

Interesting Moon Facts

Moon Phases

Because the Moon itself produces no light of its own, we can only see the parts of the Moon that are lit up by other things. A small amount of light comes from distant stars and the reflection of light from the Earth (known as Earthshine). However, the main source of light for the Moon is the Sun.

Most of the time, half of the Moon is being lit up by the Sun, but this need not be the half that is facing towards the Earth. The only exception to this is during a Lunar Eclipse.

If the Moon is between the Earth and the Sun in its orbit, then the back-side of the Moon is being lit up and the side facing the Earth is in darkness. This is called a New Moon. If the Moon is on the other side of the Earth compared to the Sun, then the near side of the Moon will be fully lit up. This is a Full Moon.

Phases Of The Moon

When we look up at the Moon, we don't always see the same amount of its surface being lit up by the Sun. This apparent change in the shape of the Moon is known as its 'phase'.

The phases of the Moon are caused by the relative positions of the Moon, Sun and Earth.

Between the New Moon and the Full Moon there are multiple stages of partial illumination during its different phases. These are the banana-shaped Crescent Moon, the D-shaped Quarter Moon, and the almost complete Gibbous Moon.

Finally, each phase is also named after its position in the full 29.5-day cycle based on whether it is growing (waxing) or shrinking (waning).

The 8 phases of the Moon are:

- New Moon
- Waxing Crescent Moon
- First Quarter Moon
- Waxing Gibbous Moon
- Full Moon
- Waning Gibbous Moon
- Last Quarter Moon
- Waning Crescent Moon

The Full Moon, Quarter Moon, and New Moon are all just the instants in time when the Moon is exactly fully illuminated, half illuminated or not at all illuminated from our perspective on Earth. The Crescent and Gibbous Moons each last approximately a week.

Months Of The Year

The Moon's phases and the months of the year are inextricably linked. It takes the Moon about 29.5 days to go through all of its phases, meaning that each month has on average one full moon (which occurs when the entire face of the Moon is illuminated by the Sun).

The word 'month' takes its root from the Moon. A month was originally defined to be either 29 or 30 days, roughly equal to the time of the lunar phases cycle. Some of our calendar months were later padded out with extra days so that 12 months would make up one complete 365-day solar year (which is the length of time it takes for the Earth to orbit around the Sun).

Full Moon Names

Over time, different cultures have given different names to the full moons each month. Many of the Moon's nicknames have come to us from Native American culture because, for their way of life, the Moon was just as important a method of time-keeping as the Sun.

January - Wolf Moon: January's full moon is named after the howling of hungry wolves crying because of the scarcity of food in midwinter. Other names for this month's full moon include Old Moon and Ice Moon.

February - Snow Moon: February's typically cold, snowy weather in North America earned its full moon the name Snow Moon. Storm Moon and Hunger Moon are other common names.

March - Worm Moon: Native Americans call the March full moon (the last full moon of winter) the Worm Moon after the worm trails that would appear in the newly-thawed ground. Other names include Chaste Moon, Crust Moon and Sap Moon, the latter named after the tapping of their maple trees.

April - Pink Moon: Northern Native Americans call April's full moon the Pink Moon after a species of early-blooming wildflower in their country. In other cultures, this moon is called the Sprouting Grass Moon, the Egg Moon, and the Fish Moon.

May - Flower Moon: Many cultures refer to May's full moon as the Flower Moon thanks to the abundance of flowers blooming that occurs as spring is under way. Other names include the Hare Moon, the Corn-Planting Moon, and the Milk Moon.

June - Strawberry Moon: In North America, the harvesting of strawberries in June gives that month's full moon its name. Europeans call it the Rose Moon, whilst other cultures named it the Hot Moon for the beginning of the summer heat.

July - Buck Moon: Male deer, which shed their antlers every year, begin to regrow them in July, hence the Native American name for July's full moon. Some refer to this moon as the Thunder Moon, due to the summer storms in this month. Other names include the Hay Moon, after the July hay harvest.

August - Sturgeon Moon: North American fishing tribes called August's full moon the Sturgeon Moon since this marine species appeared in number during this month. It has also been called the Green Corn Moon, the Grain Moon, and the Red Moon for the reddish hue it often takes on in the summer haze.

September - Harvest Moon: September's full Harvest Moon is so called because this is when crops are gathered at the end of the summer season. At this time, the moon appears particularly bright and rises early, letting farmers continue harvesting into the night. This moon is also sometimes named the Barley Moon.

October - Hunter's Moon: After the Harvest Moon comes the Hunter's Moon, in the preferred month to hunt summer-fattened deer and fox unable to hide in bare fields. Like the Harvest Moon, the Hunter's Moon is also particularly bright and long in the sky, giving hunters the opportunity to stalk prey at night. Other names include the Travel Moon and the Dying Grass Moon.

November - Beaver Moon: There is disagreement over the origin of November's Beaver Moon name. Some say it comes from Native Americans setting beaver traps during this month, while others say the name comes from the busy activity of beavers building their winter dams. Another name is the Frost Moon.

December - Cold Moon: The coming of winter earned December's full moon the name Cold Moon. Other names include the Long Night Moon and the Oak Moon.

Blue Moons

The Moon completes 12 full cycles of its phases in about 354 days - which is 11 days short of a calendar year. Every two and a half years or so the difference adds up to an extra, 13th full moon occurring during the year and this relatively rare occurrence is sometimes referred to as a Blue Moon. However, the precise origins of the term are uncertain: it was originally the name given to the third full moon of a season containing four full moons, and today Blue Moon is also sometimes applied to a second full moon occurring within a single calendar month.