

Enjoying the winter sky requires conditions being clear and cloudless, which usually means very cold temperatures...so bundle up!!

It is suggested you access a simple night sky map for this time of the year. Recommended is:  
[www.skymaps.com](http://www.skymaps.com) Downloading the latest edition (February 2022, northern hemisphere) will give you a simple map, most of the stars easily seen from anywhere in Walden. Alternatively you can use an app like skyportal (free) to lead you through the night sky.

For the 2022 Carnival dates, the moon will rise about 5:30pm and set about 2am. It will not be completely round but growing towards a full moon on Feb 16. Using standard binoculars, you can enjoy features on the moon; large grey areas called Mares (seas), and bright small round craters. If you want to see the moon through binoculars in the evening after nightfall, try wearing sunglasses to make the view less bright, more comfortable.

*Why couldn't the astronaut book a room on the moon? Because it was full!*

**Stand facing north.** The Big Dipper is standing on its handle. This asterism is a part of the full constellation Ursa Major (the Big Bear). The Little Dipper (Ursa Minor), is much fainter, and may only show three of its stars, depending on the darkness of your location. It will be to the left of the Big Dipper. Cassiopeia is in the northwest sky, up and to the left from Ursa Minor. It is commonly referred to as a big "W", though at this time of year the W shape is upside down and may appear as a stretched out "M".

**Stand facing south.** Orion (the Hunter) is fairly high directly south. Most recognizable are the three stars that make up his belt. Immediately below the belt lies a fuzzy region of stars. Have a look through your binoculars at this cloud of space dust + gas (nebulosity), a nursery for the birth of new stars. With the unaided eye, look to the bright star on the top left of Orion (his shoulder), Betelgeuse. Then look to the star on the lower right of Orion (his foot), Rigel. If you move your view back and forth diagonally between these two stars, you will notice one becomes reddish and the other becomes quite blue coloured.

Looking up and a little to the right of Orion you will notice a bright star that seems to have a faint red hue. This is Aldebaran, the red eye of the bull, Taurus. Point your binoculars in this region, a large "V" shape concentration of many stars. The large open cluster of stars making up the head of the bull is known as the Hyades. Keep looking further up, slightly to the right, to view the Pleiades, another open cluster of stars. In binoculars you may see the shape of a question mark lying on its side.

Go back to Orion and proceed lower and to the left. There is a seriously bright star, Sirius, the main star in Canis Major. The stars in this region make up the constellation representing the larger of the two hunting dogs accompanying Orion.

**Planets:** There are no planets visible in this month's evening sky. However looking eastward about 6am you can easily see brilliant Venus. A little lower, to its right, you may see the fainter red hue of Mars.

Interested in connecting with a local astronomy club, or have questions to ask? Visit:  
[sudburyastronomyclub.com](http://sudburyastronomyclub.com) to reach the Sudbury centre of the Royal Astronomical Society of Canada. Clear skies y'all!! Up above, the heavens await.