Moon phases for kids: the eight shapes, drawn, and why they change

Peabody blog · Science · updated 2026-10-30

The eight Moon phases for kids with pictures, the lamp-and-ball model that explains them, and how to tell a growing Moon from a shrinking one.

The Moon has eight named phases: new Moon, waxing crescent, first quarter, waxing gibbous, full Moon, waning gibbous, last quarter and waning crescent. The Moon never really changes shape. The Sun always lights half of it, and as the Moon travels around Earth, about once every 29 and a half days, we see more or less of that sunlit half. Peabody draws all eight at /space/moon/phases, and tonight's Moon on the Moon calendar.

The eight, in order

- New Moon: the lit side faces away; you can't see it.
- Waxing crescent: a thin curve lit on the right, in the west after sunset.
- First quarter: the right half lit; up in the afternoon and evening.
- Waxing gibbous: more than half, still growing.
- Full Moon: all lit; rises at sunset, up all night.
- Waning gibbous: more than half, shrinking from the right; rises after dark.
- Last quarter: the left half lit; rises around midnight.
- Waning crescent: a thin curve on the left, before sunrise.

"Waxing" means growing and "waning" means shrinking. "Gibbous" means bulging, more than half.

Make it in a dark room

A lamp with the shade off is the Sun, your head is Earth and an orange held at arm's length is the Moon. Face the lamp with the orange just above it: dark, new Moon. Turn slowly to your left and a crescent appears on the right, then a half, and with your back to the lamp a full face. Keep turning and it shrinks. Our guide to why the Moon changes shape walks through it.

Growing or shrinking?

In the Northern Hemisphere: lit on the right, growing; lit on the left, shrinking. In Australia it's the other way round, because they see the Moon from "upside down".

The next phases, dated

From our sky table. A phase is an instant, so when one falls near midnight the date depends on your time zone; those are marked.

- New Moon: 9 November (the 8th in Pacific, Alaska and Hawaii time), 8 December, 7 January 2027.
- First quarter: 17 November, 16 December (the 17th in Eastern time), 15 January 2027.
- Full Moon: 24 November, 23 December, 22 January 2027.
- Last quarter: 1 November, 30 November (1 December in Eastern and Central time), 30 December.

Start a Moon journal

The phases make sense fastest when a child watches them happen. Print the Moon journal: thirty blank Moons, one a night.

1. Start just after new Moon. Around 11 to 13 November, and again 10 to 12 December, a thin crescent is low in the west after sunset, and the journal fills from there.
2. Go out at about the same time each evening and draw the shape you see, shading the dark part.
3. Write where it was: low in the west, high in the south.
4. Expect gaps. The Moon rises about 50 minutes later each day, so after full it becomes a bedtime Moon and then a morning one. Clouds are allowed too; leave that box blank.

Over two weeks the drawings show the crescent growing to full, with the lit side always facing the way the Sun went down.

What to say when a child asks why

For a five-year-old: "The Moon is a ball and the Sun is its lamp. Half of it is always lit. As it goes around us, we see more or less of the bright half." For an older child, add the month: the Moon goes around Earth in about 27 days, but Earth is moving around the Sun at the same time, so it takes about 29 and a half days to come back to the same shape.

Three questions grown-ups ask

Is the dark part Earth's shadow? No. Earth's shadow only reaches the Moon during an eclipse of the Moon, a few times a year.

Is there a worksheet? Yes: the Moon journal prints thirty blank Moons to colour, one a night.

Do the full Moons have names? Many traditions name them. We don't use the names; we give the dates.

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. After a week of drawings, the

waxing or waning quiz is a good check, and the library has stories at your child's reading level for the cloudy nights.

Sources

- Phase dates from Peabody's sky table, worked out with astronomy-engine (MIT license).
- NASA, Moon fact sheet.

Free at peabody.kids/blog/moon-phases-for-kids