

Moon Phases Investigator Guide

The Moon is an easy object for young scientists to study. One of the best places to start is by making simple observations of the Moon on different days, drawing its shape, and noticing that the shape changes over time, and that there is a pattern to those changes. This is an appropriate activity for children ages 4 to 10; only when they are older will they be ready to understand the *reason* for phases.

In this activity, you and your child will put together a booklet that you can use at home to record regular observations of the Moon over one to 3 months.

What You Need:

- [Moon Phases Investigator Guide](#) printed double-sided, folded in half and stapled to create a small book
- A pencil
- About 5 minutes daily over a month

What to Do:

- On each clear day, go outside with your children and look at the Moon.
- Ask your children to draw the Moon inside their Investigator Guide, and to write down the date.
- After several observations, ask you children how the Moon is changing—is it getting bigger (waxing) or smaller (waning)?
- After a month, examine what your child has observed. Ask your children if there is a pattern to the Moon's shape. Invite them to predict what they will see for their next observation.

Parent Prompts:

What happens after a Moon is full (completely round)? (It begins to get smaller, or wanes.)

Does the Moon ever repeat the same shape? (Yes, it returns to the same shape after a month.)

Can we see the Moon during the daytime? (Yes, most phases of the Moon can be seen in the daytime and at night. The only phase that is unlikely to be seen in the daytime is the Full Moon.)