



Skywatcher's Guide

Observing the stars and other objects in the night sky is easier than you might think. There are just a few things to plan out before you start.

Where should I go?

Think about a place you can safely be with an adult that has the darkest sky possible. Lights from buildings and street lamps make it more difficult to see stars.

Places to try:

- Out the window from your home.
- In a yard or on a balcony
- At a local park with few lights
- At a campsite

What should I bring?

All you really need is you! However, some of the tools listed here can make it more comfortable and fun.

- <u>Sky Log</u> to draw what you see (print or make your own copy)
- Warm, comfy clothes (especially if you are going outside!)
- Something to sit on (blanket, folding chair, etc.)
- A flashlight (remember, extra light can make it hard to see stars so only use it when you need it!
 A red flashlight is best.)
- Snacks and water (or warm drink)
- Compass
- A tool to help you see, like binoculars or a telescope





How do I get ready?

Once the Sun has set and the sky is getting dark:

- Go to your spot, have your things with you, and give yourself a few minutes to set up and get comfortable.
- Figure out which direction you are looking in:
 - What part of the sky did the Sun set in? (The sky might still be a little lighter in that area.) That's West.
- Reach both of your arms all the way out in a straight line. If you keep them straight and point one arm west, the other arm will be pointing east.
- Take your time! The stars get easier to see as the sky gets darker. It takes time for your eyes to get used to the dark.
- Try closing your eyes for a few minutes. This will make your night vision better and help you see more stars. With your eyes closed, use your other senses to experience how different the night and day are.
 - How does it feel outside? Is it warmer or colder?
 - Take a deep breath through your nose. Does the air smell or feel different?
 - Listen. Can you hear different sounds, like animals, people, or traffic?

What can I see?

Each time you go stargazing, it will be at least a little bit different. Some things that make it different are:

- The phase of the Moon
- The time of year (fall, winter, spring, or summer)
- The time you observe (right after sunset, the middle of the night, or before sunrise)
- The direction you are looking (north, east, south, or west)
- Where you live (for example, different stars can be seen in the US vs. Australia)

Look up at the sky and consider these questions:

- Can you see the Moon? How would you describe its shape? Can you see dark areas on it?
- Which stars look brightest? Can you see any that look very dim?
- Can you see any patterns of bright stars, like Orion or the Big Dipper?
- Do any of the things you see have a color? How many colors can you find?



Here are some resources to see what might be visible when you are out:

- <u>2020 Pocket Almanac (2021 Pocket Almanac coming soon on the Morrison Planetarium website)</u>
- For more details on what you can see for the next 3 months, check out:
 - o <u>Skywatcher's Guide</u>
 - o <u>Planet Watch</u>
 - o <u>Highlights of the Season</u>