Leonid meteor shower 2026 for families: what a 47% Moon means

Peabody blog · Science · updated 2026-10-30

The Leonids peak the night of 16–17 November 2026. A half-lit Moon sets before midnight, so the dawn hours are dark. Is it worth an early alarm?

The Leonid meteor shower peaks on the night of 16–17 November 2026, by the American Meteor Society's calendar (some calendars say the night after). The Moon is a little under half lit and sets around 11 pm, so the hours that matter, before dawn, are dark. Expect up to about 15 an hour from a dark place, fewer from town. Our verdict: so-so, worth twenty minutes if someone's up early anyway. Peabody's Leonids page has the countdown.

Why the morning, not the evening

Shooting stars in a shower seem to come from one point in the sky, for the Leonids in the constellation Leo. Leo rises in the east around midnight. Before it is up, most of the Leonids are hidden below the horizon, so an evening look gives one or two at most. The best hour is the one before the sky starts to lighten, around 5 to 6 am in mid-November.

The Moon

On the peak night the Moon is waxing, about 47% lit. A growing Moon is up in the evening and sets before midnight, which is exactly what you want for a shower that's best before dawn. That's why the Moon doesn't cut the verdict this year.

Why "so-so" and not "great"

The Leonids are famous for storms: in 1833 and 1966 people saw thousands an hour, when Earth crossed fresh trails left by Comet Tempel-Tuttle. 2026 is an ordinary year. Fifteen an hour from a perfect sky means a back yard might give a few in twenty minutes. Leonids are the fastest meteors, about 71 kilometers a second, and the bright ones sometimes leave a glowing trail.

If you do go out

1. Set the alarm for the hour before dawn, around 5 to 6 am in mid-November.
2. Dress for the coldest part of the night. Hats, gloves and a blanket to lie on, not just one over you.
3. Face east, lie back and give your eyes twenty minutes without a screen.
4. Watch for quick, thin streaks. Leonids are fast; most are gone before anyone can point.
5. Stop at twenty minutes if nobody has seen one. You went out and looked, and that

counts.

One alarm, two things

The same hour before dawn has planets in it. Around 15 and 16 November, Jupiter and Mars are about a finger's width apart, high in the south-east; Venus is low in the east-south-east, very bright; and Mercury is just above the horizon in the east from about the 16th. If the Leonids are thin, the planets are there on any clear morning. Our planets before dawn post has where to look.

The Moon at bedtime instead

If a 5 am alarm is out, the evening has its own show. On 16 and 17 November the Moon is about half lit and in the south at 7 pm, three or four fists up; first quarter is on the 17th. A half Moon is the best shape for craters, because sunlight hits the edge between light and dark from the side and the shadows are long. Binoculars, held steady against a fence post, show them well.

What a shooting star is

A shooting star isn't a star. It's a grain of dust, about the size of a grain of sand, hitting the air so fast that it heats up and glows for a second. The Leonid grains come from Comet Tempel-Tuttle, which goes around the Sun every 33 years and leaves dust along its path. Earth drives through that dust every November.

Three questions grown-ups ask

Is it worth waking a child at 5 am? Only if they'd enjoy it as an adventure. A school-night alarm for a so-so shower is a hard sell; save it for the Geminids on 13–14 December, rated great this year.

Which way do we look? Anywhere, lying back. East is where Leo is, but the streaks cross the whole sky.

What if it's cloudy? The shower is active from early November to early December; the nights around the peak are worth a look too.

Peabody (peabody.kids) is free through the end of 2026, with no ads and no sign-up, and nothing your child taps on the space pages is sent anywhere. For a cloudy night, the library has stories at your child's reading level.

Sources

- American Meteor Society, meteor shower calendar.
- The Moon and the planets from Peabody's sky table, worked out with astronomy-engine; the moonset time is for Denver and moves a little elsewhere.

- NASA, meteors and meteorites: what a shooting star is.

Free at peabody.kids/blog/leonid-meteor-shower-2026