



# How to...



**FUN FACT**  
The largest star, named VY Canis Majoris, is about 1,420 times bigger than the Sun.

## Gaze at stars in the sky

To see something out of this world, all you have to do is look up.

For thousands of years, the stars and planets that are visible from Earth have inspired stories, mythology, and people's imaginations. And it's no wonder: They're really interesting to look at and dream about. If you'd like to see what you can spot, here's how you can get started.

### Notice the effects of the Moon

You've seen the Moon many times. But have you ever noticed how it affects the rest of the sky? The full Moon is like a giant light bulb, and its glow can block your view of the planets and fainter stars. That's why the best time to stargaze is at the end of the Moon's cycle, when it's really small, or during a new Moon when it's usually not visible. The new Moon happens about once a month. You can find the dates at [stardate.org](http://stardate.org).

### Find a good spot

When the new Moon phase arrives—or at least gets close—it's time to stargaze. Check to make sure it's not cloudy that night, and have an adult help you find an area away from headlights, street lamps, and neon signs. (They are considered light pollution and, like the full Moon, can make it difficult to see a lot of stars.) You

can use a telescope or bird-watching binoculars if you have them. If not, you can see plenty with nothing more than your eyes. Remember that it can take up to 30 minutes for your eyes to adjust to the darkness.

### Discover the planets

Once your eyes have adjusted, the brightest objects to look for first are other planets. You can see Venus, Mars, Jupiter, and Saturn without a telescope. Venus, the most vibrant planet in our solar system, should be easy to spot in the Western sky just after sunset. It looks like an extra-large star.

### Focus on star patterns

Groups of stars can appear to make up different images in the sky. First, look for the Big Dipper, which is an asterism (pattern of stars) made of seven bright stars. Then use that to pinpoint more stars. If you follow the handle of the Big Dipper down, it will point you toward a bright red star called arcturus. It's inside the Boötes constellation (one of 88 officially recognized groups of stars), which is shaped like an ice cream cone. Then look up from there to spot a bright blue star called spica in the constellation Virgo. To find more constellations, check out a planisphere, which is like a map of the stars. You can print one at [in-the-sky.org](http://in-the-sky.org).



Search for bright objects.

## Sights in summer



You can see these celestial wonders this time of year.

**A full Moon** Catch sight of a full Moon, also called a Buck Moon, in the sky on July 21.

**Mars and Jupiter** Throughout July, Mars and Jupiter will steadily approach each other. By July 30, these planets will form a triangle with a crescent Moon.

**A meteor shower** A major annual meteor shower, called the Delta Aquariids, peaks this year with about 10 meteors per hour on July 29–30. To spot one of these "shooting stars," look away from the Moon and city lights toward the darkest part of the sky.