THE OLD GIBBOUS MOON RISES LATE THIS EVENING; YOU WON'T BE ABLE TO FIND IT UNTIL AN HOUR OR SO BEFORE MIDNIGHT. WHEN IT DOES APPEAR IN THE EAST, YOU SHOULD ALSO BE ABLE TO SEE A FEW BRIGHT STARS NOT TOO FAR AWAY. THE CLOSEST BRIGHT STAR TO THE MOON TONIGHT IS SPICA, IN THE CONSTELLATION VIRGO THE MAIDEN. SPICA IS SUPPOSED TO REPRESENT A SPIKE OR EAR OF WHEAT THAT VIRGO HOLDS OUT IN HER HAND, AND IT'S JUST ABOVE AND SLIGHTLY TO THE LEFT OF THE MOON. NOW DRAW A LINE FROM THE MOON TO SPICA, AND EXTEND THAT LINE UPWARDS, AND IT WILL LEAD YOU TO A YELLOW-TINGED STAR WHICH IS ACTUALLY NOT A STAR AT ALL, BUT THE PLANET SATURN. ONCE YOU GET TO SATURN, LOOK OFF TO THE LEFT OR THE NORTH, AND YOU SHOULD BE ABLE TO FIND ANOTHER STAR, ARCTURUS, WHICH IS IN THE CONSTELLATION OF BOOTES, THE SHEPHERD. WHILE THESE CELESTIAL OBJECTS APPEAR NEAR EACH OTHER TONIGHT, THE MOON IS ONLY A COUPLE OF HUNDRED THOUSAND MILES OUT, SATURN IS CLOSE TO A BILLION MILES AWAY, AND THE STARS ARE MANY TRILLIONS OF MILES OUT IN SPACE.

NICOLAUS COPERNICUS

The astronomer Nicolaus Copernicus was born in Poland on February 19th in the year 1473. He had a keen interest in the Universe, and he advocated the heliocentric theory, which placed the sun in the center of the solar system, with the earth and other planets revolving about it. Copernicus received praise and encouragement from the Bishop of Kulm and the Archbishop of Capua and some scholars, but his ideas were also ridiculed by others including Martin Luther, who said, “This fool wants to turn the whole art of astronomy upside down!” Until the middle of the 17th century, the teachings of ancient Greek philosophers like Aristotle were considered the final word on matters scientific, and Copernicus had not made enough accurate observations of star and planet positions to provide for any greater accuracy in predicting how the planets moved; but the heliocentric model eventually simplified and explained the motions of the planets better than the old geocentric, or earth-centered model.

AURIGA THE CHARIOTEER

High in the northern sky this evening there is a somewhat obscure constellation called Auriga, the Charioteer, in legend and myth, an early king of Athens, the son of the blacksmith god Hephaestus or Vulcan, and the inventor of the chariot. Another story portrays him as Phaeton, whose father was the sun god Helios, and who drove the solar chariot on a reckless path across the sky. Now if you're good at imagining constellation shapes, you'll immediately see Auriga in all his glory - a man, driving a chariot, while holding on to a whip in one hand, and a bunch of small goats in the other. But if you have that kind of imagination, then I probably didn't have to tell you all that. For the rest of us, Auriga looks like a pentagon shape - a five-sided figure of stars, marked by a bright yellow star - Capella, the head of the charioteer. Look for the goat kids also, a few tiny bright stars just to the south of Capella.

THE BIG DIPPER AND THE NORTH STAR

Tonight, the Big Dipper is in the sky, just off the northeastern horizon after sunset. In order to see it, find a dark spot outside where you have a clear view toward the northeast. Where is the northeast? Turn your back to the southwest, the place where the sun set down. That's where you'll find the Big Dipper, seven stars arranged in the shape of a giant saucepan, and standing on its handle, low near the horizon. If you draw a line between the top two stars of the Big Dipper's bowl, you can extend that line to the left, and it will lead you to the North Star, not a particularly bright star, but it's not known for being bright, just for being in the north. The North Star, more formally known as Polaris, is also the end of the handle of the Little Dipper. Now continue to extend the line until you've gone about the same distance - and there's the constellation Cassiopeia - connect her stars together, and it will look like a letter W in the sky.

HOLST'S “THE PLANETS”

On February 27th, in the year 1919, Gustav Holst's suite, "The Planets," was first publicly performed: it featured theme music for seven planets of the solar system (Pluto wasn’t included as it wouldn’t be discovered for another 11 years.) And Holst was certainly no astronomer – his knowledge of the subject was limited. Holst did dabble in mythology, and in writing the music for “The Planets,” he anthropomorphized them. That is, he gave these worlds human characteristics. So the music for Mercury, which takes only 88 days to go around the sun, is a fast-paced, allegro tempo, as would befit the Olympian messenger of the gods. On the other hand the music for Saturn, which revolves about the sun only once every 29 years, is adagio, or slow and stately. Mars is militant and loud, while Venus is beautiful, and Jupiter, the king of planets, is majestic!