Exploring Gemini and Cancer - Educator's Guide (Ages 8-11)

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

- Gemini and Cancer are northern hemisphere winter constellations
- Castor and Pollux are the two brightest stars in Gemini
- Pollux possesses an extrasolar planet
- The Beehive Cluster in Cancer is a prominent open cluster

Astronomy background information

Gemini is the constellation of the Twins from ancient Greek myth. Castor and Pollux were the twin sons of the god Zeus and the mortal queen Leda. The twins grew up to be great adventures who sailed with Jason to find the Golden Fleece. Castor and Pollux have given their names to the two brightest stars in the constellation. They look very similar but Pollux is slightly brighter than Castor.

Pollux is just 34 light-years away, so is a near neighbour of the Sun. Pollux is circled by a giant planet called Thestias which is twice as large as Jupiter. Through a small telescope Castor appears to be a double star but is actually the largest in a system of six stars.

The dim constellation of Cancer represents the crab from Greek legend that distracted Hercules as he battled the Hydra. Its major feature is Messier 44, an open star cluster about 600 light-years away from us. This is a group of about 1,000 young stars which formed together relatively recently. Messier 44 has long been known as the Beehive Cluster but has also been called Praesepe (Latin for “Manger”) since ancient times.

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
Stop Text and Lines Disappearing
Show Messier Objects

Turn Off these Effects:
Show Satellites
Show Trajectories and Orbits
Show Glass Mythology

Accessible Learning:

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