

WINDOW MOON PHASES

Study the Moon's phases with these window clings

What you'll need:

- 4 cups boiling water
- A heat-safe bowl
- A whisk
- 2 tbsp unflavoured gelatin
- 2 rimmed baking sheets
- A spoon
- Toothpicks (optional)
- Food colouring (optional)
- Moon phase template (provided)
- Wax paper
- A round cookie cutter (or other round tool)
- A butter knife
- A spatula

Create:

1. In a heat-safe bowl, combine gelatin and hot water with a whisk until the gelatin dissolves. Be sure to ask an adult for help handling the hot water. Tip: If you notice any air bubbles in your mixture, smooth them out with a spoon.
2. Pour the mixture into two rimmed baking sheets. The mixture should be spread evenly (about 1/2 inch thick) across the baking sheets. Let it sit for about 15 minutes.
3. To add some colour to your Moon phases, add a few drops of food colouring to the gelatin mixture and swirl it around with a toothpick. Don't wait too long to begin this step—your gelatin will begin to harden about 30 minutes after you've mixed it.
4. Set the gelatin mixture aside for a couple of hours. For best results, leave it out overnight uncovered.
5. Once your gelatin has hardened, it's time to create your Moon phases. Print off the template provided below. No printer? No problem! Use the digital template as a guide to recreate the phases.
6. Place a piece of wax paper over the Moon phase template (if using). Then, use a round cookie cutter or other small round tool (e.g. the top of a small glass) to cut out seven circles. Carefully remove the circles from the pan and place them on top of your wax paper.
7. Use a butter knife to carefully carve out the shapes of the different phases. Trace the shapes over the template on your wax paper, or use the digital template as a guide.
8. Once your shapes are complete, lift the Moon phases off the wax paper using a spatula. Place them on a window or other flat glass surface.

Tips:

- If the gelatin mixture sticks to your cookie cutter, try spraying the rim of the cookie cutter with non-stick spray or rimming the edges with cooking oil.
- If your Moon phases are too wet or heavy to stick to the window, leave them out overnight to allow more water to evaporate from the gelatin mixture.

Play:

When you're sticking your Moon phases on your window, try to arrange them in order from New Moon (no window cling) to Full Moon (round window cling). Then, check out the Moon in the evening: What phase is it in right now? Consider writing down your observations in a notebook.

Try looking at the Moon every evening and keeping track of its appearance in your notebook. If you leave the clings on your window for about 30 days, you will see the real Moon match every phase of your window clings throughout the month!

Note: The more you handle your Moon phases, the less clingy they will become. Once you've attached them to the window, try to leave them until you're ready to discard them.

Learn:



The Moon has phases because it orbits the Earth. This means it travels all the way around the planet, just like the Earth travels around the Sun. The Moon looks different from Earth throughout the month because it has travelled to a slightly different position each day and night. Together, the Moon phases make up a full cycle that is repeated every 29.5 days.

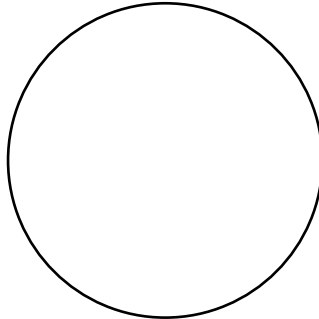


As you can see, some Moon phases appear much brighter than others. However, the Moon itself doesn't emit light. Instead, the light of the Sun reflects off the surface of the Moon. A bright full Moon happens when the Moon is fully facing the Sun, while a darker New Moon occurs when the Moon is in shadow between the Earth and the Sun. When the Moon appears brighter from one night to the next, it is called a waxing Moon. When it appears darker, it is called a waning Moon.

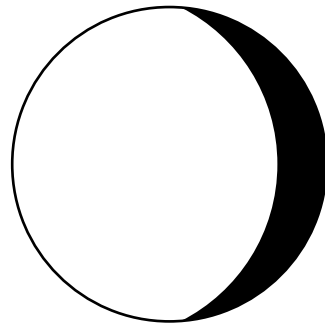


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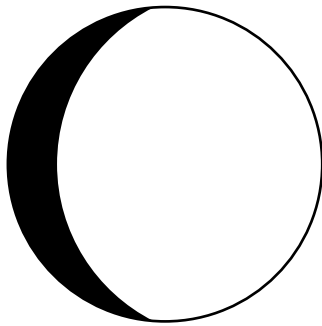
Full Moon



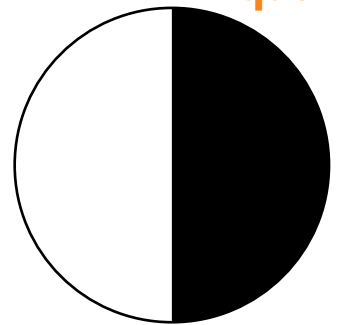
Waning gibbous



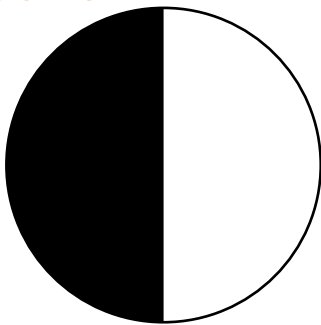
Waxing gibbous



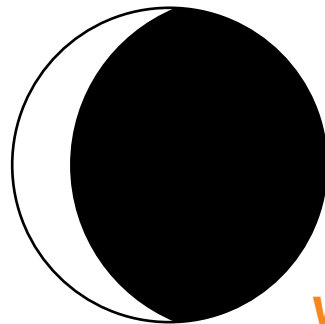
Last quarter



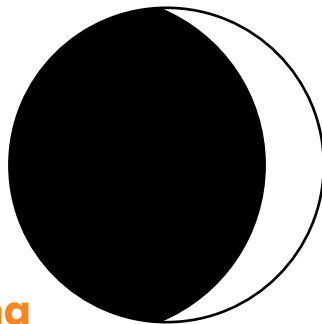
First quarter



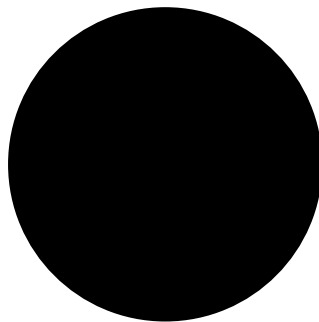
Waning crescent



Waxing crescent



New Moon



The Moon isn't visible during this phase, so no window cling is needed.