

Barnard Astronomical Society of Chattanooga: Welcome to the neighborhood!

Welcome to the BAS and amateur astronomy in Chattanooga! Many folks can become a bit put off by the complexity of the night sky, but like many things in life, you don't need to worry about understanding everything right away. You work on it a little at a time, learning small bits and then adding to them at your own pace. This little project will help you become acquainted with the 2023 late winter sky which will be a wonderful jumping off point later in the season.

This project consist of 18 objects that you can view a variety of ways. Many are naked-eye, all look good in binoculars, and some are at their best in a telescope. You probably already have the eyeballs, and maybe the binoculars, but the telescope may not be there yet. That is perfectly fine – just come to BAS star parties and look through our scopes! Even look at EAA monitors that some members set up.

One thing to be sure and do if you are looking through a scope or EAA setup: have the person running the scope point out the object in the sky. They will be happy to do that, and that is part of your beginning to learn your way around. Plus, we love showing off our green laser pointers!

With your list and a pencil in-hand, head outside after sunset and see what you can document. Here is what you need to earn your Welcome to the Neighborhood pin:

- Your **latitude** and **longitude**. Your phone probably has a Compass app that will give you this information.
- **Date** and **Time** of observation. Probably on your phone's home screen.
- **Seeing**. This is a measure of how steady the air is. The Astrospheric app can give you this information, or you can just look at the stars:
 - Are they twinkling like crazy? That is "Poor Seeing."
 - Are they twinkling near the horizon (often with lots of pretty colors) but not twinkling much overhead? That is "Average Seeing."
 - Are the stars all shining with a nice, steady light with no evidence of twinkling? That is a miracle! OK, call that "Excellent Seeing." This is not very common.
- **Transparency**. Once again, lots of ways to measure this. Keep it easy:
 - Perfectly crystal clear sky? Good transparency.
 - Light smoke or haze forming, but most stars still visible (if a bit dim)? Moderate Transparency. You can still observe things through this.
 - Lots of high clouds and haze, with light rings around the Moon? Poor transparency.
- What did you use to observe the object? Naked eye, binoculars, telescope, EAA.
- **Size** and **magnification** of binoculars or telescope. If you are not sure, just ask!
- A sentence or two description of what *you* saw. Size, color, etc.
- Observe any 10 of the objects on the list. Feel free to observe more!
- Observations must be completed before **June 1, 2023**. This is because many of the objects will be gone from the evening sky by then.
- Scan or photograph your observations and send to Matt@spaceforeverybody.com. Include your name, mailing address, email, and phone number. This info will only be used to make sure you get your award!

Remember, all of us started at the same place you may be now, but after years of practice we have gotten better and better. Learning about the sky, assembling equipment, earning pins and certificates is not a race! It is about enjoying yourself, learning new things, and having fun at your own pace. We all asked lots of questions of our predecessors, and we are happy to answer yours as well!

Welcome to the Neighborhood!

Name: _____ Email: _____ Phone: _____

Mailing Address: _____

Object Name (Const.)	Catalog #	Seeing/Transparency/Inst	Description
Ex.: Andromeda Galaxy	M31	Average/Moderate/7x35Binos	Elongated fuzzy patch with a bright center.
Polaris (Ursa Minor)	North Star		
Orion Nebula (Orion)	M42		
Betelgeuse (Orion)	Star		
Sirius (Canis Major)	Star		
Pleiades (Taurus)	M45		
Capella (Auriga)	Star		
Pollux (Gemini)	Star		
Castor (Gemini)	Star		
Double Cluster (Perseus)	NGC 869		
Aldebaran (Taurus)	Star		
Jupiter	Planet		
Venus	Planet		
Mars	Planet		
Procyon (Canis Minor)	Star		
Alpha Mon (Monoceros)	Double Star		
Beta Mon (Monoceros)	Double Star		
The Moon			
Comet C/2022 E3 (ZTF)	Comet		

Complete any 10 or more. Scan or take a photo and send to Matt@spaceforeverybody.com