

Starwatch

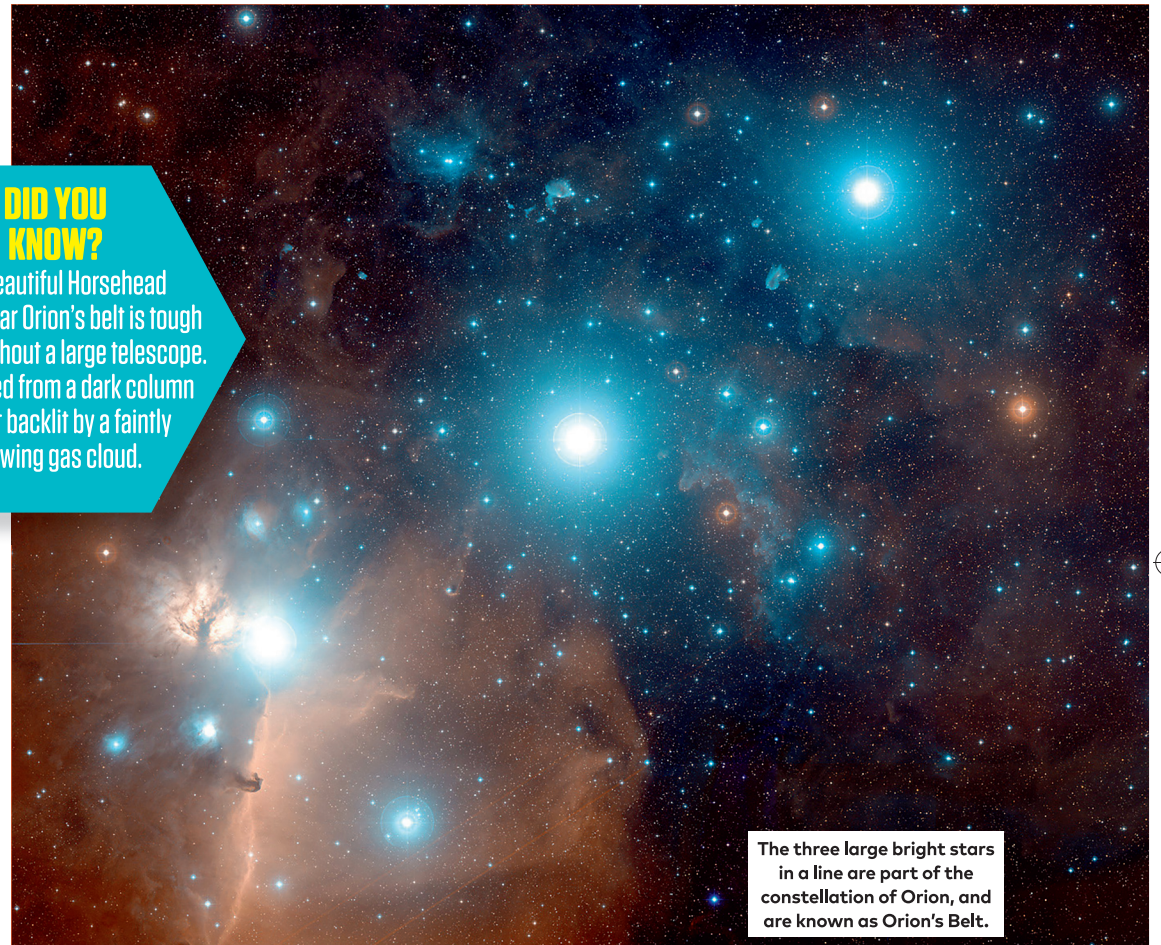
February nights bring the sky's brightest winter highlights into view, as the Orion constellation takes centre stage.

Look south as the sky gets dark after sunset this month, and you won't be able to miss Orion, one of the sky's most distinctive constellations. Home to two of the sky's brightest stars, bright red Betelgeuse and brilliant white Rigel, as well as the beautiful Orion and Horsehead nebulae (clouds of gas and dust in between the stars), Orion the hunter is the centrepiece of the winter sky. To his west, he holds off an attack from the fearsome bull, Taurus, while to his east – behind him – follow his loyal dogs Canis Minor and Canis Major. Both dogs are picked out by a brilliant marker star: Procyon is in Canis Minor and Sirius (the brightest star in the entire sky) is in Canis Major. Beneath Orion's feet, you can see the bow-tie shaped star group of Lepus – a hare fleeing the scene.

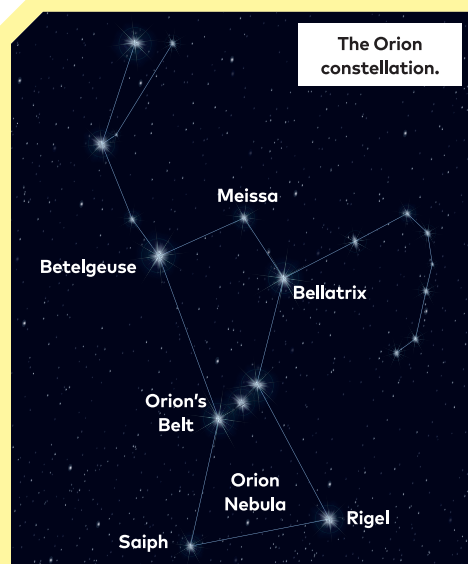
Further afield, Mars remains the only bright planet to see in the evening, sinking towards the west as the night progresses, while the constellation of Gemini, the Twins, sits above Procyon and is easily spotted, thanks to its roughly equal pair of bright stars, Castor and Pollux.

DID YOU KNOW?

The beautiful Horsehead Nebula near Orion's belt is tough to spot without a large telescope. It's formed from a dark column of dust backlit by a faintly glowing gas cloud.



The three large bright stars in a line are part of the constellation of Orion, and are known as Orion's Belt.



CONSTELLATION OF THE MONTH ORION

The gigantic figure of a celestial hunter has been recognised in the skies since prehistoric times – the ancient Greeks named him Orion, and told a story of how he set out to kill every creature on the planet, before the enraged Earth goddess Gaia sent a scorpion to defeat him.

Orion's unmistakable body is marked by Betelgeuse on one shoulder and Rigel at the opposite knee, with a belt of three bright stars across his waist (Orion's Belt), and a fainter chain of stars (including the famous Orion Nebula), which represents his sword beneath. In dark skies, you might see the fainter stars that mark the hunter's head, raised club and lion-skin shield.

HIGHLIGHT OF THE MONTH SUPERMOON

The 19 February full Moon happens when the Moon is at the closest point to Earth on its orbit. As a result, the full Moon will be about 10% bigger in the sky than usual. January also had a supermoon, but February's is the closest of all.



The Moon will look much bigger.



Things to make and do

STAR MAP

February sky 2019

February's unpredictable weather can mean more cloudy nights than usual, but when the skies clear, grab this map and a torch, and get outside to see the stars.

How to use this map

Our February star chart is easy to use – just find somewhere with a dark, clear sky, hold the chart above your head and line up one of the directions around the edge with a direction on the horizon (north or south is probably easiest – and this month Orion offers an easy way of finding south). The map is designed to be most accurate for the times and dates shown at the upper left, but you can still use later in the evening – just remember that the stars will have shifted slightly as they rotate anticlockwise around the pole star, Polaris.

What you need

You need nothing special to stargaze, just:

- Your eyes and a torch (to find your way and illuminate your star map).
- A pair of binoculars or a telescope to help you spot fainter stars and objects.
- This month's star map to help you locate sights described below.

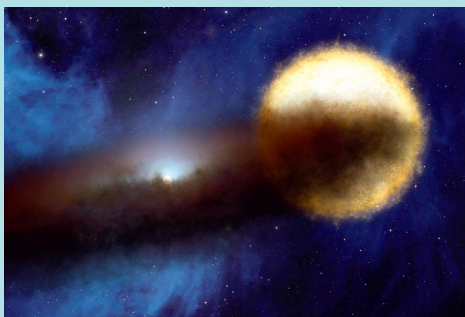
Top tip

Local astronomy clubs and observatories hold open nights – search online to find one near you.



Can you find these sights in February's night sky?

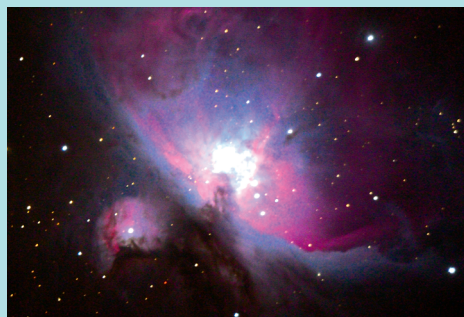
- 1 Epsilon Aurigae** This strange yellow star sits at the top of a narrow triangle called The Kids – in Auriga, the Charioteer. It dips in brightness for about two years every 27 years.



- 3 Betelgeuse** This red supergiant star on Orion's shoulder is one of the largest stars known. Its diameter is almost 1,000 times bigger than the Sun.



- 2 Orion Nebula** This glowing patch in Orion's sword is easily spotted with the naked eye and is spectacular through binoculars. The nebula is a huge gas cloud lit by newly formed stars.



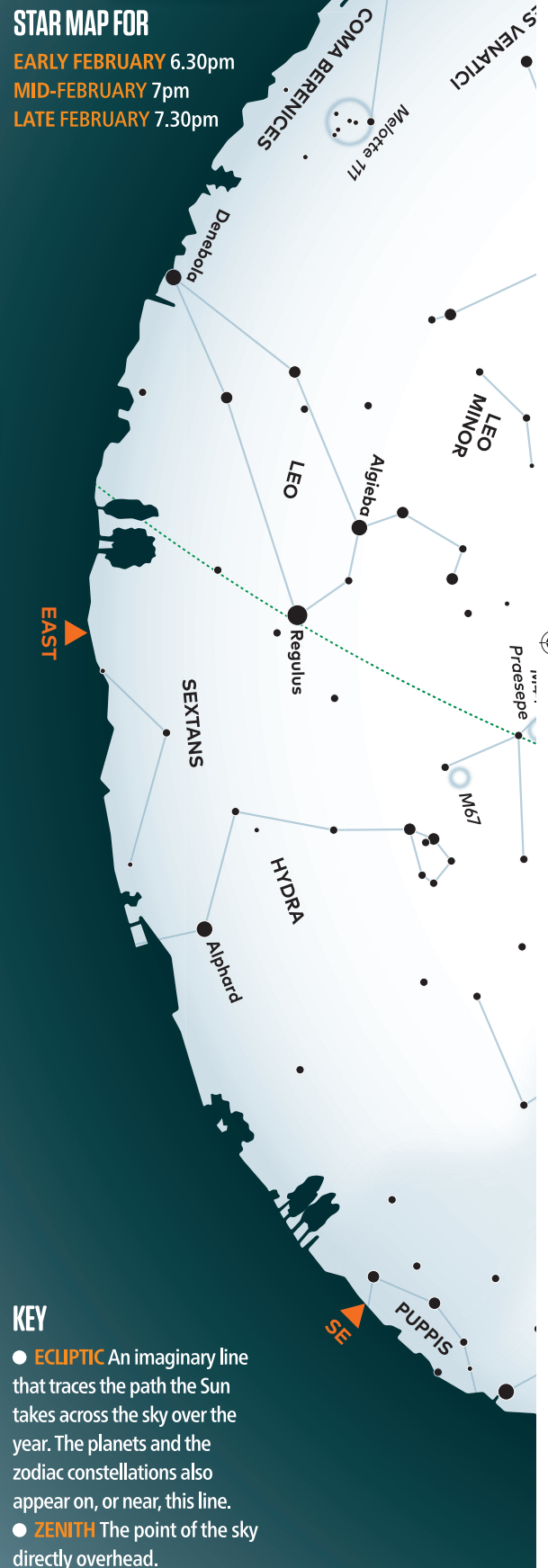
- 4 Messier 35** This cluster of more than 1,000 distant stars is visible with the naked eye on dark nights, and covers an area about the same size as the full Moon.

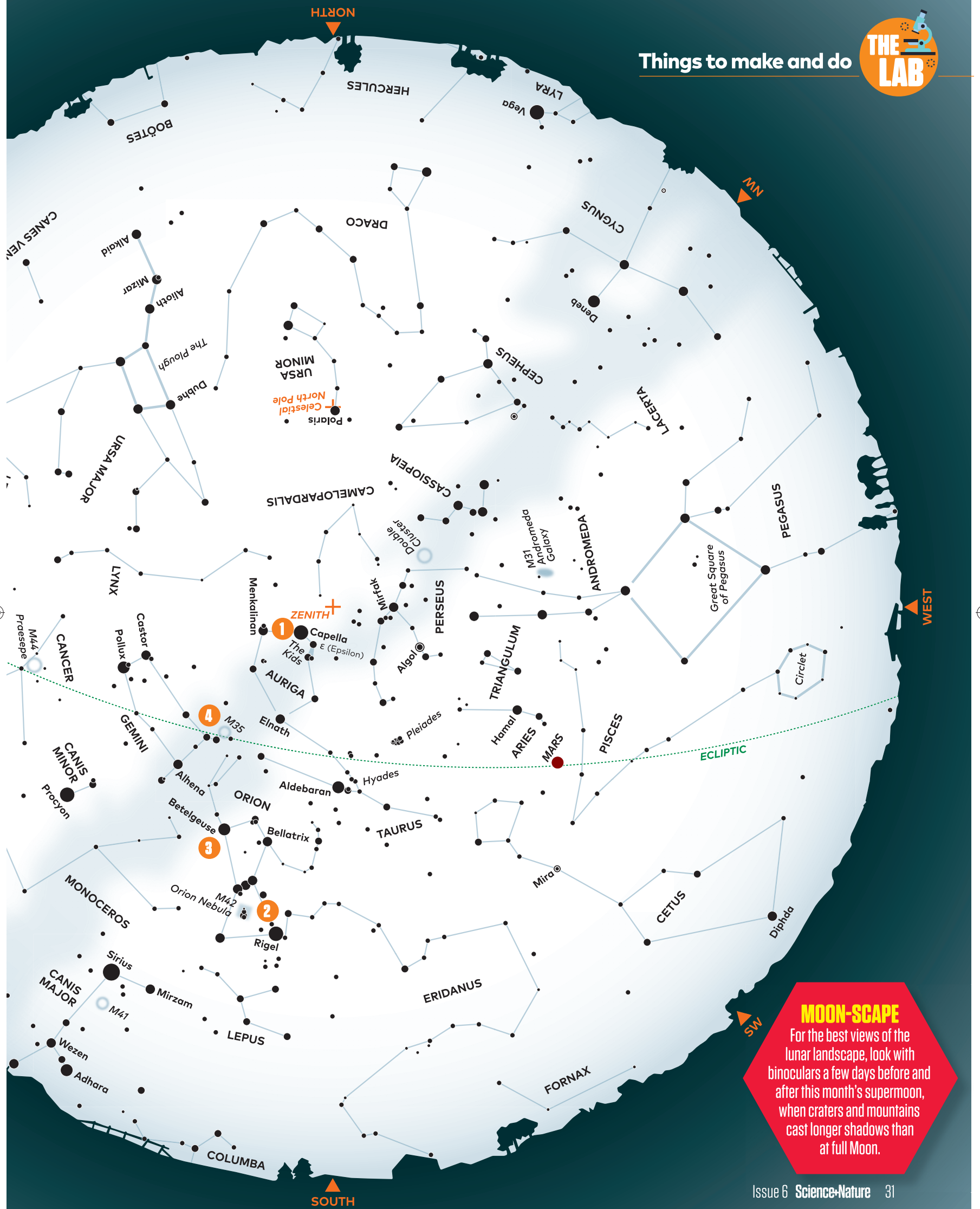


SUPER GIANT
The star Betelgeuse is so big that if it sat where the Sun is, it would swallow up all the planets out to beyond the orbit of Mars.

STAR MAP FOR

EARLY FEBRUARY 6.30pm
MID-FEBRUARY 7pm
LATE FEBRUARY 7.30pm





MOON-SCAPE

For the best views of the lunar landscape, look with binoculars a few days before and after this month's supermoon, when craters and mountains cast longer shadows than at full Moon.