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

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

- Virgo is best viewed in springtime in the northern hemisphere
- As Virgo is a Zodiac constellation the Sun passes through it
- Spica and Vindemiatrix are two bright stars with Latin names
- The constellation lies in a region of the sky which is rich in galaxies

## **Astronomy background information**

Virgo (the Maiden) is one of the twelve Zodiac constellations and the second largest of the 88 constellations. It is an ancient constellation associated with goddesses from multiple cultures. Although Virgo does not have a firm identity she is always shown as holding a sheaf of wheat in one arm.

The brightest star of Virgo is blue-white Spica meaning (the "Ear of Wheat"). Spica is actually a double star system of two blue giant stars about 250 light-years from the Sun. The third brightest star is Vindemiatrix, a red giant star about 110 light-years away. Vindemiatrix means the "Grape Harvester" as traditionally the first rising of this star each year marked the start of a new wine vintage.

When you look towards Virgo you are looking out of our own galaxy, the Milky Way, towards a cluster of more than 1000 galaxies known as the Virgo Cluster. This is only the central part of the Virgo Supercluster. This massive structure is comprised of at least 100 clusters of thousands of galaxies held together by gravity. Each galaxy might contain hundreds of millions of stars. The famous Sombrero Galaxy (Messier 104) is located near Spica although is not part of the Virgo Cluster.

### **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

