JANUARY 2026

9:00 pm on January 1
8:00 pm on January 15
7:00 pm on February 1

To use this chart: hold the chart in front of you and turn it so the direction you are facing is at the bottom of the chart.

- **Bright Stars**
- **Medium Bright Stars**
- **Faint Stars**

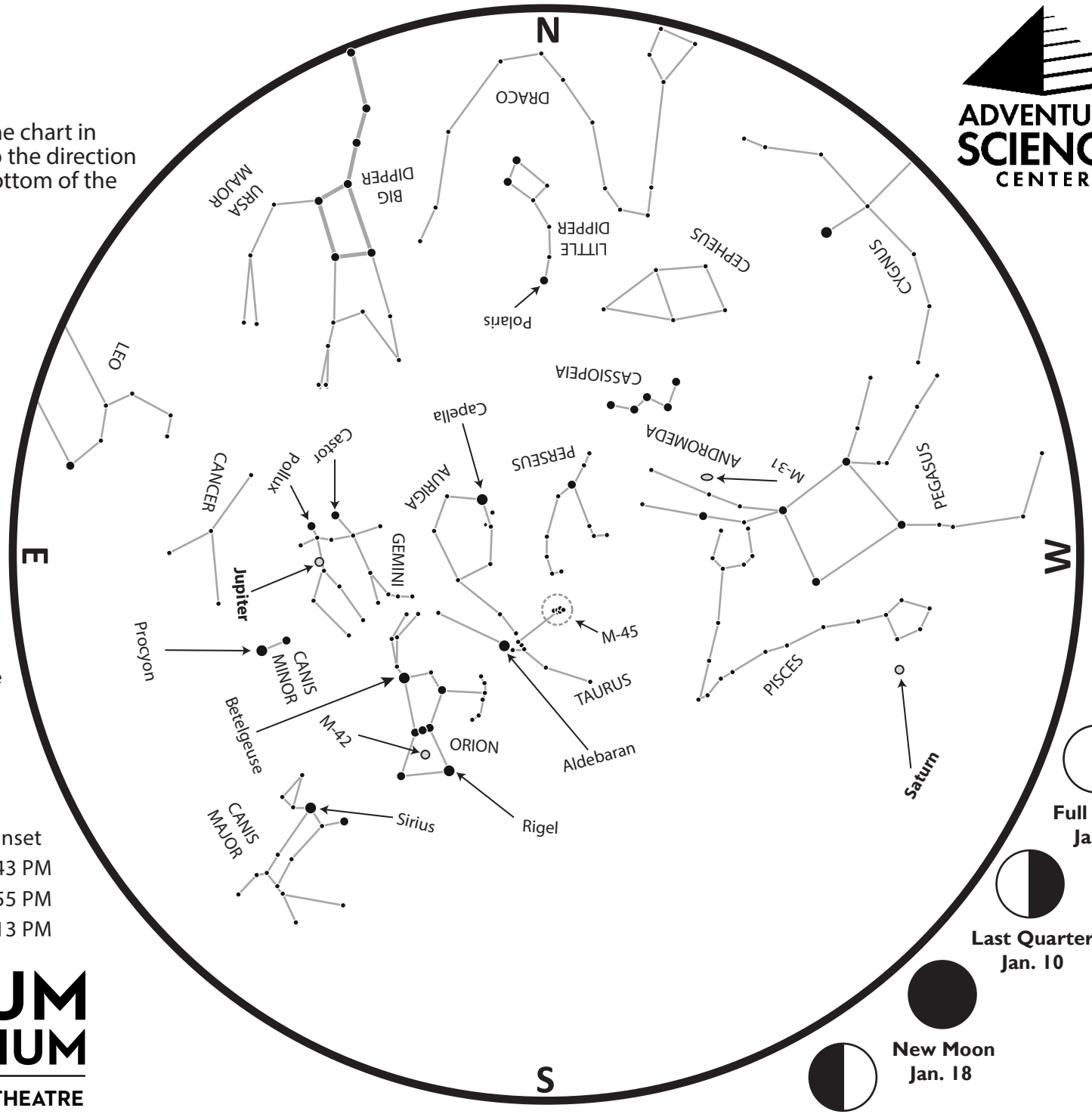
Scan dark skies with binoculars:

M-31: The Andromeda Galaxy

M-42: The Orion Nebula

M-45: Pleiades open star cluster

Winter is here! It may not feel like it yet, but the days are now getting longer and the nights shorter. This will continue until the first day of summer on June 21.



From Nashville:

	Sunrise	Sunset
Jan 1	6:58 AM	4:43 PM
Jan 15	6:58 AM	4:55 PM
Feb 1	6:48 AM	5:13 PM

Full Moon
Jan. 3

Last Quarter
Jan. 10

New Moon
Jan. 18

First Quarter
Jan. 25

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After Sunset

As the sky darkens, look to the east-northeast for the first bright point of light to appear - that will be mighty planet **Jupiter**. Once it gets darker, take a look through a telescope to see Jupiter's cloud bands. Even a good steady pair of binoculars will reveal up to four of Jupiter's largest moons. Early in the month it make take some time for it to rise above local trees or buildings that may block your view.

Once the sky is darker, look high in the south for **Saturn**. Saturn is fainter than Jupiter, but a telescope view will reveal the planet's famous rings. The rings may look like a sharp bright line across Saturn as we are currently seeing them almost edge-on. The view will improve a little through early March. Saturn will then spend most of March and April too close to the Sun to see. By summer, the rings will look round and beautiful again, but you'll have to wake up before sunrise to see them!

Look for the Moon near Jupiter on January 3 and near Saturn on January 22.

High in the west is the asterism called the **Great Square of Pegasus**. Three of these four stars are part of autumn constellation **Pegasus the Flying Horse**. The remaining star marks the head of **Andromeda the Princess**.

Look to the southeast for the bright stars of the winter evening sky. The most famous and easily found constellation is **Orion the Hunter**. Look for the three stars in a straight line that mark his belt, the two stars that mark his shoulders, and the two stars of his feet. **Betelgeuse**, one of this shoulder stars, is distinctly red in color.

Learn to find Orion and he can direct you to many other sights of the winter sky. This part of the sky contains some of the brightest stars throughout the year.

Follow Orion's belt down and to the left for the brightest star in the night sky, **Sirius**, in **Canis Major the Big Dog**. Follow the belt stars up and to the right to find orange star **Aldebaran**, the eye of **Taurus the Bull**.

Look just past Aldebaran and you may see a grouping of stars called **M-45**, or the **Pleiades Star Cluster**. With your unaided eyes you might just see six stars in the Pleiades, maybe seven if you have excellent vision and good, dark skies. With a pair of binoculars you can see dozens of stars in this **open star cluster**.

Other bright stars to look for are **Capella** in **Auriga the Charioteer**, **Procyon** in **Canis Minor the Small Dog**, and **Castor** and **Pollux** which mark the heads of **Gemini the Twins**. All of these stars can be found using Orion as a guide.

For much of the year, we use the stars of the **Big Dipper** to help us find **Polaris**, the **North Star**. However, the Big Dipper is harder to find in the early evening hours of winter. It appears very low to the northern horizon after sunset. Some of its stars even set below the horizon from our latitude in Tennessee. You'll have to wait until 10 or 11 at night to see it all.

Fortunately, another group of stars can help us find our way. Look for a group of five stars known as **Cassiopeia the Queen**. When the Big Dipper is low to the horizon, Cassiopeia is high in the north. The central peak of this constellation's W-shape points you in the direction of Polaris.

Polaris is not a particularly bright star, but it does remain fixed in the sky throughout the night and throughout the year. When you face the North Star, you're facing due north. Polaris is at the end of the handle of the **Little Dipper**. This group of stars is officially known as the constellation **Ursa Minor the Little Bear**.

From Dark Skies

Bright outdoor lighting can make it hard to see all but the brightest stars. On a clear night, find a dark spot far away from city lights, give your eyes time to adjust to the dark, and look for even more celestial sights. You can begin by looking for the fainter stars of the season's constellations. Pegasus, Andromeda, and the stars of the Little Dipper all become easier to explore.

Winter evenings are great for spotting the **Milky Way** coursing from the southeast, through Canis Major, Orion and Auriga, on past Cassiopeia in the northwest. This hazy band of light is the bulk of our disc-shaped galaxy, as we see it from within.

Look below Orion's belt to find **M-42**, the **Great Orion Nebula**. This faint patch of light is a massive star-forming cloud of gas and dust over one thousand light years away. Take a look through steady binoculars to see a little more detail. A small telescope can reveal the overall shape of the nebula. A quartet of young stars near the center are called the **Trapezium**. These stars formed out of the gas and dust of the nebula.

Near Andromeda, look for **M-31**, the **Andromeda Galaxy.** This massive spiral galaxy is the most distant object visible to the unaided eye, but to find it requires crisp, dark skies and a little patience. Binoculars or a small telescope can improve the view, but don't expect to see more than a faint, fuzzy, oval-shaped blob. It takes a camera attached to the telescope to reveal Andromeda's beautiful outer spiral arms.

Our star chart looks a little empty to the south - there just aren't many bright stars in that region of the sky this time of year. From very dark skies and with a more detailed chart you may be able to find **Cetus the Sea Monster** and **Eridanus the River** - but those can be real challenges to spot!

Early Morning

Throughout the year, the constellations rise and set just a little bit earlier every day. You won't see much difference from night to night, but you will over the course of weeks or months. What we see in today's pre-dawn sky is a preview of the early evening sky in later months. Go out before dawn this month for a look ahead at the spring night sky.

Just before dawn, our winter constellations have set in the west. Compare the locations of the Big Dipper and Cassiopeia from where you saw them in the early evening. These two star pictures stay on nearly opposite sides of Polaris. The Big Dipper is high in the northwest and Cassiopeia is now hidden behind tress and buildings along the northern horizon.

Imagine poking a hole in the bottom of the bowl of the Big Dipper - the water drips out onto the back of springtime constellation **Leo the Lion**.

How to Use a Star Chart

Newcomers to star charts like this one may quickly notice what looks like a serious error: east and west are labelled backwards! But it's no mistake: remember that this is a map of the sky, not of the ground. Flip it up over your head and look at it from below. The cardinal directions are correct!

If you'd rather not observe while holding a piece of paper over your head, that's understandable. Hold the chart in front of you and face south. The bottom area of the chart features stars that are in front of you. The top of the chart are stars that are behind you, and the center of the chart is straight overhead.

Want to look to the west instead? Just rotate the chart in your hands until west is at the bottom.

Our charts are made to show you the early evening night sky. What if you want to get out late at night or in the morning instead? Consider purchasing a planisphere, sometimes called a star wheel. Planispheres are a simple and inexpensive kind of star chart that consists of two disks that rotate on a common pivot. Rotate the disks to set the date and time you want to observe, and you'll see the right set of stars. Different planispheres are made for different latitudes of the Earth. In Tennessee, make sure to find one made for approximately 40° north latitude. You can even print out and make a planisphere at home by visiting:

skyandtelescope.org/astronomy-resources/make-a-star-wheel

You can also buy more durable planispheres online.

One tiny drawback to planispheres: they can't show you where the planets or the Moon are. These objects constantly move through the constellations over days, months and years.

Desktop planetarium software like the free, open-source Stellarium (stellarium.org) can show you more precisely where night sky objects will be on any date and time, from any location on Earth. It's a great way to learn about the night sky before you go out for a look at the real thing!

This month in the Sudekum Planetarium
Judith Payne Turner Theatre