

A Brief Column for the Beginning Stargazer Introducing a New Astronomical Term Each Month

Astronomy is rich with terminology. This column will help beginning stargazers ease into the world of astronomy by *briefly introducing* a new but *basic astronomical term* (word, acronym or abbreviation) each month. This list, which began January 1999 with the letter *a*, is alphabetical but uses successive letters for each month's entry until. (We will return to the letter *a* after twenty-six months.)

Word of the Month for June 1999

full Moon The *phase* of the Moon when its disk appears fully illuminated. Full Moons occur when the Moon is at *opposition* to the Sun (*celestial longitude* is 180° greater than the Sun's). Therefore, at mid-northern latitudes, *full Moons only rise approximately when the Sun sets*. Likewise, *full Moons* are over the south horizon approximately in the middle of the night, and set approximately when the Sun rises.

The Moon is technically full only at some moment. Times of full Moon are usually given to the nearest hour and minute. Before a full Moon, the Moon is said to be *waxing*; after full Moon the Moon is *waning*. Inexperienced observers cannot usually tell a full Moon from a Moon two or three days before or after full so many people think the Moon seems full for nearly a week.

When the Moon appears full from Earth, observers on the Moon see the opposite phase (i.e., a "new Earth").

Although many people believe the full Moon influences human behavior (cf., "lunatic"), careful scientific studies have failed to show any relation.

Extra-high ocean tides (*spring tides*) usually occur near dates of full and new Moons, when the gravitational pull of the Sun and Moon act together along nearly the same line.

Different cultures have often given names to full Moons during the year. The following list gives some

example full Moon names used in Colonial America:*

January	Winter or Yule Moon
February	Trapper's, Snow or Storm Moon
March	Lenten, Fish, Worm, Sap, Crow Moon
April	Easter, Egg, Planters, Pink, Grass Moon
May	Milk, Mother or Hare Moon
June	Rose, Honey, Hot or Flower Moon
July	Summer, Buck, Thunder or Hay Moon
August	Dog, Sturgeon, Green Corn, Grain Moon
September	Harvest, Fruit, Dying Grass, Barley Moon
October	Hunter's or Blood Moon
November	Beaver, Frosty or Snow Moon
December	Christmas, Oak or Moon Before Yule

Full Moons occur approximately once every 29.53 days, a time interval called the *lunar synodic period*. (The lunar synodic period varies in length by about one-quarter of a day). Twelve synodic periods equal about 354 days, or eleven days short of a regular calendar year of 365 days. So, some years contain thirteen full Moons. Since all months but February have at least thirty days, any regular calendar month but February can have a second full Moon.

In recent years the second full Moon in a calendar month has become known as a "Blue Moon." Blue Moons are relatively common, occurring once about every three years. More infrequent are two Blue Moons in a year. (Example: Both January and March 1999 had two full Moons.)

However, recent research into the history of Blue Moons reveals that the old *Maine Farmer's Almanac* used the phrase differently, namely the "third full Moon in a season of four full Moons" rather than the second full Moon in a given calendar month. (See *Sky & Telescope*, May 1999, pp.36–38.)

References. J. Mitton 1991, *Concise Dictionary of Astronomy* (Oxford Univ. Press); I. Ridpath 1997, *A Dictionary of Astronomy* (Oxford Univ. Press). ☼

*Adapted from *The Moon Book*, 1998, Kim Long.