

# SCOPE On the skies

Mythology in the sky  
brings light to Algol  
and Andromeda.



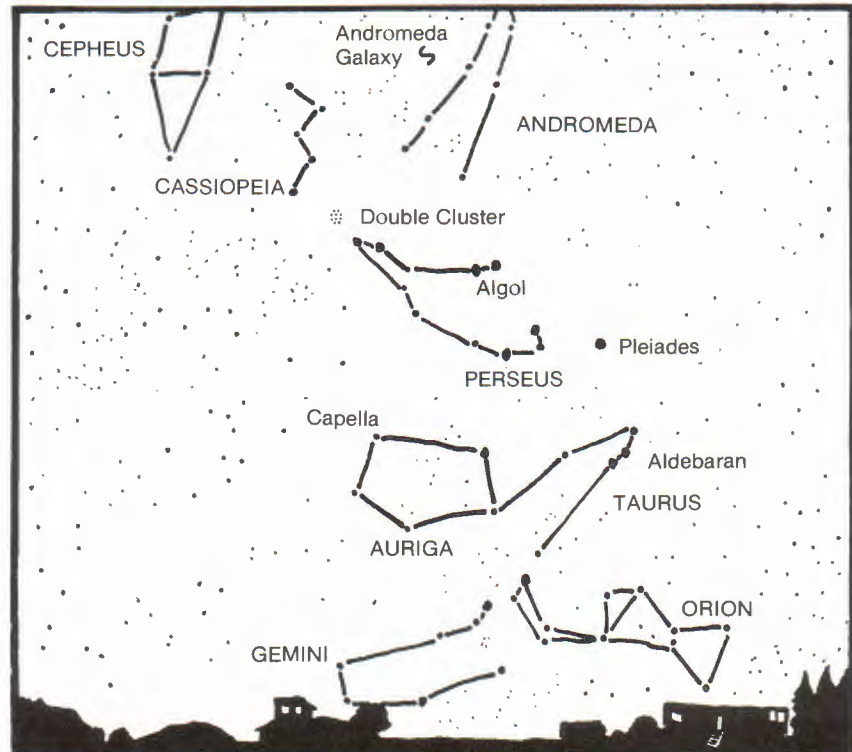
Appearing over the northeastern horizon during November are nearly all of the characters from a myth about love, vanity, and heroism. The myth describes the attempted sacrifice of Princess Andromeda by her parents, Cassiopeia and Cepheus, the queen and king of Ethiopia. The hero of the story, Perseus, arrived just in time to save the princess from a horrible sea monster.

## Stopping Cetus

Cassiopeia, a beautiful but terribly vain queen, angered Neptune, Ruler of the Seas, with her boasting. Neptune thereupon ordered the sea monster Cetus to harass sailors and wreak havoc upon coastal villages and crops.

Cepheus, the king of Ethiopia, unlike his wife, was greatly concerned about this situation and sought advice. The solution was to sacrifice something of value and beauty. Princess Andromeda was chosen as the sacrificial offering that would appease Neptune's anger and remove the sea monster. Although Cepheus was very upset with the decision, he had no choice and led his daughter down to the coast where he left her chained to a rock outcropping to await the monster's appearance.

Fortunately, at about the moment the sea monster appeared, the hero Perseus also arrived, riding the winged horse Pegasus. Perseus had just completed the grim task of killing Medusa, one of the Gorgon sisters. Medusa, like her sisters, was a horrible sight to behold, and a glance at her face instantly turned her onlooker to stone. Acting quickly, Per-



LOOKING NORTHEAST ABOUT 9 P.M. ON NOVEMBER 15

seus pulled the head of Medusa out from a leather bag, just long enough for Cetus to see. The sea monster instantly turned into a large mass of rock. As a reward for his heroism, Perseus won Andromeda's hand in marriage. Cassiopeia learned her lesson and never again boasted about her beauty.

## Perseus plus

The constellation Perseus can be located in the November skies about midway between the northeastern horizon and the zenith (straight overhead). He appears as two curved lines of stars joined together near Cassiopeia. Between the juncture of these two lines of stars and the stars of Cassiopeia is a pair of star clusters known as the Double Cluster of Perseus. While visible with binoculars, this pair is best seen through telescopes at low power. Another, more familiar cluster of stars, near the foot of Perseus, is the Pleiades, or the Seven Sisters.

## Medusa and Andromeda

The head of Medusa is also included in the star pattern of Perseus, and is the star Algol from the Arabic *Ra's al Ghol*—the Demon's Head, or the Blinking Demon. Early observers of this star noted that it noticeably brightened and then dimmed, over a very short period of time, thus giving rise to its description as a blinking demon. Algol is known to be an eclipsing binary system, in which one star orbits another in about 60 hours. We view Algol and its companion edge on (in the same orbital plane) from the Earth, and for about ten hours, as Algol's companion eclipses it, it dims about two or three times and then brightens again.

Between Cassiopeia and Andromeda lies one of the more spectacular objects for viewing. This is the Great Andromeda Galaxy, a collection of several hundred billion stars arranged in a spiral shape, 2.5 million light-years away. (One light-year is about six trillion miles.) At

Art by Alice Faith Dole

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a distance of about 150 quadrillion miles, the Andromeda Galaxy, which appears as a white smudge in the sky, is the most distant object that can be seen with the unaided eye—city dwellers might want to consult the star chart and use binoculars to search for the galaxy. Binoculars, or any size telescope, will reveal details of the spiral structure.



## Evening planets

**Mercury:** Just barely visible about an hour after sunset very low over the southwestern horizon.

**Saturn:** Visible over the southern horizon at sunset, sets about four hours later.

**Uranus and Neptune:** Low, over the southern horizon, west of Saturn, and set about 2.5 hours after sunset. (Watch on the evening of November 10 for the crescent moon to be just below Uranus and Neptune. On November 12 the crescent moon will be just above Saturn.)

## Moon phases

New Moon - November 6

First Quarter - November 14

Full Moon - November 21

Third Quarter - November 28

**Bob Riddle** is the planetarium director for the Kansas City School District, at Southwest Magnet Math & Science High School.

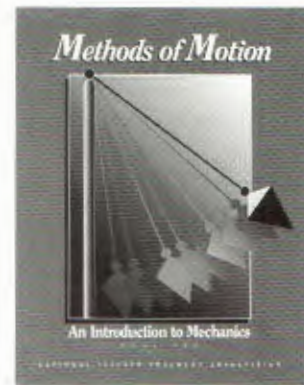
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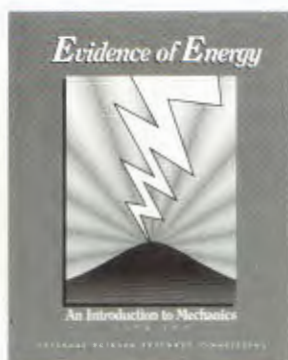
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