Every person in the Northern Hemisphere, when they look up at the full moon, sees a face like a smiling snowman—the man in the moon. Throughout history, he has inspired legends.

In many European cultures, he was a man banished to the moon for stealing from his neighbors—or for working on Sunday. (Good thing that’s not a banishable offense today!)

Coastal Germans, recognizing the moon’s tidal connection, believed he was a giant who poured water on Earth to create high tide.

In Norse legend, the man kidnapped two children to have them fetch that water, a story that would become Jack and Jill.

In the Southern Hemisphere, however, the man’s face is upside down, which makes it look like a rabbit—with legends all its own.

The eyes of the man and the body of the rabbit are actually basalt flats caused by ancient lava flows. But why do all people on Earth see this same view?

The answer is something called tidal locking—most moons are tidally locked to their planets.

Soon after the moon formed, the powerful pull of Earth’s gravity created a bulge near the moon’s equator.

Gravity kept pulling the bulge toward Earth, slowing the moon’s rotation till it was perfectly in synch with the moon’s orbit around Earth, meaning that only one side of it faces Earth, and always will.

So what exactly is on the other side of the moon? You’ll have to wait till another EarthDate to find out.
Synopsis: On Earth we always see the same side of the moon; it orbits in perfect sync with Earth’s rotation. Dark shapes on the face of the moon have inspired folklore through the ages. In the Northern Hemisphere, we tell stories about the “man in the moon,” while our equatorial and Southern Hemisphere friends picture the “rabbit in the moon.”

Many myths and legends about the moon relate to our view of the moon. The orientation of the same dark and light spots on the moon shifts from the Northern Hemisphere to the equator to the Southern Hemisphere, resulting in a variety of stories.

We always see the same side of the moon, no matter what phase it is in.

The perfectly synchronized orbit of moon with Earth, called tidal locking, is caused by gravity.

It’s not as romantic as folklore, but the dark shapes we see on the near side of the moon are actually geologic features.

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