup:** Keep watching our outer planets! Saturn is slowly heading down to the west, but is still easily seen. By 6:00 p.m., Saturn is about 25 degrees above the south-southwestern horizon and still at magnitude 0.9. Surrounded by dimmer objects, you can pick it out fairly easily. Jupiter, you can't miss – really. At magnitude -2.6, Jupiter is that incredibly bright “star” in the south, well over halfway up from the horizon. Neptune is right in between these two giant planets. If you have binoculars and the Moon is out of the sky, you

can pick out Uranus 20 degrees to the left and slightly below Jupiter. If you're up in the mornings, Venus rises at 5:00 a.m. and outshines everything in the sky at magnitude -4. Mercury and Mars are, both, still too close to the Sun to be seen right now. The 3Q Moon occurs on January 3<sup>rd</sup>, the next New Moon is on the 11<sup>th</sup>, 1Q on the 17<sup>th</sup>, and the next Full Moon is on January 25<sup>th</sup>.

To close-out 2023, instead of a crossword puzzle, I hope you will have fun with this word search puzzle. It contains astronomy terms from this past year's *What's Up?* articles. I wish you all a happy and healthy new year!

You can email me at [astroblog@comcast.net](mailto:astroblog@comcast.net) with any questions and comments. This is *What's Up?* installment #79.

*Barry*

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- BLACK HOLE
- CASTOR
- CLOUDY
- COMET
- DIFFUSE
- ELONGATION
- EQUINOX
- GALAXY
- GEMINIDS
- JUPITER
- MARS
- MERCURY
- MOON
- NEBULA
- NEPTUNE
- ORION
- PLEIADES
- SAGA-STAR
- SATURN
- SOLSTICE
- SPIRAL ARM
- SSAS ASTRONOMY CLUB
- SUN
- TRIFID
- UNIVERSE
- URANUS
- VENUS