



NEXT MONTH

SUPERMOON

Uno dei fenomeni celesti più ammirati e decantati: la luna piena. Qui però non stiamo parlando di quella che possiamo vedere ogni mese, ma della cosiddetta superluna, osservabile solo quando si verificano determinate condizioni. Proviamo a spiegarle, senza rovinare il romanticismo... By Mariam Khan

PRE-INTERMEDIATE **A2**SPEAKER
ALEX WARNER TRACK 3 

GLOSSARY

- 1 bright:** brillante
- 2 average:** media
- 3 in a straight line:**
in linea retta
- 4 close:** vicino
- 5 furthest:** più lontano
- 6 celestial bodies:**
corpi celesti

There is nothing more romantic than a big, **bright**¹ moon in the night sky. A few times a year, the moon is bigger and brighter than usual. This natural phenomenon is called a 'supermoon'. It can appear up to three times the size of an **average**² moon!

Supermoons happen when the Moon, the Earth and the Sun are **in a straight line**³, and when the Moon is closest to the Earth. When these two celestial events happen at the same time, you get a great big Moon in the sky.

THE SCIENTIFIC NAME

'Supermoon' is not, in fact, the scientific name of the event. It is actually

called a 'perigee syzygy'. Perigee means '**close**⁴ to Earth'. The Moon orbits the Earth in an elliptical curve; 'perigee' describes the closest point in its orbit. The **furthest**⁵ point is called 'apogee.'

'Syzygy', on the other hand, means the alignment of three **celestial bodies**⁶. The Sun, the Moon and the Earth are aligned during the **full moon** and **new moon** phases. During a new moon syzygy, the Moon is not visible because it is between the Earth and the Sun. This is a lunar eclipse. The supermoons that are visible **occur**⁷ during a full moon syzygy, when it is closest to earth. In other words, a perigee syzygy full moon.



The different stages of the 'blood moon' and supermoon during a total lunar eclipse. A blood moon is the name given to the combination of a supermoon and a full lunar eclipse, when the Earth's shadow obscures the Moon. Below: *The Munsters*, an American sitcom originally aired from 1964 to 1966 depicting the home life of a family of monsters, among them Eddie, a child werewolf.

LET'S CALL IT SUPERMOON

Of course, 'supermoon' is an easier term to use than 'perigee syzygy'. It was coined⁸ by astrologer Richard Nolle thirty years ago. His definition was: "a new or full moon which occurs with the moon at or near (within 90% of) its closest approach to earth in a given⁹ orbit." Now it has become the popular phrase among astronomers, as well.

According to Nolle's definition, the Moon has to come within 226,000 miles of Earth¹⁰ before we can call it 'super'. The closest it has been recently was on the 14th of November 2016, at a distance of 221,524 miles. This was the closest since 1948 and it won't come that close again until 2034! However¹¹, even the greatest supermoons are only 30 per cent bigger than usual. What makes it truly¹² spectac-

ular is the 'moon illusion'. Nobody really knows why, but the Moon looks much, much bigger when it is on the horizon. So, when a supermoon touches the horizon, it becomes like something out of a fairy tale¹³.

HOWLING AT THE MOON?

The phrase 'howling at the moon' conjures up images of werewolves howling to the heavens, but in fact supermoons do not have any major effect on Earth. Tides¹⁴ are a little bigger, but earthquakes, natural disasters and psychological effects on humans – these are all unsubstantiated¹⁵ myth. So don't worry and just enjoy the show. ☒

Next supermoon: January 2nd

GLOSSARY

- 7 occur:** si verificano
- 8 coined:** coniato
- 9 in a given:** in una data
- 10 has to come within 226,000 miles of Earth:** deve arrivare a circa 363.712 km dalla Terra
- 11 however:** tuttavia
- 12 truly:** veramente
- 13 fairy tale:** favola
- 14 tides:** maree
- 15 unsubstantiated:** infondato

SPEAK UP EXPLAINS

New moon, full moon. Luna nuova, luna piena.

L'astronomia definisce fino a otto fasi lunari, però le quattro che impariamo sin da bambini sono: *new moon* (luna nuova, quando non vediamo il nostro satellite dato che la faccia che ci mostra non è illuminata dal sole); *waxing* (o *crescent*) *moon* (luna crescente); *full moon* (luna piena); e *waning moon* (decescente).

Werewolves howling. Licantropi che ululano. La parola *werewolf* proviene dall'inglese antico, con chiara influenza del tedesco. Si tratta di un personaggio capace di trasformarsi in lupo, presente nel folklore di molte culture europee sin dal medioevo.

