

Exploring Capricornus and Aquarius - Educator's Guide (Ages 8-11)



At the end of these Night Sky activities students will understand:

- Fall (autumn) is the best time of year to view Capricornus and Aquarius
- The Helix Nebula is found in Aquarius, while Messier 30 lies in Capricornus
- Both constellations lie near other water-themed constellations
- Capricornus and Aquarius are zodiac constellations as the Ecliptic passes through them

Astronomy background information


Capricornus is the smallest of the twelve Zodiac constellations. It represents a “sea goat”, a mythical beast dating from a time when land animals were thought to have ocean-dwelling counterparts.

Apart from its stars, Capricornus is home to Messier 30, a globular cluster first recorded by Charles Messier (1730 – 1817) himself in 1765. Like all globular clusters, Messier 30 is a mass of hundreds of thousands of stars squeezed into a tight ball. Located about 27,000 light-years from us, Messier 30 appears in telescopes as a fuzzy little blob.

Aquarius (the Water Carrier) is the 10th largest constellation in the sky, but lacks bright stars. In ancient Greece it was said to be Ganymede, the youth who served drinks to the gods. The best-known object in Aquarius is the beautiful Helix Nebula (NGC 7293), a planetary nebula about 650 light-years away. NGC means the nebula was included in the New General Catalogue of Nebulae and Clusters of Stars published in 1888 by Danish-born astronomer John Louis Emil Dreyer (1852 – 1926).

Capricornus and Aquarius lie in a “watery” part of the sky which they share with the constellations of Eridanus (the River), Cetus (the Whale), Pisces (the Fish), Delphinus (the Dolphin) and Pisces Austrinis (the Southern Fish).

Night Sky App Essential Settings

Go to Night Sky Settings  and make sure the following Preferences are set.

Turn On these Effects:

Real Sky Representation
Environment Based Horizon
Show Constellation Lines
Show Glass Mythology
Stop Text and Lines Disappearing
Enable Messier Objects
Show Ecliptic Line

Turn Off these Effects:

Show Satellites
Show Trajectories and Orbits

Accessible Learning:

- Text size can be increased in the Preferences section
- Star numbers can be reduced by sliding two fingers down the screen

