




February Skies over the Pinnacles

February 2022

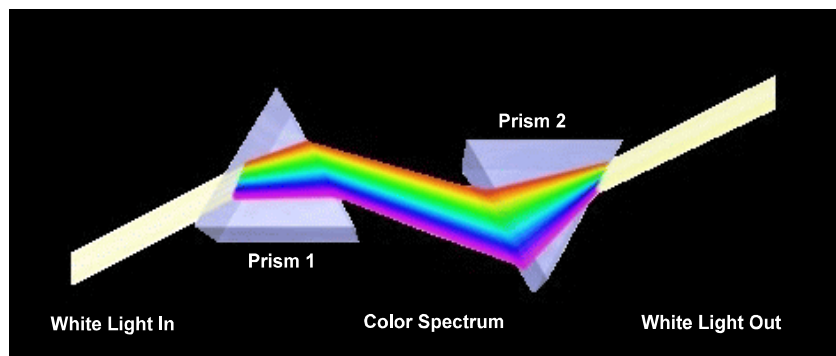
February's four principal phases of the moon

February 1	New Moon	
February 8	First Quarter	
February 16	Full Moon	
February 23	Last Quarter	

The Romance of Science

If you are like me, you might remember high school science class as being boring and a little tense. Boring, because the teacher might not have linked the subject to anything in *your* life. Tense, because in order to get credit for whatever effort you put into the class the answer you got had to be the same answer in the textbook. The astronomer and educator, Carl Sagan, suggested that the results science students got from their experiments in class didn't matter as long as they could correctly explain the results they got.

Sagan believed that the wonder of science is what makes it so attractive. But so many of us feel that this is a field fit only for nerds and the unsociable. For Christmas, my wife gave me the book, ***Unweaving the Rainbow*** by Richard Dawkins. This book (1998) addresses the romantic attraction of science. The title refers to the discovery, in 1666, when Isaac Newton used a glass prism to separate the colors of light in a sunbeam and used a second glass prism to recombine the colors back into white light.



In 1817 the English poets John Keats and William Wordsworth attended a dinner when they criticized Newton for taking the romance out of the rainbow by describing it scientifically. You may agree with Keats and Wordsworth, but I think that by understanding something in nature scientifically, we add another dimension to our appreciation of it.

This simple experiment led to the invention of the spectroscope that has many uses today. Its most amazing use is its ability to tell us what stars are made of, how big they are, how fast they spin and where in the Cosmos they are headed. The spectroscope also showed astronomer Henrietta Swan Leavitt, and later, Edwin Hubble, that the entire Universe is expanding.

Mathematicians describe the beauty of an elegant mathematical proof, entomologists describe the beauty of insects. Here's one that I spotted recently. Beautiful, isn't it?



Astronomers often describe even the most mundane, distant and fuzzy objects as “wonderful”.

Union Church is sponsoring a discussion group via Zoom on the relationship between science and religion. The discussion is open to all.

To learn more, go to their website at <https://union-church.org/>

I'll close with a quote from Carl Sagan:

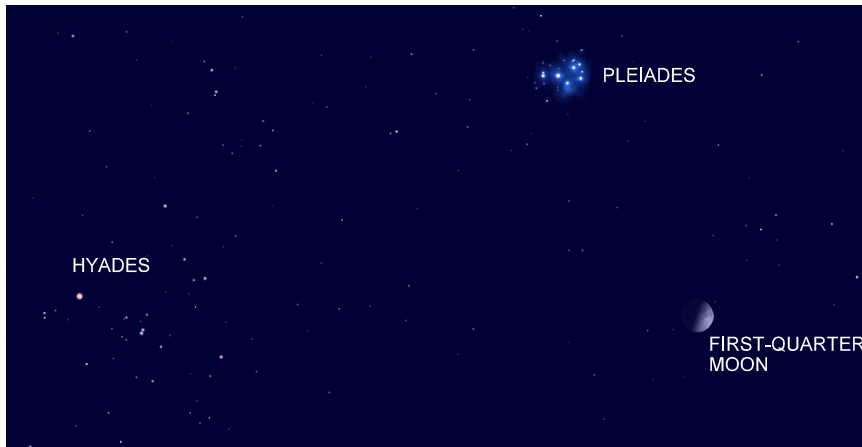
The notion that science and spirituality
are somehow mutually exclusive
does a disservice to both.

Attractions in February

February 2 As soon as it gets dark, look low in the west to catch the thin crescent Moon and the planet Jupiter setting together.



February 8 Look high in the southwest and spot the first-quarter Moon about three fingers below the beautiful Pleiades.



February 9 Now look again to see how much the Moon moves in the sky in one Earth day.



February 18 Tonight, or any night in late February, find a dark spot away from city lights look for a faint pyramid-shaped glow stretching from the western horizon up through the constellations Taurus and Gemini. If you do, you're seeing light from the Sun reflecting off dust between the planets. It's called Zodiacal Light.

February 20 The waning (shrinking lit area) gibbous Moon can be spotted at 11:30 as it follows the star Spica into the sky, separated by about 3 fingers.



February 20 If you're up early, take a look in the predawn eastern sky to catch quite a grouping. You'll be treated to the waning crescent Moon, reddish Mars and Venus before the rising sun blots them all out.

