

## Stargazing

today's calendar is rooted in ancient astronomy



Astronomy is related to our every-day lives—even the calendar we use. The Gregorian calendar that we use today dates back to the papacy of Pope Gregory XIII. In 1582, he altered the existing Julian calendar. The Julian calendar worked pretty well, but it did not do a good job of accounting for the fact that the earth's revolution about the sun is not exactly 365 days. The effect was that over long periods of time, the seasons moved through the months of the year. Pope Gregory's solution to this in 1582 was to make an adjustment. He removed 10 days from the calendar that year by decreeing that the day following October 4, 1582, would be October 15, 1582. Landlords were incensed that they were being cheated out of rent, but the changes held, and slowly the world adopted this calendar system. So today we have a 365-day year that includes 12 months, and every 4 years we make an adjustment by adding a leap day. This keeps the planet's seasons in line with our months, and we won't have to make another 10-day adjustment. Landlords, relax.

What about the other units of time on our calendar? A week is the unit of time on our calendar that seems to make the least sense. Unlike a day or a month, the unit of seven days has no meaning in the world of astronomy. It turns out that there are 5 visible, or naked-eye, planets that have been known since ancient times: Mercury, Venus, Mars, Jupiter and Saturn. Add to these the two other prominent astronomical objects in our sky—the sun and the moon—and you have the 7-day week.

You can see that the sun was given Sunday, Saturn got Saturday, and the moon Monday, but what of the others? We find the answers in ancient Saxon: Mercury was known as Woden, and evolved into Wednesday; Frigg was Venus and thus became Friday; Mars was known as Tyr or today's Tuesday, and Thor was Jupiter's appellation, becoming Thor's Day or Thursday.

So literally, astronomy IS every day of our lives! 🏠

—Lisa Daly