



# Super Blue Moon

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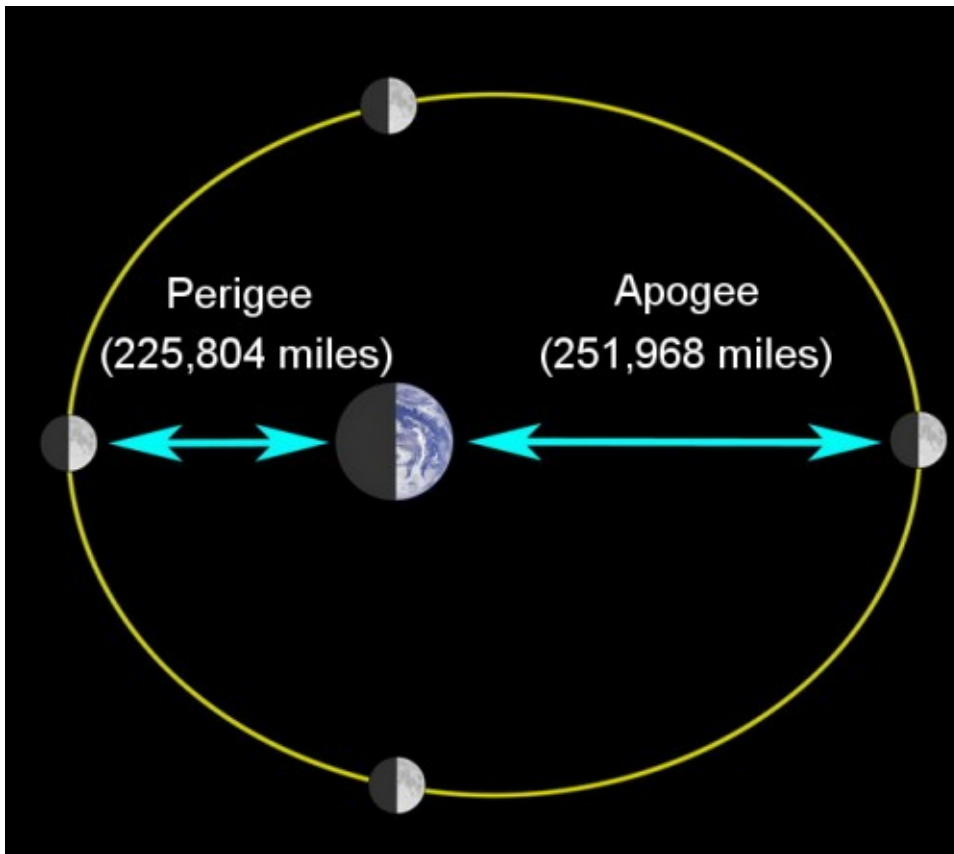
## Why in News?

On August 30, 2023, the night sky was illuminated by a **rare phenomenon: a super blue moon**. However, despite its name, this **full moon was neither blue in colour nor super in size**.

- The last blue supermoon was in 2009, according to the [National Aeronautics and Space Administration \(NASA\)](#), and the next is not expected until 2037.

## What is a Super Blue Moon?

- A super blue moon combines a **supermoon and a blue moon**.
- A supermoon occurs when the **moon aligns closely with Earth during its orbit, making it appear larger and brighter**.
  - This alignment, called **perigee, contrasts with apogee, when the moon is farthest** in its elliptical orbit around earth. While the difference is subtle, near the horizon, an **optical illusion can make it seem larger**.
  - The term "**supermoon**" was coined in 1979 by astrologer Richard Nolle.
- A blue moon is the **second full moon in a month**. Despite its name, **a blue moon isn't blue**; it's the traditional name for the second full moon in a month.
  - Sometimes, smoke or dust in the air can scatter red wavelengths of light, as a result of which the moon may, in certain places, appear more blue than usual, but this has **nothing to do with the name "blue" moon**.



▪ **Effect:**

- The moon's gravitational pull during a supermoon slightly affects tides, causing minor fluctuations in coastal high and low tides. However, the difference is **usually not significant enough to cause major disruptions.**

## THE RAREST FULL MOONS

			
<b>Supermoon</b>	<b>Blood Moon</b>	<b>Super Flower Blood Moon</b>	<b>Ring of Fire Eclipse</b>
<i>Supermoons look ~30% larger than regular full moons. They happen when the moon is both full and is also orbiting within 90% of perigee (the part of the Moon's orbit closest to Earth).</i>	<i>Occurs during a total lunar eclipse when the Earth is between moon and sun. During this time, the Moon is lit only by the edges of the Earth's atmosphere which scatters blue but not red light.</i>	<i>The Flower Moon is the second full moon of spring and May's full moon. When it also meets both "supermoon" and "blood moon" criteria, it becomes the Super Flower Blood Moon.</i>	<i>Occurs during a solar eclipse when the moon is between Earth and Sun and when the Moon is also further away in its orbit so that it only partially blocks the Sun, leaving a "ring of fire."</i>
			
<b>Micro Moon</b>	<b>Blue Moon</b>	<b>Harvest Moon</b>	<b>Cold Moon</b>
<i>A full Moon that happens at the same time that the Moon is furthest from Earth in its orbit. This makes the Moon look smaller and dimmer than usual.</i>	<i>The second full moon in a month. Full moons are 29 days apart, but most months are 30-31 days, so sometimes two full moons will happen within the same month.</i>	<i>The full, bright Moon that happens closest to the start of autumn. It got its name because the extra light was used by farmers to harvest crops for fall.</i>	<i>Also called "The Long Night Moon," this is the full moon that occurs in December closest to the winter solstice - the longest night of the year.</i>

**Related Reading:** [Total Lunar Eclipse](#)

