2024 Moon phases calendar

designed by <u>www.ilovescience.in</u>

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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
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11	N					D	D	D	D	D	D	D	11
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16	D	D	D	D	D	\square		0			F		16
17	D	D	D	D	D	\square		0		F	0		17
18	D	D	D	D	D				F	0	0	0	18
19	D	D	D	D	0	0		F	0	0	0	0	19
20	D	0	D	0	0	0		0	0	0	0		20
21	0	0	0	0	0		F	0	0	0			21
22	0	0	0	0	0	F	0	0	0	Q			22
23	0		0		F	0	O	Q	Q	Q			23
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25	F	0	F	0	0	0	0						25
26	Q												26
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28		0		0									28
29	Q												29
30	Q												30
31												N	31

Phases of moon and our festivals



Diwali: Always happens on the new moon (Amavasya) between mid October to mid November.

Holi: Always happens on the full moon (Poornima) in the month of March.





Eid: Can happen in different months as per some calculation, but it always happens after 2 days of the new moon. (The day after a thin crescent "Dooj ka chand" is seen in evening in the western sky)



- 1. Find out about more festivals and when do they happen as per lunar calendar.
- 2. There is only one Hindu festival which happens every year on a fixed date. It does not follow lunar calendar. Which festival is it?

What is waxing and waning moon

After the new moon, when the sun lit area on moon is increasing each day, (we say it is getting bigger), it is called a waxing moon. After the full moon, when the sun lit area is reducing each day, (we say it is getting smaller), it is called a waning moon.



The "DOC" formula:

If you see a partial moon in the sky, can you tell if it is increasing (waxing) or reducing (waning)?

Note that in the waxing phase the moon is cut from the left side (like shape "D") and in the waning phase it is cut from the right side (like shape "C"). The "O" in DOC represents full circle or full moon. So the shape of the moon goes in this sequence:

-> Cut from left, then full moon, then cut from right, then new moon.

Note that sometimes it may not be exactly left or right, it may seem little tilted, but if you look carefully, you will be able to identify whether it is cut from left or right.



Observe the moon for a few days at the same time, say 9 pm everyday. Does it only change the shape or also its position in the sky every night?

Interesting moon bits



Once in a blue moon:

Sometimes there can be two full moons in a calendar month. (e.g. on 1st and 31st of the month). Then the second time moon is called blue moon. This will not happen in 2024.

A super moon is a full moon or new moon that occurs when the moon is at its closest point to Earth in its elliptical orbit. This makes the moon appear slightly larger and brighter than usual.





There are many other interesting names like blood moon or pink moon, and some more names for full moon in different months and seasons. Find out about them.



Gibbous:

The phase of the moon in which its illuminated part is greater than a half.



Crescent:

The phase of the moon in which its illuminated part is less than a half.



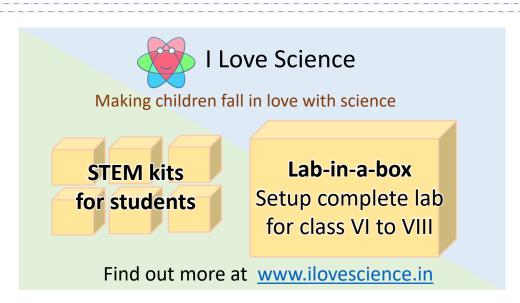


Study the pattern in the moon calendar, and count number of days between two full moons. You will find that it is not same for all months.

Find out why does it happen.

Look up in the sky. Observe moon, stars and planets and learn about our universe.





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