## Mercury appears in March

by James Stokley

The planet Mercury, visible during March for perhaps the only time in 1972, is the smallest of the principal planets. (This does not include the minor planets or asteroids, thousands of which move in orbits mainly between those of Mars and Jupiter.) It will be visible around the middle of the month low in the west at dusk—setting about an hour and a half after sunset.

Mercury's diameter of a little over 3,000 miles is considerably less than the 8,000 miles of earth. Mercury takes 88 days to go once around the sun. Until a few years ago astronomers thought it turned once on its axis in the same period. If so, it would always keep the same face toward the sun. (In the same way the moon, which turns on its axis and encircles the earth in the same 27-day period, always keeps the same hemisphere toward earth.)

In that case, the half of Mercury toward the sun would have temperatures high enough to melt lead; the dark half would be extremely cold—hundreds of degrees below zero. However, a few years ago radar observations showed that Mercury rotates once in 59 days, so all parts of its surface are exposed to the sun. The range of temperature from noon to midnight, however, is still large.

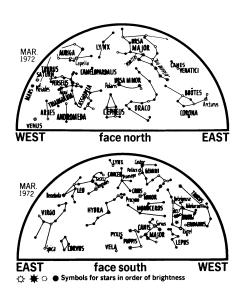
Through a telescope Mercury is seen to go through changes in phase just as the moon does. This occurs as more or less of the sunlit hemisphere is turned toward earth. When Mercury

CELESTIAL TIMETABLE March EST 3 11:50 pm Algol at minimum brightness Moon farthest, distance 251,850 miles 2:00 pm Algol at minimum Moon in last quarter Moon passes south of 8:40 pm 2:05 am 11:00 am Jupiter Algol at minimum Mercury farthest east 5:30 pm 5:00 am of sun 6:35 am 3.00 pm New moon Moon passes north of Mercury Moon nearest, distance 223,750 miles 4:00 pm Moon passes north of Venus 1:00 pm 18 9:00 am Moon passes north of Mars 8:00 pm Moon passes north of Saturn Equinox-7:22 am 20 -sun over Equinox—sun over equator and spring commences in Northern Hemisphere Moon in first quarter Algol at minimum Full moon Algol at minimum Mercury passes between sun and earth 9:12 pm 10:20 pm 3:05 pm 7:10 pm 7:00 am

is out beyond the sun we see the whole bright half and it's full. But as it moves toward earth most of the illuminated part is turned away from earth, and it appears as a crescent.

Three other planets are visible in March. Venus is low in the west at early twilight before any other planet, or star, has appeared. Saturn is high in the west in the constellation Taurus. Mars is below Saturn.

The maps show the sky at 10 p.m. local standard time at the beginning of March; 9 p.m. on the 15th and 8 p.m. on the 31st.





science news, vol. 101

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