# Exploring Leo - Educator's Guide (Ages 8-11)

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

- Leo represents a lion from Greek myth
- Regulus is the brightest star in Leo
- Regulus is a star with a non-spherical shape
- Messier 44 is a cluster of stars near Leo

## **Astronomy background information**

Leo (the Lion) is one of the 88 constellations. People have seen a lion traced out in the stars for thousands of years. To Greek stargazers this constellation represented the Nemean Lion, a beast wrestled to death by the legendary hero Hercules. It has been suggested that Leo might also represent the Great Sphinx.

Leo's brightest star is bluish Regulus (also known as Alpha Leonis). The name Regulus means "Little King" and this name reflects how Regulus seems to rule its part of the sky. Regulus is about 80 light-years from the Sun. Regulus is a very large and bright star which spins around on its axis very rapidly. It whirls around so quickly that its shape has distorted from spherical to a very oblate spheroid shape (like a thick discus or M&M candy).

Leo seems to looks towards Messier 44, an open star cluster about 600 lightyears away from us. An open cluster is a group of young stars which formed together relatively recently. There are about 1000 stars in Messier 44 which is known as the Beehive Cluster. The Beehive is located in the middle of Leo's neighboring constellation Cancer.

### **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
Enable Messier Objects

Turn Off these Effects:
Show Satellites
Daytime Effect
Show Trajectories and Orbits
Show Ecliptic Line
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

