

Zodiac constellations 13: Leo



The prominent constellation of 'the lion' is the 12th largest of the 88 modern constellations. Located between Cancer and Virgo, it is easy to recognise as its outline resembles a crouching lion. From the southern hemisphere, Leo appears upside down.

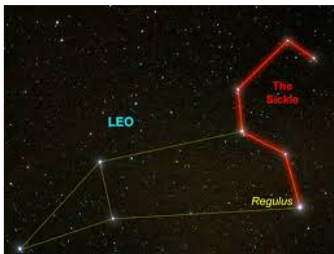
It is one of earliest recognised constellations. Records date back to ca 4,000 BCE in archaeological evidence found in Mesopotamia. In all early cultures, the names used meant 'lion'. In Greek mythology it represents Nemean, the lion with an impenetrable hide who was slain by Heracles (Hercules in Roman mythology). He did so by breaking the lion's back, in the first of his twelve labours. Zeus marked this achievement by placing the lion in the sky.

The present Coma Berenices was formerly the tuft of the lion before being created a separate constellation by Tycho Brahe (1602). The Sun passes through Leo from mid-August to late-Sept (5 weeks).

Leo contains many bright stars, many of which were identified in ancient times. Four of these are magnitude 1 or 2. It also contains some of the largest structures in visible universe including several large quasar groups and five Messier objects.

Notable features include:

- Alpha Leonis (Regulus - 'little king'): a naked eye magnitude 1.36 blue-white main sequence star. 79 ly away, it has a faint wide companion dwarf star.
- Beta Leonis (Denbola - 'lion's tail'): marking the lower rear point of the lion, this blue-white star is 36 ly away.



- The Sickle: an asterism of six stars marking the lion's head and shoulders in the shape of a question mark.



- M65 and M66: a pair of spiral galaxies located beneath the lion's hindquarters. Tilted at steep angles from Earth, the appearing elongated when viewed through a telescope.

- M95 and M96: a fainter pair of spiral galaxies, these are also found beneath the crouching lion, but closer to the front of the body. 20 million ly away, they can be observed through a telescope.
- M105: near M95 and M96, this elliptical galaxy is 20 million ly away. Observation also needs a telescope.
- Leonid meteor shower: this radiates from the Sickle area in mid- to late-November. The meteors have the highest geocentric velocities and the most persistent trains of

any meteor stream. The parent comet is Temple-Tuttle, named for its two independent discoverers, in 1865 and 1866. Activity is mostly weak, except during occasional meteor storms which occur at perihelion every 33 years.

- Wolf 359: third closest star to Sun. This red dwarf is 7.8 ly away from Earth.

Sources: Ridpath, I (Ed) 2012 Oxford dictionary of astronomy Oxford, OUP, Ridpath, I (Ed) 2006 Astronomy London, Dorling Kindersley, en.wikipedia.org