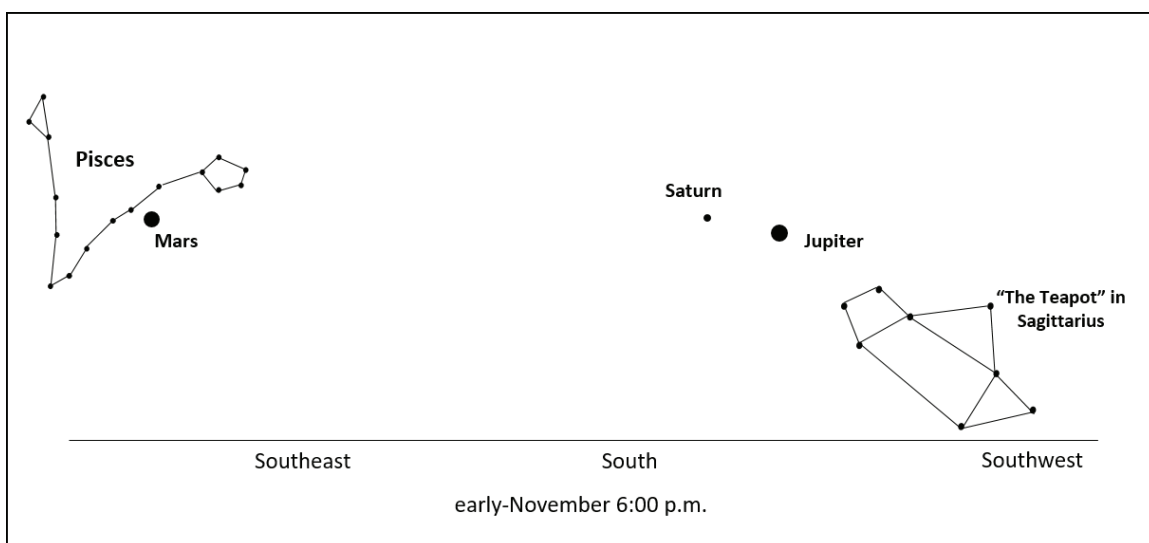


# WHAT'S UP?

Regular readers of *What's Up?* know that, while I do enjoy the warm Summer evenings, I look forward to the end of Daylight Savings Time because it means that it gets dark earlier and I can get out to the telescope sooner. It's an especially good thing this time around because Jupiter and Saturn are slowly dropping into the southwest as evening begins. When we go back onto Standard Time on Sunday (November 1<sup>st</sup>), it will be dark enough to view them well by 5:30 p.m. Yay. And, when we're finish with Jupiter and Saturn for the night, we can turn our gaze towards Mars. About half-way up in the southeastern sky by 8:00 p.m., Mars stands out as a brilliant red beacon. The Moon will give Mars some competition for the first few days of November, but by the 5<sup>th</sup> will be far enough away from Mars in the sky to allow the Red Planet center stage all by itself.

Let's take these one at a time and preview what can be seen. Starting with the Moon, it will be full on the morning of October 31<sup>st</sup>. The last Full Moon was on October 1<sup>st</sup>. When two Full Moons occur in the same month, we have dubbed the second, a *Blue Moon*. Is it really blue? Well, we won't know because the Moon will have already set by the time it is full (10 a.m.) Turning our attention to the planets, let's start with Jupiter. The largest planet in the Solar System, Jupiter is shining brightly at magnitude -2.16. That's almost twice as bright as the brightest star in our skies, Sirius, which rises around 10 p.m. If you



Jupiter

binoculars and a steady hand), you can watch the dance of Jupiter's four largest moons – Io, Europa, Ganymede, and Callisto – as they move in their orbits. Drawing a diagram of their positions next to the planet is a great way to see their motions. Each night that you observe, note the date, time, and positions. If you'd like a form for recording what you see, email me at [astroblog@comcast.net](mailto:astroblog@comcast.net) and I'll send you one. Two additional telescopic features are worth noting. One is that you will notice one, two, or more dark stripes around the planet. These are cloud bands, with typical wind speeds of over 200 miles per hour. The other feature is the Great Red Spot. This is a storm that has been observed for over 300 years! Over this time the color (varying from red to light orange) and the size (currently, it is about twice as big as the Earth, and shrinking).

As we move to eastward (to the left of Jupiter) we come to Saturn, the second-largest planet. It may be seven times dimmer than Jupiter, but don't overlook it! Saturn through a telescope is a sight that you will never forget. Saturn's majestic ring system circles the planet and is unique in the Solar System. The main ring grouping is over 250,000 miles across but is only about 30 FEET thick! Consisting of small chunks of ice, dust, and rock, the rings reflect sunlight back to us and leave an indelible memory for anyone that has viewed them. Lastly, make a fist and stretch out your arm in front of you. Use the width of your fist as a measuring tool and note how far apart Saturn and Jupiter are. One fist-width? One-half fist-width? Write down what you see. Next time, I'll ask you to do this again and compare your answers.



Saturn



Mars

If you can pull yourself away from viewing Saturn, look towards the southeast and find the Red Planet. Presently, it is about the same apparent brightness as Jupiter, but is distinctively red. There will be no doubt that you have found Mars. For more details on Mars, take a look at *What's Up?* #29 (from September 4<sup>th</sup>).

You can reach me at [astroblog@comcast.net](mailto:astroblog@comcast.net) with any questions and comments you have. This is *What's Up?* Installment #33.

Until next time, Keep looking up!

*Barry*