



☼ \* ○ ● SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

quarter, rising at midnight and interfering with the meteors which are most numerous in the early morning hours, the display this year will not be especially good.

August also brings two eclipses, though neither will be visible in this part of the world. On Aug. 5, the moon is partially eclipsed, as seen from Europe, Asia, Africa and Australia.

Aug. 20 brings an annular eclipse of the sun. Such an eclipse is one where the moon does not completely cover the sun, but even at maximum leaves a ring of that orb visible around it.

This effect will be seen along a path crossing South America from Peru, to the southeast through Bolivia, Paraguay, Brazil and Argentina. All of South America, Central America and a little of Antarctica will see the moon partially eclipse the sun.

**Celestial Timetable for August**

Aug.	EST	
5	2:40 p.m.	Full moon; partial lunar eclipse visible in eastern hemisphere.
	3:00 p.m.	Moon nearest, distance 221,900 miles.
12	early a.m.	Perseid meteors.
	8:27 a.m.	Moon in last quarter.
	11:44 a.m.	Moon passes Jupiter.
	1:00 p.m.	Mercury in direction of sun.
19	6:00 a.m.	Moon farthest, distance 252,500 miles.
20	10:20 a.m.	New moon, annular eclipse of sun, visible in South America.
22	12:58 a.m.	Moon passes Venus.
24	9:38 a.m.	Moon passes Saturn.
27	11:35 p.m.	Moon passes Mars.
28	7:03 a.m.	Moon in first quarter.

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

Science News Letter, July 26, 1952

AGRICULTURE

**Buried Block Reveals Moisture Content of Soil**

➤ FARMERS AND fruit growers who must depend upon irrigation for successful crop yields soon may have a new tool at their disposal.

It is a block, either plaster of Paris or nylon, through which electricity is made to flow. Buried in the ground, it tells whether the land needs more water.

In describing the new device to the colloid symposium of the American Chemical Society in Los Angeles, Dr. George J. Bouyoucos, research professor of soil science at Michigan State College, East Lansing, said that irrigation water is scarce and expensive in many places.

"This method," he added, "has revealed that the same yield of crops can be obtained with considerably less irrigation water, bringing about large savings."

Science News Letter, July 26, 1952

HOME ECONOMICS

**Scientific Jelly Making**

➤ IF YOU are one of those ambitious housewives who likes to make her own jelly, you can do it with less trouble and disappointment than your grandmother had. You can buy the pectin needed to make jelly jell, instead of depending on the uncertain amount in the fruit itself.

Sugar, acid and pectin are three musts for jelly making. All three are present in fruits, but to varying degree. The riper fruit becomes, the less pectin it contains. That is why grandmother used fruits when they were a little underripe for her jelly making. This custom, however, sacrificed some flavor. As fruits ripen some of their natural acids are changed into what are technically termed esters. These compounds give scent and flavor to the fruits.

If you look over grandmother's recipes for jellies, you may find that she added two or three lemons. This was because the citrus fruits are high in pectin content and also in acid, needed to make the pectin set. You may find also that she frequently combined fruits in one jelly, for example, apple and plum, or quince and plum. This was

to take advantage of the larger amount of pectin furnished by the apple and quince.

The acid, sugar and pectin must be used in the right proportions to make the jelly set. One tested recipe from home economists calls for three cups of blackberry juice, four cups of sugar and 1 box of powdered fruit pectin. The rest of this recipe for spiced ripe blackberry jelly follows:

To prepare the juice: Crush thoroughly about 2 quarts fully ripe blackberries (not black caps). Place in jelly cloth or bag and squeeze out juice. Measure 3 cups into large saucepan. Add ½ to 1 teaspoon each cinnamon, cloves, and all-spice or any desired combination of spices.

To make the jelly: Measure sugar and set aside. Place saucepan holding juice over high heat. Add powdered fruit pectin and stir until mixture comes to a hard boil. At once stir in sugar. Bring to a full rolling boil and boil hard ½ minute, stirring constantly. Remove from heat, skim, pour quickly into glasses. Paraffin at once. Makes about eight six-ounce glasses.

Science News Letter, July 26, 1952

**Basic Books on**

**INTERLINGUA**

**The new international language**

**Get the grammar and dictionary which will allow you to study this simple language, used in the new international edition of Science News Letter, Scientia International.**

**Interlingua-English Dictionary of the International Language**  
\$5 postpaid

**Interlingua Grammar of the International Language**  
\$3.50 postpaid

**These are the standard books on this new tool for international understanding. Both bound in substantial buckram.**

**Postpaid if ordered from**  
**Retail Book Department**  
**SCIENCE NEWS LETTER**  
**1719 N St., N.W.**  
**Washington 6, D. C.**

