

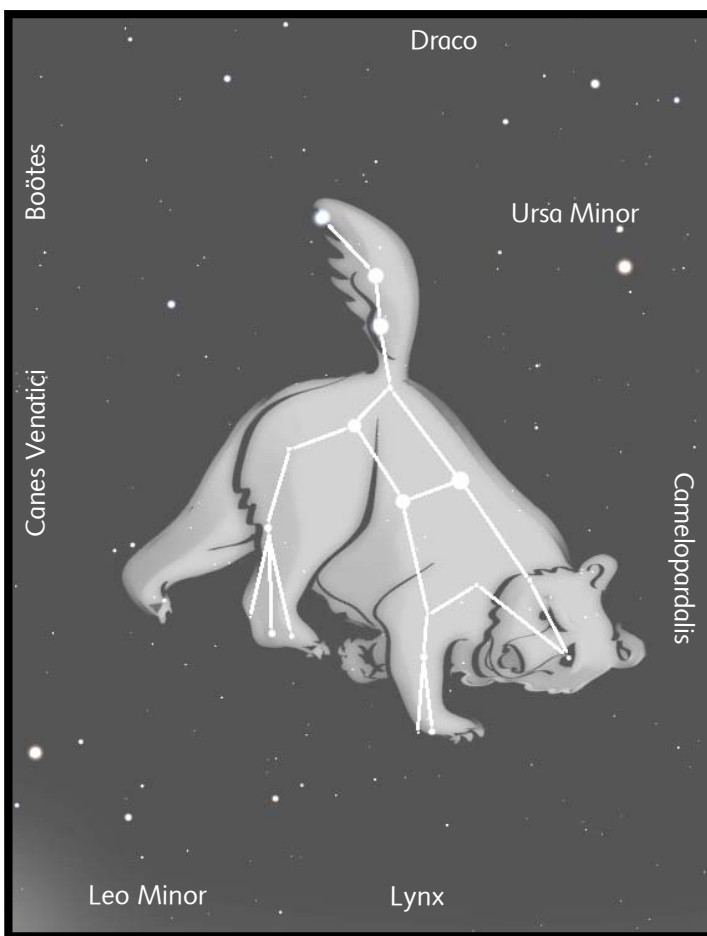
# June night sky

As summer arrives we need to wait later for truly dark skies, but balmy weather means that cold winter nights are far behind us. 21 June marks the summer solstice for us in the northern hemisphere, so the Sun will be in its highest position in the sky and we will enjoy the most daylight. After dusk there are plenty of interesting constellations to find, with the bright Summer Triangle rising higher. This contains the stars Altair in Aquila the Eagle, Deneb in Cygnus the Swan, and Vega in Lyra the Harp. Look up at night and see if you can find them!



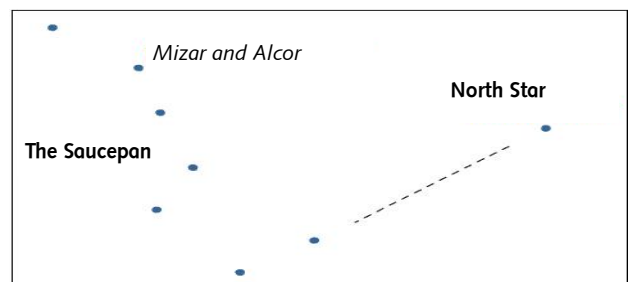
## Constellation of the month: Ursa Major

Constellations are patterns of stars useful for separating the night sky into different sections. Modern astronomers use a set of 88 constellations which cover the entire sky, many of which have been inherited from the ancient Greeks. Ursa Major is a circumpolar constellation which means that it is visible to us at all times of the year. Its seven brightest stars have a few different nicknames, such as The Plough, The Big Dipper, and The Saucepan. Maybe you know some others!



## Finding Ursa Major

Ursa Major is high in the western sky by around 11pm, but so long as it's dark and you have a clear horizon you'll be able to see it. The brightest seven stars, which we at At-Bristol like to call The Saucepan, are the easiest to see. Use the end two stars in The Saucepan to point to the North Star, and never lose your bearings again!



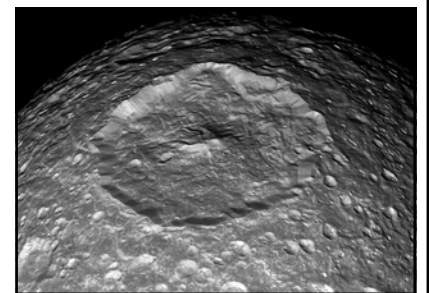
## Look out for...

The star in the bent handle of The Saucepan is called Mizar. In the night sky look right next to it to see a dimmer star called Alcor. In ancient times these two stars were used as an eyesight test. If you could see faint Alcor next to brighter Mizar, your eyes were said to be in good condition.

## News flash: NASA releases incredible new images of Saturn's moons

1.4 billion km away from the Earth, a spacecraft has been conducting close fly-bys of Saturn's moons, and taking breathtaking pictures. They show the Saturnian system in more detail than ever before. To see all the images, please visit: [http://www.boston.com/bigpicture/2010/05/checking\\_in\\_on\\_saturn.html](http://www.boston.com/bigpicture/2010/05/checking_in_on_saturn.html)

*Saturn's moon Mimas as seen by the spacecraft Cassini. Image credit: NASA/JPL/SSI.*





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## The planets in May

<b>Mercury</b>	is close to the Sun and cannot be seen from Earth.
<b>Venus</b>	shines brightly in Gemini and Cancer this month.
<b>Mars</b>	is gradually fading and sets around midnight.
<b>Jupiter</b>	is in Pisces and rises at around 1am.
<b>Saturn</b>	is to the east of Mars in the constellation Virgo.

## Theme of the month: The International Space Station

The International Space Station, or ISS for short, is a scientific research laboratory being built in orbit around the Earth. Work on it began in 1998, and if all goes to plan it will be finished next year. The ISS is the largest manmade satellite ever, and is a project between NASA, the European Space Agency (of which the UK is a member), the Russian Federal Space Agency, the Japan Aerospace Exploration Agency, and the Canadian Space Agency. It really is international, having been visited by people from 15 different countries.

The ISS's value as a laboratory comes from the fact that zero-gravity experiments can be carried out. Many ISS research topics are about human medicine, which benefit all of us on the Earth. Other scientific areas studied include weather and astronomy. It is also used to see how people cope with being in space for a long time. This will be useful when we eventually send people to explore distant planets such as Mars.



Image credit: STS-119 Shuttle Crew and NASA.

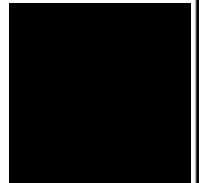
Up to seven astronauts can be on board the ISS at the same time. For the first half of this month there are three crew members, with three more joining them on 15 June. Thanks to the ISS being permanently manned, for as long as it exists there will be people living and working above the Earth.

## Moon Calendar

04 June  
Last Quarter



12 June  
New Moon



19 June  
First Quarter



26 June  
Full Moon



### Would you like to know more?

Details of our planetarium shows and back issues of this night sky guide can be found at:  
<http://www.at-bristol.org.uk/theplanetarium>

**Stellarium** is a planetarium program for your computer, showing a realistic 3D sky just as you would see if looking with your eyes or a telescope. Best of all, it's completely free. Download it at [www.stellarium.org](http://www.stellarium.org)

**Heavens Above** is a website that lets you create customised sky maps and see when satellites like the International Space Station will be visible. Head over to [www.heavens-above.com](http://www.heavens-above.com) and try it out.

Do you have an astronomy question for the At-Bristol planetarium team?

E-mail [lee.pullen@at-bristol.org.uk](mailto:lee.pullen@at-bristol.org.uk) and our keen astronomers will try to quench your thirst for knowledge!