

Fundamentals of Stargazing – Month 9 Worksheet

Project #1: Find the first 15 objects on the Lunar 100 list. These are easy objects (especially the first three), and this exercise will help you get interested in exploring the rest of this list of intriguing lunar objects.

Project #2: Find the Clear-Sky Chart for your location, or for the nearest location to you, at: <http://www.cleardarksky.com/csk/> (North America only). Learn how to read these charts using the notes in the Observing section for Month 9.

Project #3: Review the Caldwell List, a list of 109 deep-sky objects that are exclusive of the Messier objects. Add a few to your list to see over the next few months. For example, all the objects on page 12 of the Observing notes this month are visible in the sky this month. The list includes objects from the far north to the far south of the celestial sphere.

https://en.wikipedia.org/wiki/Caldwell_catalogue#Caldwell_objects

Project #4: List five differences between open star clusters and globular star clusters. Where are you most likely to find a globular cluster in the sky? An open cluster?

Project #5: Review the difference between a Population I and a Population II star (see the Science section, p. 5)

Project #6: Compare the appearance of the open star clusters M103 and NGC 7789 in Cassiopeia. By their appearance, which do you think is older? Why?

Project #7: See as many deep-sky sights on this month's tour as possible. Some of the most appealing objects on this month's tour are:

- The Andromeda Galaxy, M31
- The Triangulum Galaxy, M33
- Gamma Andromedae
- NGC 891 (galaxy)
- NGC 752 (open star cluster)
- The Small Magellanic Cloud (southern hemisphere only)
- 47 Tucanae (southern hemisphere only)