



\* \* ◦ • SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

# orion shines in the southeast

James Stokley

The brilliant display of stars that winter evenings bring is coming into view in December. This year a bright planet adds to the show.

Both appear on the accompanying maps, which depict the sky as it looks about 10:00 p.m., local time, on Dec. 1. The appearance is similar an hour earlier at the middle of the month and two hours earlier at the end.

Orion stands in the southeast. Supposedly representing a warrior, three stars in a row form his belt. Betelgeuse, above and left, is in one shoulder; Rigel, right and lower, is in one upraised knee. At least that's the way it was pictured on the old star maps.

**Below Orion** shines Canis Major, the great dog, with Sirius. Quite close, astronomically speaking, it looks bright-

er than any other nighttime star. At this time of year it is so low that the atmosphere absorbs much of its light.

Canis Minor, the lesser dog, is a little higher and to the left. Here you see the star called Procyon. And above Orion stands Taurus, the bull. Red Aldebaran marks the animal's eye.

Gemini, the twins, east of Orion, is shown partly on each map. Brightest stars in this group are Castor and Pollux. Above Gemini is Auriga, the charioteer, with the bright star Capella.

To the southwest, in Pisces, the fishes, is the planet Saturn. At about the same brightness as Aldebaran, it shines with a steady light.

**Also prominent** on December evenings, although they contain no first magnitude stars, are several other constellations. Pegasus, the winged horse, is high in the west. You can easily

locate it by the four stars that form the "Great Square," which is resting on one corner. Actually Alpheratz, the uppermost star in the square, is in neighboring Andromeda.

Overhead is Perseus, the hero who rescued her. Here shines Algol, famous eclipsing variable star. Every two days, 21 hours, it dims to a third its normal brightness as a faint companion moves in front of the brighter star.

## CELESTIAL TIMETABLE FOR DECEMBER

| Dec. | EST        |                                                          |
|------|------------|----------------------------------------------------------|
| 1    | 11:10 a.m. | New moon                                                 |
|      | 9:10 p.m.  | Algol (variable star in Perseus) at minimum brightness   |
| 4    | 6:00 p.m.  | Algol at minimum                                         |
| 5    | 3:00 a.m.  | Moon passes south of Mars                                |
| 8    | 12:58 p.m. | Moon in first quarter                                    |
| 10   | 5:00 a.m.  | Moon north of Saturn                                     |
| 12   | 1:00 p.m.  | Moon farthest, distance 251,900 miles                    |
| 16   | 6:22 p.m.  | Full moon                                                |
| 19   | 2:00 a.m.  | Algol at minimum                                         |
| 22   | 6:00 a.m.  | Moon north of Jupiter                                    |
|      | 8:17 a.m.  | Sun farthest south, winter begins in Northern Hemisphere |
| 24   | 5:48 a.m.  | Moon in last quarter                                     |
|      | 7:40 p.m.  | Algol at minimum                                         |
| 27   | midnight   | Moon south of Venus                                      |
| 28   | 2:00 p.m.  | Moon nearest, distance 226,100 miles                     |
|      | 6:00 p.m.  | Mercury behind sun                                       |
| 30   | 10:39 p.m. | New moon                                                 |



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