

★ * ○ • SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

since a very clear and unobstructed sky down to the horizon is required both in the east and west, it is seldom that one can actually do this, even when other conditions are right.

Continuing with the phases of the eclipse, between 7:30 and 8:40 p.m. EST, the moon is emerging from the umbra, and once again the curved edge of the earth's shadow will be seen crossing the disk. By the time it is over, the moon will have risen even along the Pacific coast, and observers there will be able to see the final phases.

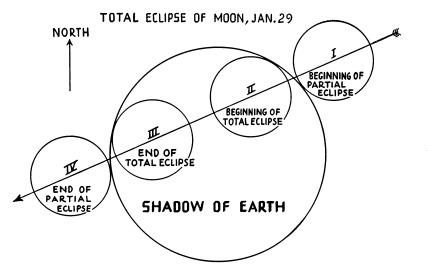
Between 8:40 and 9:55 p.m. EST, the moon will still be in the penumbra, but again it will be hard to notice it. However, if one watches carefully during this period, he may see that the moon gets appreciably brighter as it comes into the full brilliance of the sun.

While the moon is partially eclipsed, it will still be visible, even though completely immersed in our shadow. This also is due to refraction of the atmosphere, which bends the sun's light enough to let it fall in the umbra. However, as this light passes through the atmosphere, some of its blue rays are scattered, thus giving the daytime sky its blue color. With blue removed, the light falling on the eclipsed moon is predominantly red, which gives it a characteristic coppery color.

Celestial Time Table for January

an.	EST	
2	1:00 a.m.	Earth nearest sun, distance 91,-
		446,500 miles.
3	7:42 p.m.	Algol (variable star in Perseus)

at minimum.
4 5:00 p.m. Moon farthest, distance 251,800 miles.



The large circle represents the shadow of the earth, and the small circles, I, II, III and IV, indicate the successive positions of the moon as it passes through the shadow. North is toward the top. The four phases shown occur at the following times:

I	4:54 p.m. EST	3:45 p.m. CST	2:54 p.m. MST	1:54 p.m. PST
II	6:05	5:05	4:05	3:05
III	7:30	6:30	5:30	4:30
IV	8:40	7:40	6:40	5:40

4:30 p.m. Algol at minimum. 8 5:09 a.m. Moon in last quarter. Moon passes Saturn. 9 3:57 a.m. 9:08 a.m. New moon. 16 6:00 p.m. Moon nearest, distance 223,600 miles. Venus passes Mars. 9:00 p.m. 18 3:48 a.m. Algol at minimum. 8:01 p.m. Moon passes Venus. 12:36 a.m. Algol at minimum. 2.T 12:43 a.m. Moon in first quarter. 9:23 p.m. Moon passes Jupiter. 9:24 p.m. Algol at minimum. 26 6:12 p.m. Algol at minimum. 6:44 p.m. Full moon, moon totally eclipsed. 10:00 a.m. Venus farthest east of sun; now visible longest after sunset in evening.

Subtract one hour for CST, two hours for MST, and three for PST.

Science News Letter, December 27, 1952

NUTRITION

Obesity Is Now No. 1 U. S. Nutritional Problem

➤ OBESITY HAS replaced vitamin deficiency diseases as the number one nutritional problem in the United States, Dr. W. H. Sebrell, Jr., director of the National Institutes of Health, U. S. Public Health Service, said.

Dr. Sebrell, speaking before the National Food and Nutrition Institute in Washington, said one-fourth of the adult population is sufficiently overweight to cause health disorders.

Reviewing the status of nutrition work and its possible future course, Dr. Sebrell said nutrition experts have focused their attention in the past on curing specific nutrition-linked diseases, like beri-beri and scurvy, with great success.

Now it is time to concentrate on nutrition problems affecting the over-all health of the people, he said, indicating obesity as one of the foremost of these.

Obesity is associated with diabetes, cirrhosis of the liver, cardiovascular disease, hernia, gall bladder disease, and some forms of cancer and arthritis.

Aside from these immediate health measures, American nutritionists must apply their knowledge to wider fields, Dr. Sebrell pointed out.

The food problems of other countries directly affect our own safety and wellbeing. In many regions of the world, inadequate diet has left the people weak, disease-ridden and poverty-stricken, he said. This situation is of the greatest economic, social and political significance to us.

In these areas food technologists must apply direct remedies for critical diseases like beri-beri, Dr. Sebrell said, and find ways and means to relieve the long-term food situation, such as improving crops and farming techniques.

These are not merely considerations for the distant future, Dr. Sebrell said. They are critical world nutritional problems and confront us now.

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