

Moon Cycle Journal

Estimated Time: 20 minutes each night for 28 days

SUMMARY

The Moon rises and sets every day and it goes through a cycle of phases over the course of four weeks. By going out regularly you can see the Moon change as it orbits the Earth.

WHAT YOU'LL LEARN

- The phases of the Moon and it's progress over the month.

Materials Used	Resources Used
<ul style="list-style-type: none"> • Pencil and moon chart handout 	<ul style="list-style-type: none"> • Moonrise and Moonset Calculator https://www.timeanddate.com/moon/ • NASA: What are the Moon's Phases? https://spaceplace.nasa.gov/moon-phases/en/

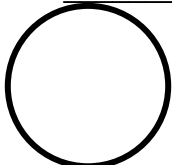
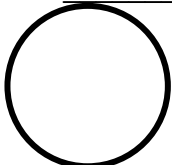
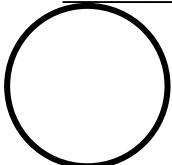
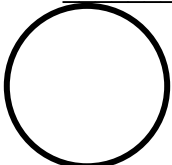
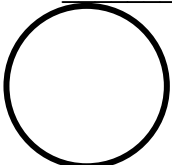
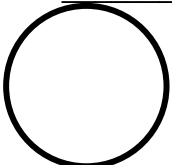
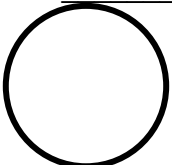
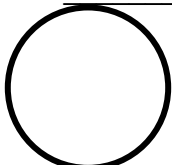
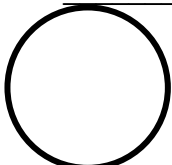
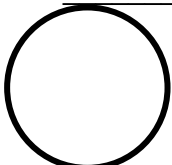
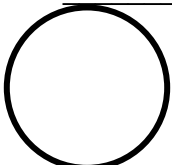
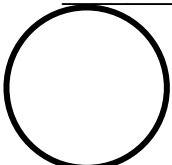
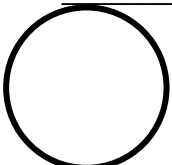
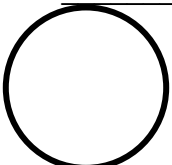
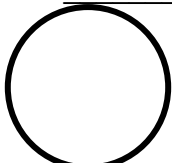
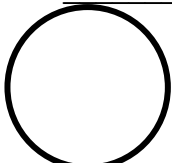
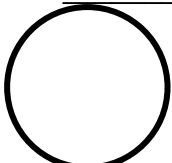
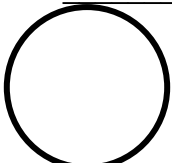
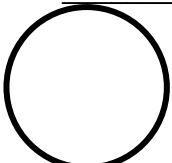
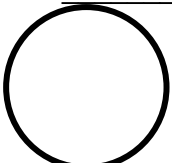
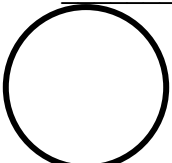
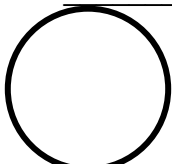
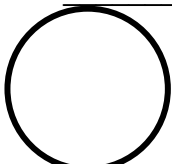
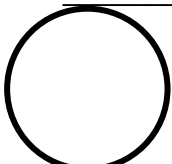
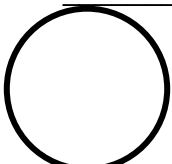
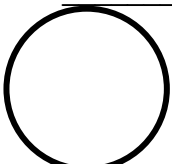
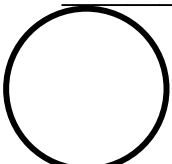
WHAT TO DO

1. Use the [Moonrise and Moonset Calculator](https://www.timeanddate.com/moon/) in the Resources Used section to find when the Moon will be visible near your house. Go out when the Moon is in the sky and fill out the first square of the Moon Cycle Journal.
2. Repeat Step 1 when you're able to go out again and write down more observations of the Moon. It's not going to ruin the project if you can't make observations one day because of weather or schedule but if you miss a day, also skip a space on the Moon Cycle Journal. This will have the cycle line up accurately.
3. Once your Moon Cycle Journal is finished, take a look at the changing appearance of the Moon. Does it follow any patterns? Do you see when it reaches the halfway point?
4. Use the link in the Resources Used section to the NASA page entitled "[What Are the Moon's Phases?](https://spaceplace.nasa.gov/moon-phases/en/)" This allows you to label the Full Moon, First Quarter, New Moon, Third Quarter, and the different waning and waxing stages. It will also show you the full context of what you just charted!

TIPS

- The Moon goes through phases over the course of about four weeks: one week to go from full to only half-illuminated, another week to become fully dark, a third week to become half-illuminated again, and a final week to become full. Depending on when you started your Moon Cycle Journal your first observation might be any of these phases but you should see them all as you continue through the cycle.
- Originally, the word "month" referred to this cycle (which is why the word is so close to "moon") and months today are still close to 28 days long for this reason. However, in a year of 365 days we go through thirteen lunar cycles and thirteen is an unlucky number. That's why the thirteenth month (and the one extra day) got split amongst the other months and the day count now is 28 and a few more.
- This activity can be easily extended by doing observations month after month. After your first cycle, try to predict which day a phase will occur on and see if you are right!

Moon Cycle Journal

Day 1 Date: _____ Time: _____ 	Day 2 Date: _____ Time: _____ 	Day 3 Date: _____ Time: _____ 	Day 4 Date: _____ Time: _____ 	Day 5 Date: _____ Time: _____ 	Day 6 Date: _____ Time: _____ 	Day 7 Date: _____ Time: _____ 
Day 8 Date: _____ Time: _____ 	Day 9 Date: _____ Time: _____ 	Day 10 Date: _____ Time: _____ 	Day 11 Date: _____ Time: _____ 	Day 12 Date: _____ Time: _____ 	Day 13 Date: _____ Time: _____ 	Day 14 Date: _____ Time: _____ 
Day 15 Date: _____ Time: _____ 	Day 16 Date: _____ Time: _____ 	Day 17 Date: _____ Time: _____ 	Day 18 Date: _____ Time: _____ 	Day 19 Date: _____ Time: _____ 	Day 20 Date: _____ Time: _____ 	Day 21 Date: _____ Time: _____ 
Day 22 Date: _____ Time: _____ 	Day 23 Date: _____ Time: _____ 	Day 24 Date: _____ Time: _____ 	Day 25 Date: _____ Time: _____ 	Day 26 Date: _____ Time: _____ 	Day 27 Date: _____ Time: _____ 	Day 28 Date: _____ Time: _____ 