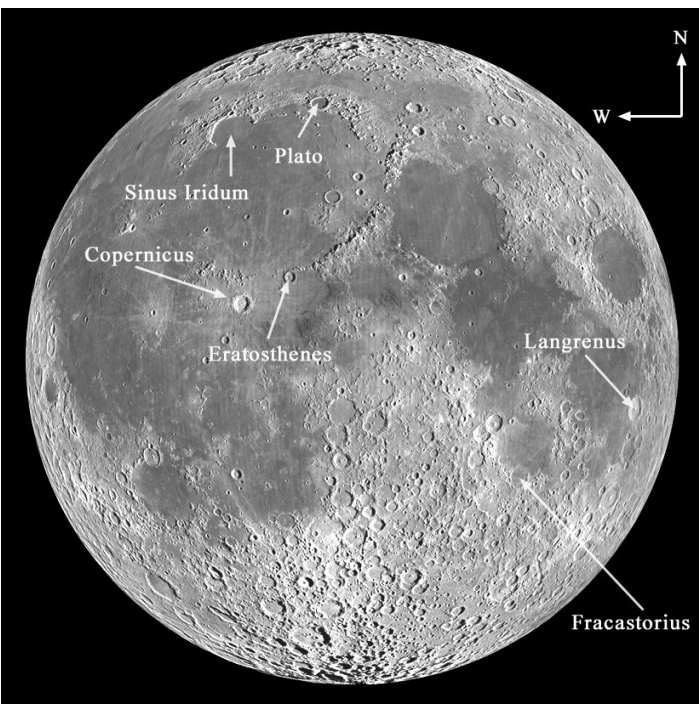


Impact Craters

What They Are

Impact craters are the shallow, round depressions caused when asteroids or other objects hit the moon's surface. They range in size from microscopic to over 100 miles in diameter. Simple craters resemble shallow bowls, while complex craters may have central peaks, lava-flooded floors, and other details.



Why They're Cool

Craters undergo amazing changes in appearance as the moon's phase changes, and even big craters can be hard to see near full moon when there are few shadows. Craters big enough to see in small telescopes are at least several miles in diameter! A portion of the rims of Sinus Iridum and Fracastorius is missing, probably because they sank a bit as the lunar "seas" formed, and were flooded by later lava flows. Langrenus can be a real challenge to find at the waxing crescent moon!

When To See Them

The best time to see any crater is when it has lunar sunrise or sunset. That's when its shadow is most dramatic, making the crater stand out. In the times below, each crater is best near the start and end of its time, but may nearly disappear in the middle!

Plato: about 9 to 22 days after new moon.

Copernicus: about 10 to 23 days after new moon.

Langrenus: visible only briefly from about 4 or 5 days and 15 or 16 days after new moon, but not between those times.

Eratosthenes: about 9 to 19 days after new moon.

Sinus Iridum: about 10 to 24 days after new moon.

Fracastorius: about 6 to 8 and 17 to 18 days after new moon, but not between those times.

Where They Are

Craters are easily seen in the smooth, dark "seas" and "oceans" of the moon, but are the dominant features of the brighter highlands. Since this set of craters for small telescopes is far from complete, be sure to look for others listed with other areas in the Lunar Top 10!