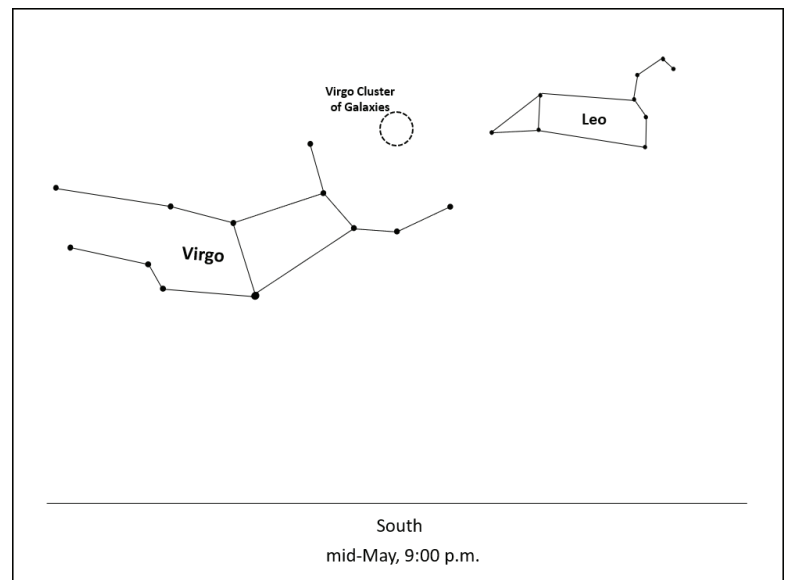
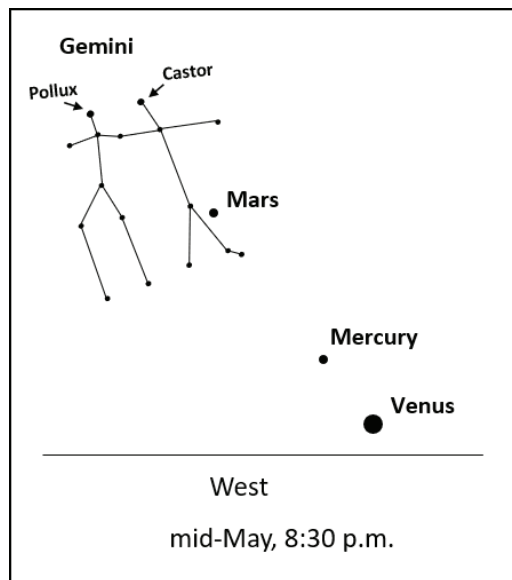


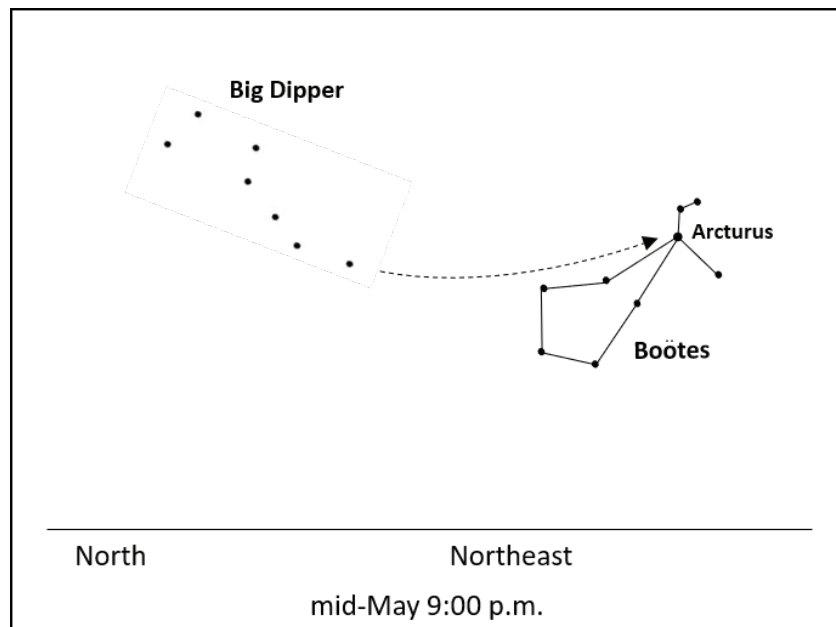
WHAT'S UP?

Hello and welcome back. In this installment, let's return to seeing what is interesting in our evening and morning skies right now. In the evenings, we have to wait until after 8:00 before we begin to see any stars and planets. By now, our winter friend Orion is sinking in the west. If you have a low western horizon, you *might* be able to see Venus briefly before it sets. It is dazzlingly bright (magnitude -3.9) but so low and so close to the Sun, that it is tough to see just yet. In another two or three weeks, our chances of seeing it will be better. After that, it will be with us in the evening sky until early in 2022. Just up and to the left (north and east) of Venus is Mercury. By 8:30 you should be able to pick out our smallest planet shining at magnitude -0.6 less than one fist's-width above the western horizon. That's pretty low, but doable. Further to the left and higher in the sky, Mars is still visible in the constellation Gemini. At magnitude 1.6, it is just a bit dimmer than the star Castor that marks the head of the western-most Gemini twin.

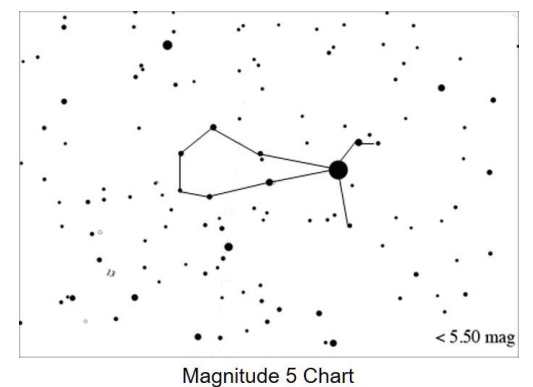
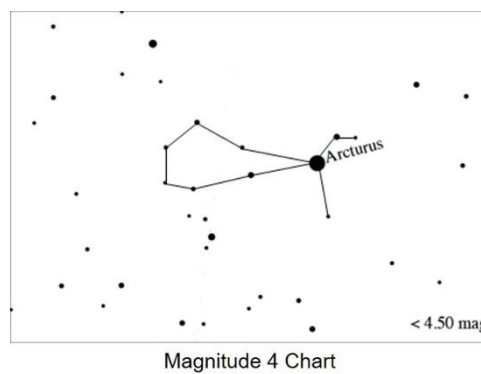
Once it is darker, a look due south will bring us to the zodiac constellations of Leo and Virgo. Between the stars that mark the outlines of the Lion and the Maiden, is the closest large cluster of galaxies to us. Known as the Virgo Cluster, it covers an area of our sky about 5 degrees by 3 degrees and comprises over 1,000 galaxies. A small telescope will reveal many of these to an observer. It is fascinating to see these tiny



smudges of light and realize that each smudge is the combined glow of hundreds of millions of stars. Look now high in the sky to the north-northeast and find the Big Dipper. The Big Dipper is hanging upside down in the sky. As we learned in the past, we can follow the stars in the Dipper's handle and "arc to Arcturus". Arcturus is a red giant star in the constellation *Boötes* (the Herdsman).

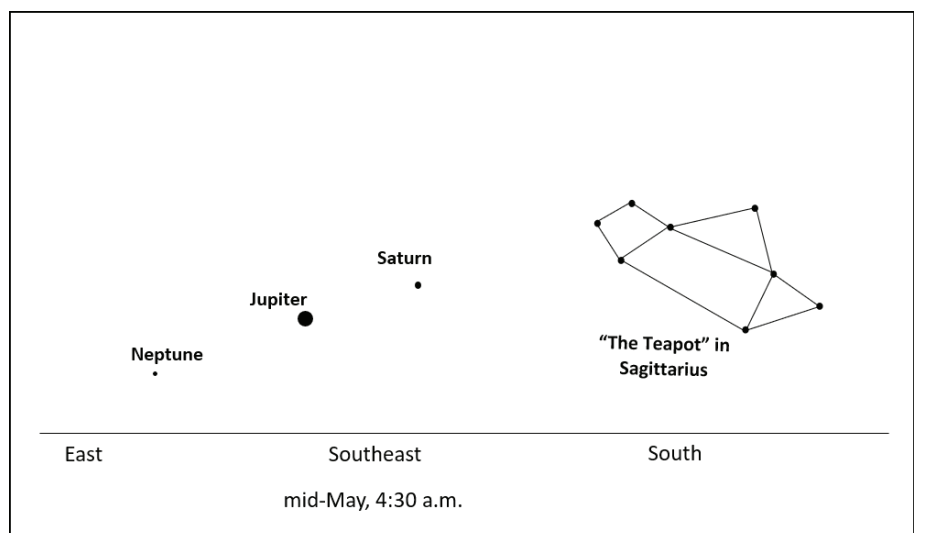


In the last *What's Up?* I told you about the *Globe at Night* program (<https://www.globenight.org>), an international citizen-science campaign to raise public awareness of the impact of light pollution. For the May 4-11 timeframe, the stars of the constellation Boötes are used for gauging the darkness of our night sky. Here are two of the charts to use.



In the mornings, it starts getting light out around 4:30. In the south is the zodiacal constellation Sagittarius with its familiar Teapot asterism. Looking towards the east, we can see a great line up. Neptune, Jupiter, and Saturn form a line running from east-southeast to south-southeast. About 15 degrees above the horizon, Neptune is the lowest of the three. Then comes Jupiter (about 22 degrees high) and Saturn (25 degrees high). On May 8th, they are joined by a waning crescent Moon just peaking above the horizon before sunrise. One week later, a waxing crescent Moon will be seen in the west after sunset.

Enjoy these sights as the warmer weather makes it easier to stay outside longer and wonder! As always, you can reach me at astroblog@comcast.net with any questions and comments you have. This is What's Up? Installment #44.



Barry