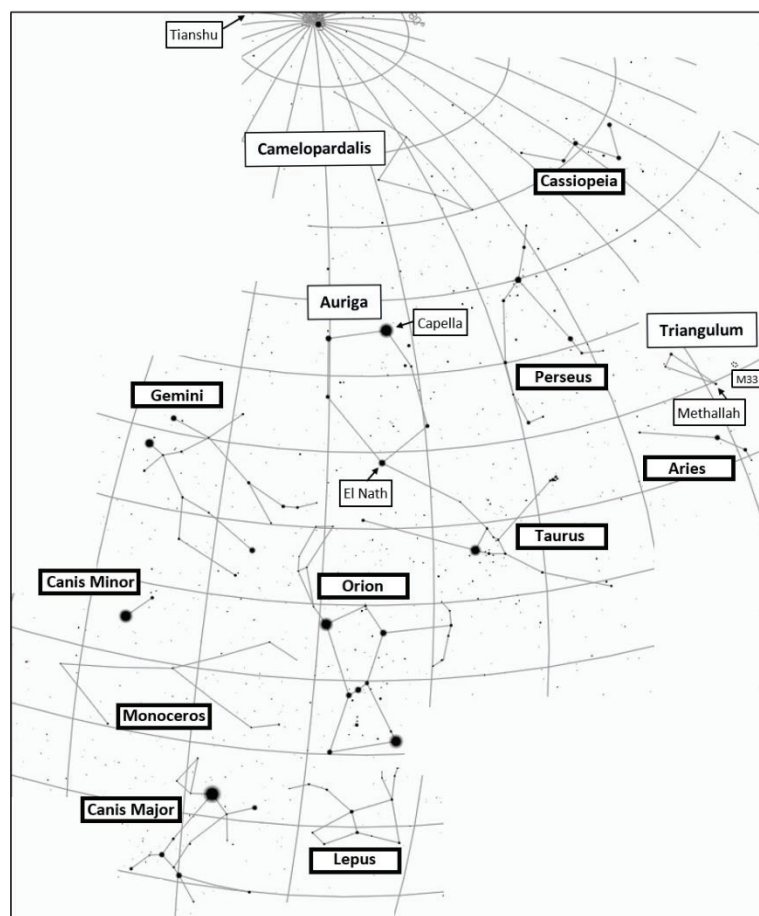


WHAT'S UP?

Hello again. Let's start off this installment with a review of the constellations that we've looked at in the last three articles. Here's a map that shows the outlines of those constellations. Can you fill in the boxes with their names? Two of the boxes are for the northernmost in this section of the sky that, though we haven't heard about them recently, we did talk about them when we looked at the circumpolar constellations. As I wrote this article, I realized that I never gave you the filled-in boxes from the previous section of the sky that I asked you to try back in March! I've included that map this time.

With August just around the corner, let's remember to get outside and watch the Perseid meteor shower. Weather-permitting (of course), this year's shower should be a good one since the Moon will be a waxing crescent that will set soon after dark and won't trouble us with its bright light. When is the peak? The best nights to go out looking for meteors will be the nights of August 10th/11th, August 11th/12th and August 12th/13th. The best time to look will be after midnight. But, go out *whenever you can* on those nights. It's just that midnight-to-dawn is when we'll see the most meteors. Why? Because then we'll be on the side



of the Earth that is facing in the direction that the Earth orbits around the sun. The effect is similar to driving in the rain and getting more raindrops on your windshield as compared to the rear window. Meteor showers are especially nice for all of us to view because you don't need any equipment to view a meteor shower. Set up a comfortable chair (one that reclines is best), sit outside in an open area, and look up. And even though it is summertime, you might also want to have a long-sleeve shirt and long pants handy in case it gets chilly and damp. Lastly – don't forget the bug spray! As to where to look, look generally from the northeastern horizon to straight up. Just slowly scan the sky. The point from which all of the Perseid meteors appear to start (the *radiant*) never sets for us at our latitude of 42° North and will be low in the Northeast as night falls and rises higher in the sky as the night progresses.

Lastly, our time of waiting is almost over. The gas giants Saturn and Jupiter are returning to our evening skies! Saturn is in opposition to the Sun the night of August 1st. At opposition, a planet is seen to rise above the eastern horizon just as the Sun sets and is up in our night sky until the following dawn. Jupiter is in opposition on August 19th. On the 1st, it rises in our sky about an hour after sunset. We'll be talking more about how to view these planets and what we can see in the coming months.

You can reach me at astroblog@comcast.net with any questions and comments you have. This is What's Up? installment #49. Keep looking up!

Barry