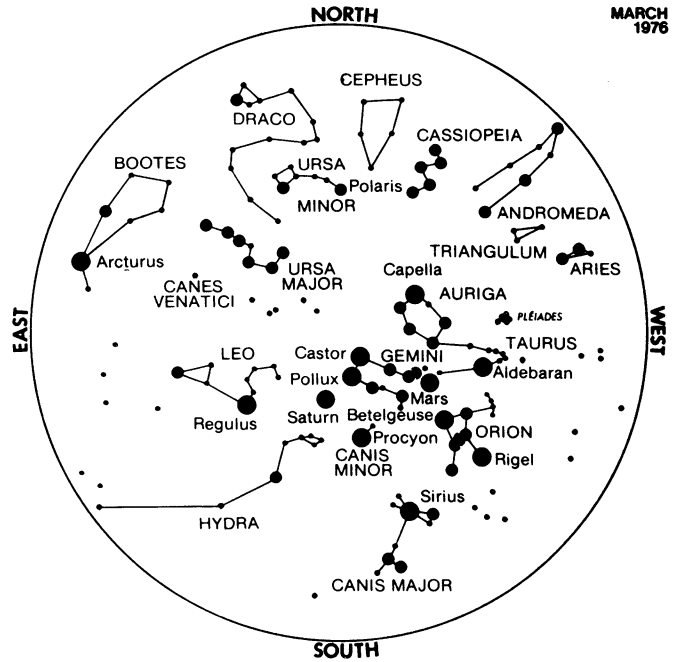


# STARS OF MARCH

MARCH  
1976

## CELESTIAL TIME TABLE

March	3	midnight	Moon farthest from earth, distance 252,300 miles
	4	3:00 am	Moon passes north of Jupiter
	8	11:38 pm	Moon in first quarter
		2:00 pm	Moon passes south of Mars
	11	10:00 pm	Moon passes south of Saturn
	13	10:20 pm	Algol (variable star in Perseus) at minimum brightness
	15	9:53 pm	Full moon
	16	2:00 pm	Moon nearest, distance 222,200 miles
		7:10 pm	Algol at minimum
	20	6:50 am	Sun over equator, spring begins in Northern Hemisphere
	22	1:54 pm	Moon in last quarter
	30	12:08 pm	New moon
	31	5:00 am	Moon farthest, distance 252,600 miles



BY JAMES STOKELY

Of the three bright planets that shine in the March evening sky, Jupiter is the most brilliant. At the first of the month it sets about 9 p.m. local standard time. Earlier in the evening it will be in the west in the constellation Pisces. By the end of March, after it has moved into the next-door group of Aries, it will set about two hours earlier—just about the time the sky becomes dark after twilight has ended.

Second brightest is Saturn, overhead at the boundary between Gemini and Cancer. Almost in line with Castor and Pollux, the two brightest stars in Gemini, it is farther south and considerably brighter than either. It sets in the early morning.

Mars is farther west and just above the

stars of Taurus. It's the faintest of the three, although still ranking as first magnitude. Saturn is about  $1\frac{3}{4}$  times as bright as Mars, while Jupiter is more than five times as bright as Saturn.

Of the evening stars the brightest is Sirius, to the southwest in Canis Major, a little fainter than Jupiter. It shines, however, with the scintillating brilliance of a star rather than the steady glow of a bright planet.

To the right of this group is familiar Orion, which has two first-magnitude stars. Rigel, which is brighter, is nearer the horizon; Betelgeuse stands above it. Between them is the row of three fainter stars forming Orion's belt. Farther to the right and about as high as Orion you'll

see Taurus with Aldebaran, the brightest star.

Sunrise is considered the time when the sun's upper edge, not its center, first appears above the horizon. Similarly, sunset is the last appearance in the west of the upper edge. In addition, refraction in our atmosphere bends the sun's rays around the curve of the earth and makes the sun appear a little higher than it really is. Actually, we can see the entire disk of the sun when it is really completely below the horizon.

If there were no atmosphere to cause such refraction, and if we used the center of the sun to mark sunrise and sunset, day and night would be the same length at the equinoxes in March and September. □

## PRODUCTS

PRODUCTS are selected and listed as an editorial service. The claims are the manufacturers'. For further information circle the appropriate number on the postpaid, self-addressed Reader Service Card in the center of this issue.

**Plant-growth study kit** includes self-contained, disposable seed germinator and greenhouse with soil, seed, container and water reservoir for individual student use in classrooms or laboratories.

*Gro-Vue*

Circle No. 128 on Reader Service Card

**Plastic lab bins** are chemically inert, made of corrugated polyethylene, and available in seven sizes with optional partitions.

*Science Related Materials*

Circle No. 127 on Reader Service Card

**Digital lab timers** claim .01 percent accuracy from .1 millisecond to 10,000 seconds, with manual or remote control triggered by light, sound, radiation or other means.

*Krell Electronics*

Circle No. 126 on Reader Service Card

**Melting-point apparatus** makes determinations up to 350°C and reads to 0.2°C without interpolation. Lighting system provides shadowless illumination of three samples at a time against a white or black background. Vent system for rapid cooling.

*National Instrument Co., Inc.*

Circle No. 49 on Reader Service Card

**Flameless electric burner** can deliver a controlled heat steam at temperatures up to 1,100°F, reaching maximum heat within 60 seconds. Operates on 120 volts with air pressure of 6 to 30 psi.

*GTE Sylvania Inc.*

Circle No. 50 on Reader Service Card

**Powder-feeder** for flame-spraying, chemical reactions and other applications operates at flow rates up to 50 pounds per hour and at pressures from a few millimeters of mercury up to more than 50 psig.

*TAF*

Circle No. 51 on Reader Service Card

**Three-axis rotator** provides positioning for aligning prisms and retardation plates perpendicular to an optical beam. Resolution on the optical axis is to 5 seconds of arc, with readout to .5 minute.

*Oriel Corp.*

Circle No. 53 on Reader Service Card

**Immersion oil in microscopy** is the subject of a free reprint including theoretical aspects, technical specifications and history.

*R.P. Cargille Laboratories, Inc.*

Circle No. 129 on Reader Service Card