

January 28, 2018

Full moon, blue moon and more

The first full moon in 2018 occurred on January 1 and is known in some folk lore as the Full Wolf Moon.

The full moon, a Blue Moon and an eclipse of the moon all takes place on January 31. This will be the second full moon this month, hence the title of "blue moon". This refers to the somewhat unusual occurrence of two full moons in one month not the colour of the moon. The lunar cycle is 29.5 days in length so the timing of blue moons always is at beginning and end of a month.

The distance between the Earth and moon is less than usual this time, so the moon will appear slightly larger than usual.

During the early hours of Jan. 31, there will be a full moon, a total lunar eclipse, a blue moon and a supermoon. None of these things is all that unusual but rare that it happens all together on one day. The last time was in 1866.

The moon's orbit is tilted by about 5 degrees relative to Earth's orbit. Most of the time the moon ends up a little above or below the path Earth follows as it revolves around the sun. A lunar eclipse can happen only on a full moon because the moon needs to be behind Earth, relative to the sun, to pass the Earth's shadow.

When the moon is completely in shadow, it does not go completely dark; instead, it can look reddish because of a process called Rayleigh scattering.

View the western sky at about 6:45 a.m. on Wednesday, January 31.