

Stargazing Tips for Beginners

From The National Capital Astronomers



1. Where do I start?

- With a Book: **NightWatch: A Practical Guide to Viewing the Universe** If you only get one book on stargazing, get this one. Most local libraries have this book, and there are four editions. All of them are fine, since the basics don't change. This book will tell you all you need to know to start stargazing).



2. What objects should I start looking at in the night sky?

- Start with **The Moon!**
- And then go to <https://www.skymaps.com/downloads.html>, and print out or download the evening sky map for your month. Focus on “Easily Seen with the Naked Eye” and “Easily Seen with Binoculars” objects first.

3. Now I have the list of objects, but how do I actually find these objects tonight? Where are they in the sky?



- Buy a printed **Planisphere** (←) and learn to use it (→).
- Or use a mobile app. There are lots of them! Cautions:
 - Turn the screen brightness down as low as you can!
 - Most apps show too many stars, because the severe light pollution around DC hides the faint ones. Some apps give you the option to show fewer stars, matching our local sky conditions. Here are two: **Star Walk 2** (free) and **Stellarium Mobile** (easier to use than StarWalk2 but you have to pay to upgrade to get this feature, <https://stellarium-labs.com/blog/light-pollution/>).
- **Stellarium** website on a PC (<https://stellarium-web.org/>) will allow you to print out sky maps for any location, any time, on any day in the future or the past.



4. I'm still having trouble matching stars with my planisphere or my app? what should I do?

- Stop by at our **Exploring the Sky** event or any other local astronomy club events. There will be people eager to help you.
- Or you could get another book: **Turn Left at Orion: Hundreds of Night Sky Objects to See in a Home Telescope - and How to Find Them**

5. Should I buy a pair of binoculars or a telescope?



- Neither. Start just with your eyes and try to find bright stars first. If you want to go further, we **strongly** recommend getting a pair of binoculars first as they are cheaper and much easier to use. (See ←<https://telescopicwatch.com/binoculars-ranking/>)
- But here are some telescope recommendations (<https://telescopicwatch.com/best-telescope-reviews/>) and information on how to use a telescope (→).
- Also, connect with one of the local astronomy clubs and consider joining one of them and observing from a location with darker night skies. Here are five local astro clubs, each of which has an entire observing calendar:
 - ❖ **National Capital Astronomers or NCA** (that's us): <https://capitalastronomers.org/>
 - ❖ Northern Virginia Astronomy Club or NOVAC: <https://www.novac.com/wp/>
 - ❖ Howard Astronomical League or HAL: <https://www.howardastro.org/>
 - ❖ Astronomical Society of Greenbelt or ASG: <https://greenbeltastro.org/>
 - ❖ Analemma Society (Great Falls VA): <https://www.analemma.org/>



And finally, Astronomy in DC (<http://astronomyindc.org/>) is a resource listing many local astro events