



Photo:

Children with their parents and teachers are shown looking through telescopes with the Big Dipper above them in Colfax, WI November 2024.

Members of the Chippewa Valley Astronomical Society provided telescopes to view the moon and other celestial objects at the elementary school.

Note the Big Dipper in the sky.

“Planetary Oppositions Can Guide Your Finances”, essay by Lauren Likkel

Jupiter has been high in the sky in the evening lately, and that stirred a memory of the first time I ever saw Jupiter through a telescope. My middle school science teacher had organized “Astronomy Night”, and there were two telescopes that we could look through. It was the first time I ever saw a telescope in person. And it was the first time I ever saw Jupiter, because I remember being surprised that you could actually see a planet in the sky. It was like finding out that planets were real things.

Our science teacher had some friends who brought their own telescopes to create that “Astronomy Night” in 1970, and each telescope was supervised by a man who told us what we were looking at. I know I was 12 years old, because one telescope guy told me that Jupiter was at the same place in the stars that night as it was when I was born, because I was 12 years old and Jupiter takes 12 years to orbit the sun. They also said that Jupiter was near opposition that night. I misunderstood that “opposition” was a special place in the stars and so I thought that Jupiter was in opposition every 12 years. I have since learned that “opposition” is when Earth is passing Jupiter in orbit around the sun. Earth is nearer the sun, so the sun and Jupiter are on ‘opposite’ sides of the Earth at opposition. So oppositions don’t happen every 12 years on my birthday (I was confused on that point for years). Jupiter oppositions happen almost every year because it takes Earth one year to get back to the place where it was lined up with Jupiter and it takes about a month more for Earth to catch up to it. The last Jupiter opposition was in December 2024 and the next will be January 2026.

Saturn takes much longer to orbit the sun once, 29.5 years. So from Earth we see it move slowly across the stars, returning to the same place 29.5 years later. When I was 29.5 years old, Saturn was in the same constellation that it was in when I was born. And it was in the same place among the stars 29.5 years after that, when I was 59 years old. It is a myth that ancient people recorded the passage of Saturn to determine when they could withdraw money from an IRA (Individual Retirement Account) without penalty, since that age

is 59.5. Yes, you will be about 59.5 years old when Saturn has returned twice to the constellation it was in when you were born. But would be prudent to check your precise age with a calendar before making IRA withdrawals.

--Lauren Likkel is a member of the Chippewa Valley Astronomical Society