

How to Learn Your Way Around the Moon

Many times I am asked "how do you know where so many features are located?", or "how do you learn where all the features are located?". Actually if the techniques are known, it is a relatively simple process.

The moon has thousands of craters, numerous mountain chains, and other objects such as rilles, clefts, and valleys. First of all, we are not going to try and memorize where all these features are located. Let's trim the list down to the 100 largest or so features that can be seen with a pair of binoculars or a small telescope. To learn where these objects are located, can be done in the course of several months.

As the moon orbits the Earth, each day it presents itself to us with a different phase angle. When you first see the moon in the western sky after sunset, it is a thin crescent. The line that separates the sunlit portion of the moon, from the "night side", is called the terminator. Along this terminator the features of the moon stand out well, since they are illuminated with a low sun angle. Therefore the contrast is very high, making shadows stand out on the surface. This same effect is seen on Earth when the sun first rises or sets. By taking advantage of the terminator as a reference point, and seeing the features under high contrast, it is easy to identify the objects along the line between night and day on the moon.

A note on the charts which I must explain. I acquired these charts several years ago off the Internet. I would like to give credit to whoever did them, but can find no reference to these charts anywhere. Doing a search on the Internet, does not bring up any reference or websites showing these charts. Therefore, I am using these as an educational tool and request that it not otherwise distributed. If at a later date I discover the source, credit will be given. You can print the charts using the print option in your PDF reader. The following charts are shown in their entirety, with no alteration.

You can start your lunar exploring anytime, you only need to know the "lunar day". One of my favorite websites for determining the lunar day is located at: <http://www.moon-phases.com/current-phase/current-phase-of-the-moon.html>
If the current "lunar day" or "age" is around 9 days, then you will need to use the chart for day 9. Use the chart as you would a map. Because the moon phase angle is not exact (the moon wobbles in its orbit), you may have to use a chart the day before or after the actual lunar day. If you use binoculars, the image will be correct. If you use a small telescope, it may invert the image. In this case, just rotate the chart upside down and it will appear as it does in your eyepiece.

Have fun exploring the moon!

DAY 2 MOON



Endymion —

Maria Crisium —
Promontorium Agarum —

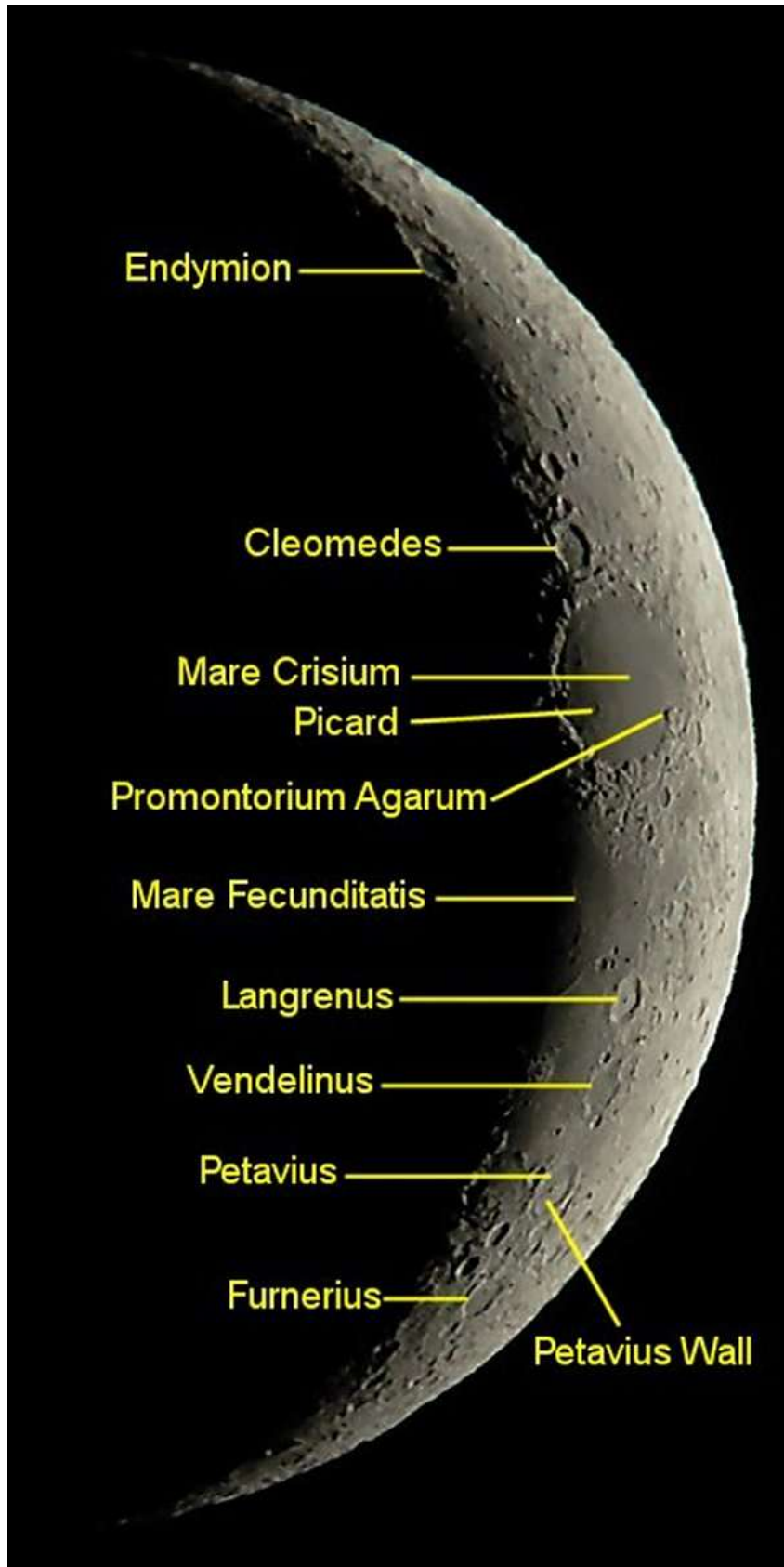
Langrenus —

Vendelinus —

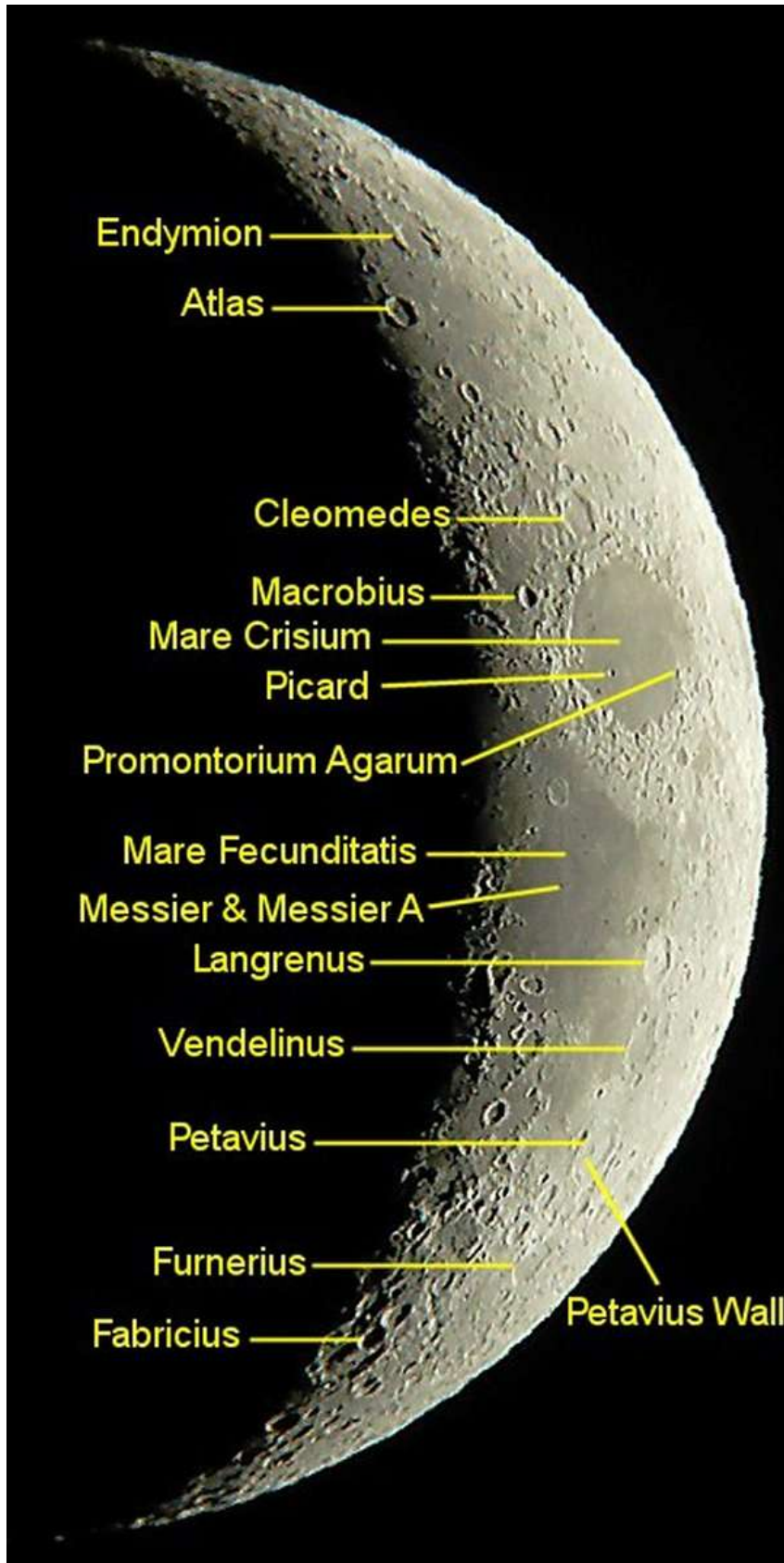
Petavius —

Furnerius —

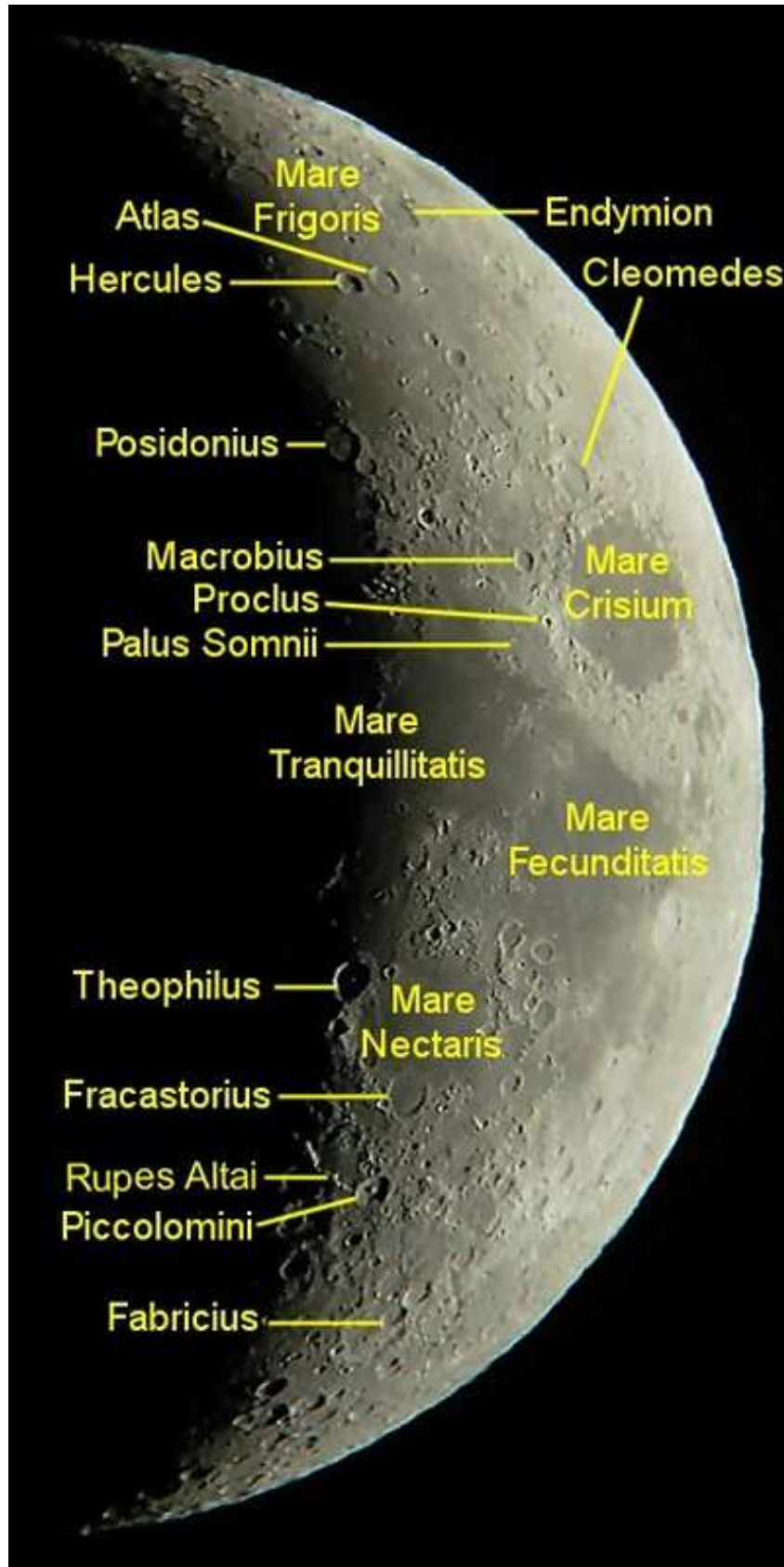
DAY 3 MOON



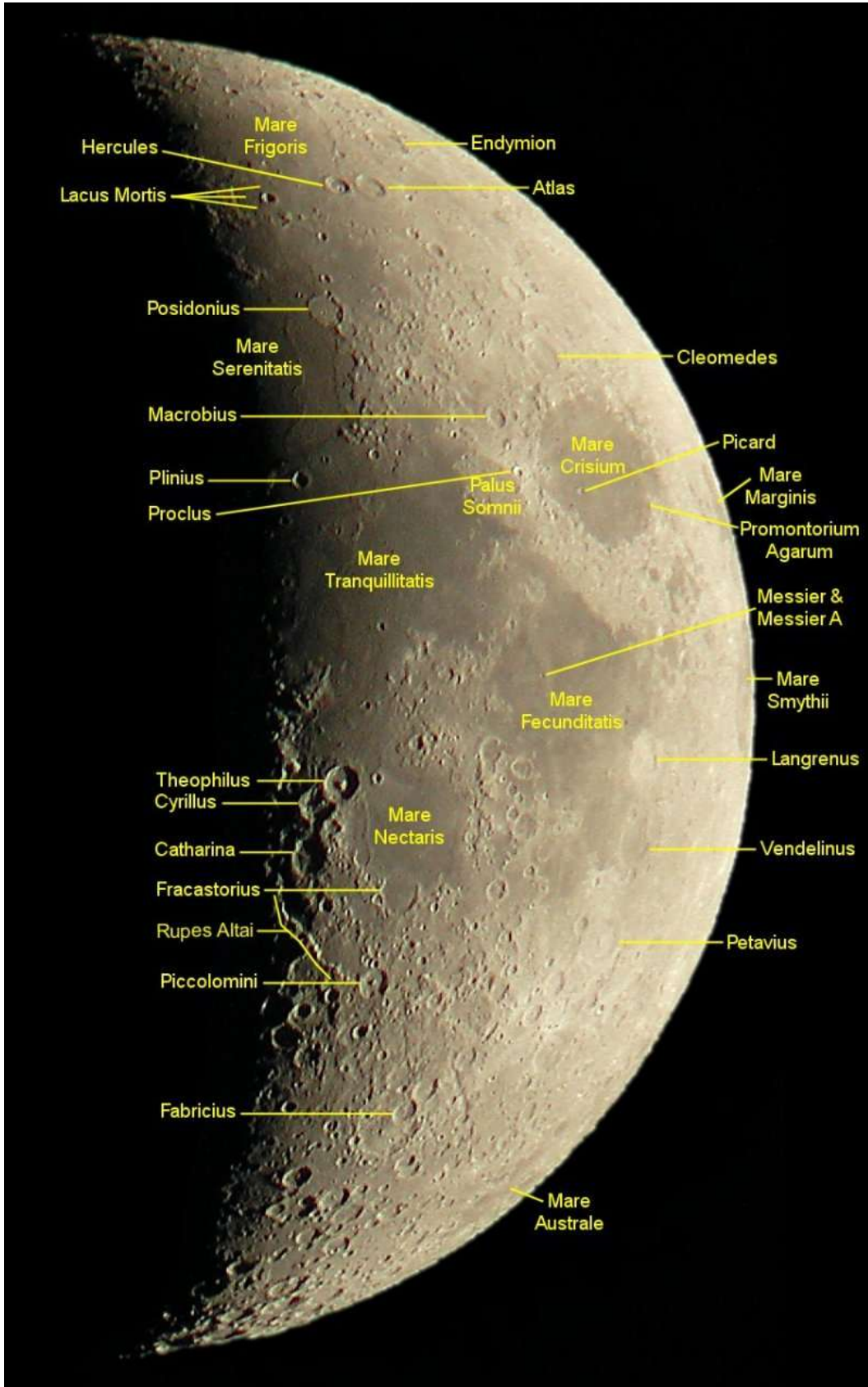
DAY 4 MOON



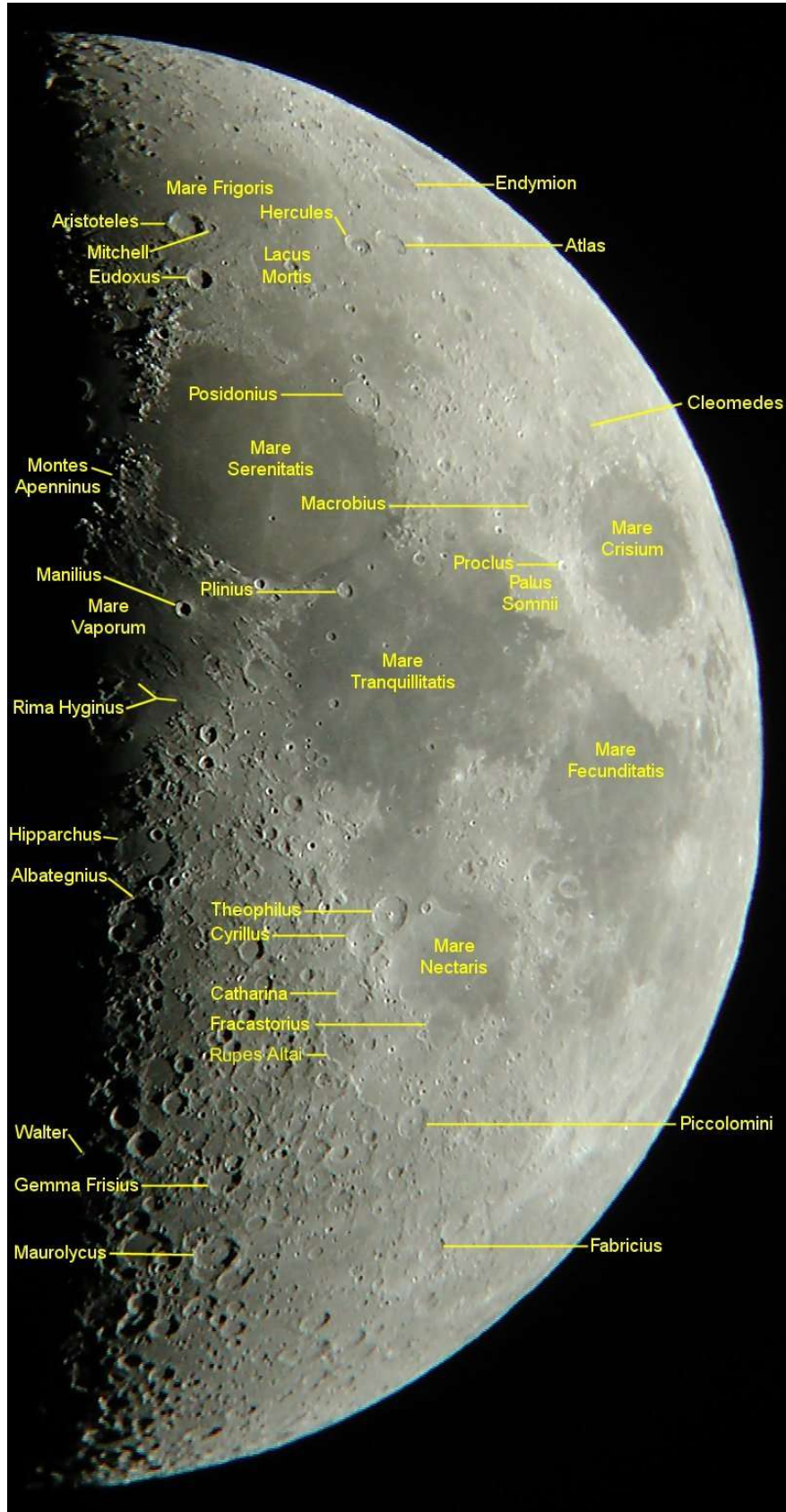
DAY 5 MOON



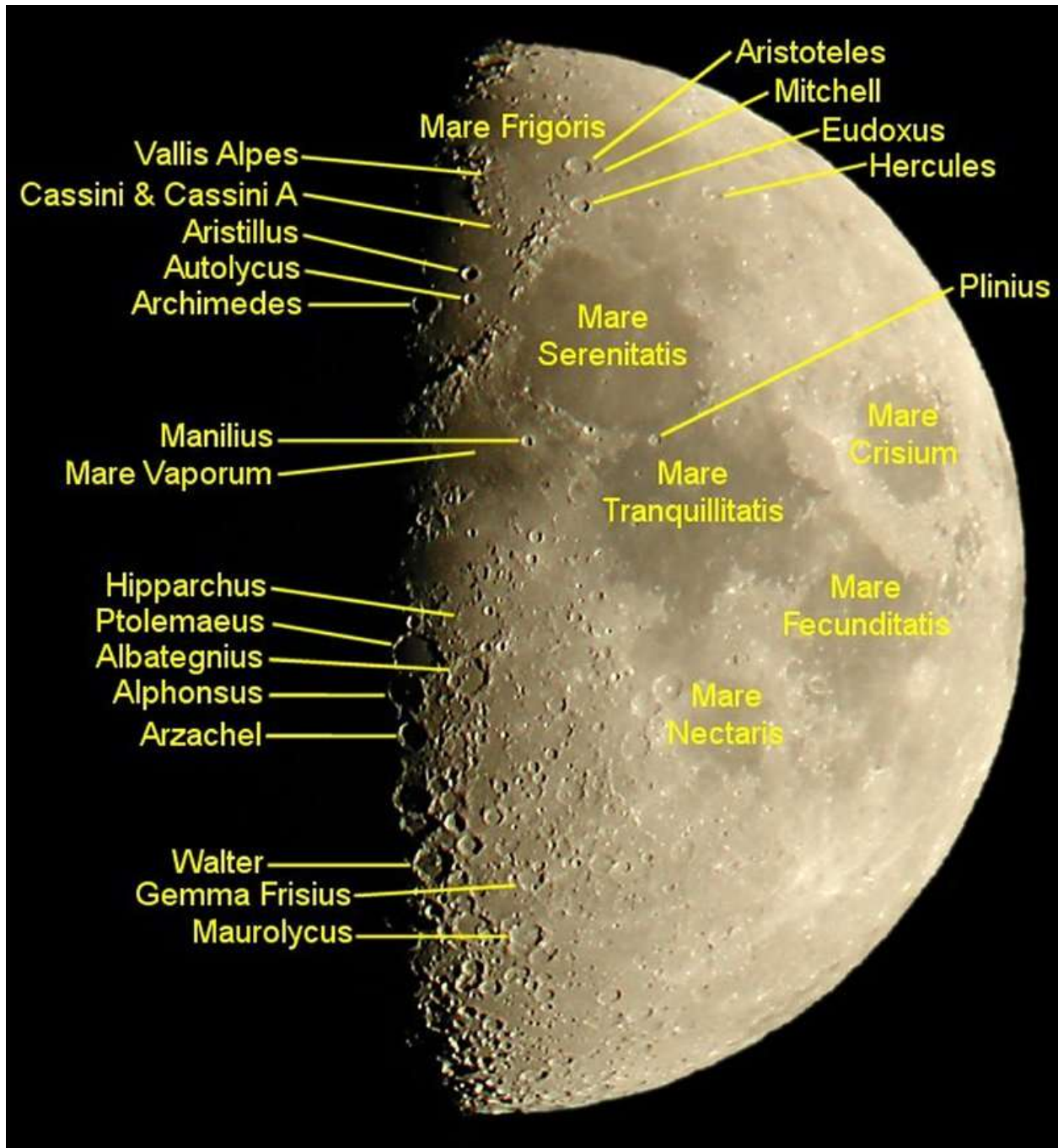
DAY 6 MOON



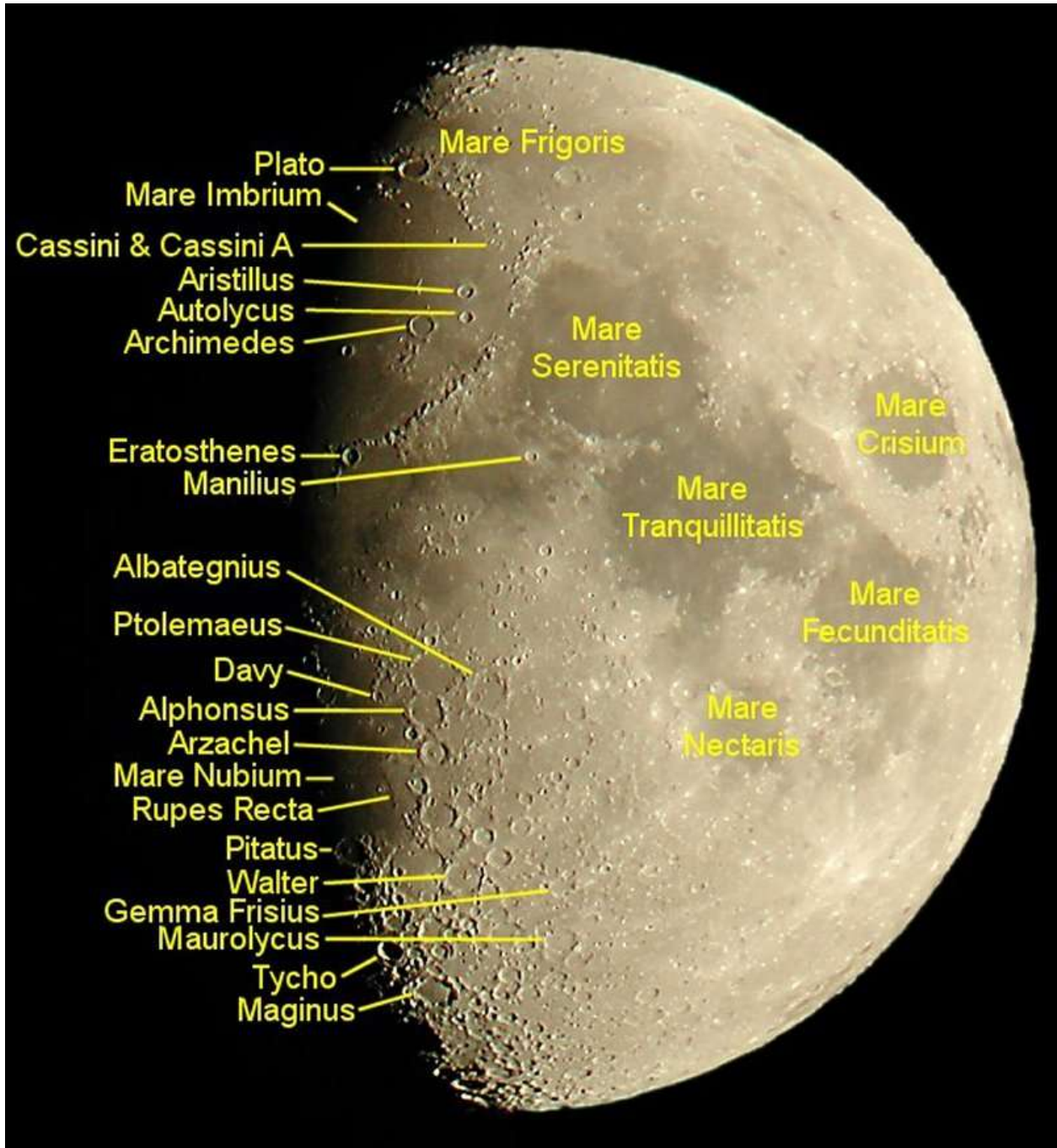
DAY 7 MOON



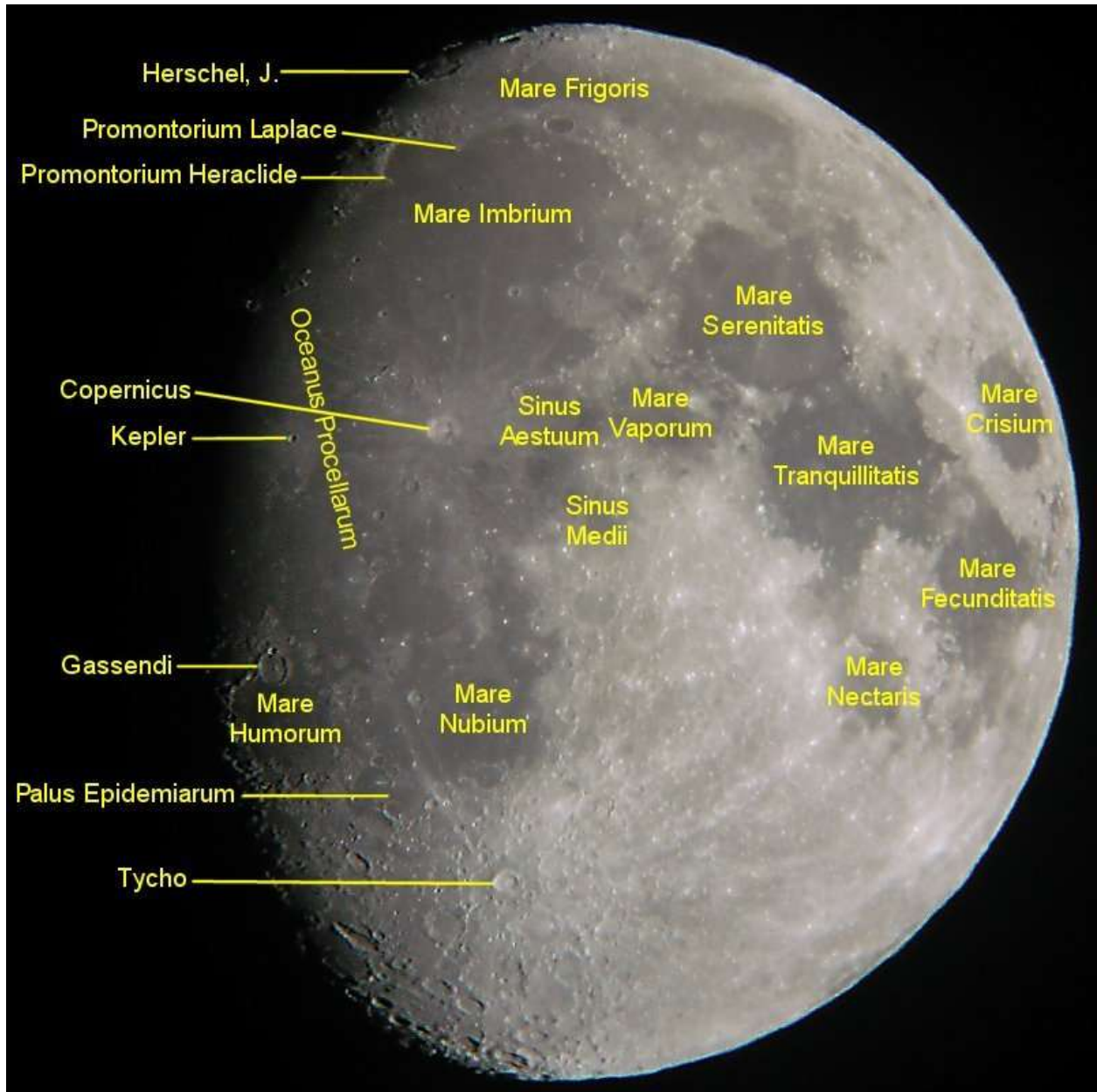
DAY 8 MOON



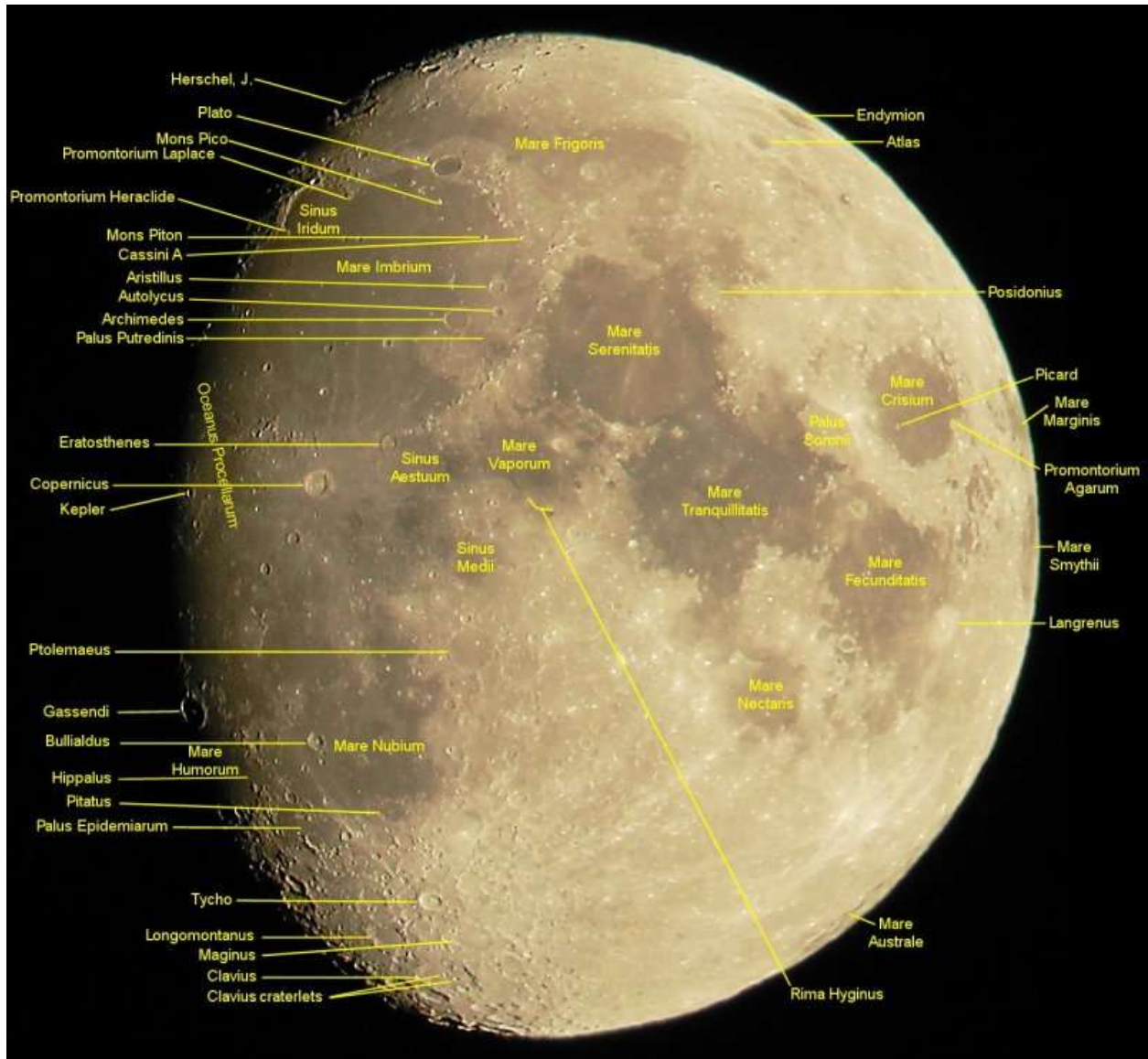
DAY 09 MOON



DAY 10 MOON



DAY 11 MOON



DAY 13 MOON

