

## Introduction to the Constellations

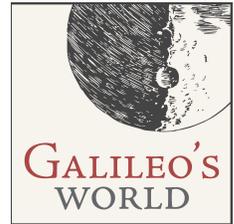


EXHIBIT: *Galileo's World*  
GALLERY: Controversy over the Comets; Music of the Spheres  
The Sky at Night; Space Science after Galileo  
OBJECT: *Urania's Mirror* (London 1825), a boxed set of 32 cards; with  
Jehoshaphat Aspin, *A Familiar Treatise on Astronomy*  
(London 1825), 2d ed., or any celestial atlas.

### **Q. What is the difference between star patterns and constellation figures?**

A. The star patterns are the configuration of the stars in the sky; the constellation figures are the imaginary pictures that help us identify the stars.

### **Q. Do the star-patterns of constellations resemble the figures they are named for?**

A. No. The stars are named and grouped into recognizable clusters or constellation figures as an aid to memory. Constellation patterns are arbitrarily imposed upon the stars in honor of particular characters or stories, not because the pattern resembles the character in form.

*Example:* Only the most imaginative can see a bear in the area of the Big Dipper. There are many star-patterns that look like dippers, triangles, or squares in the sky. There are very few that actually resemble bears or people. Yet constellations were named to honor particular figures in ancient stories, not because the star pattern actually looked like the figure being honored. It took imagination to invent them a long time ago, and it takes imagination to see them now. The “handles” of the dippers represent the “tails” of the bears on ancient star maps--even though modern bears don't have long tails! The Big Bear was regarded as a bear before Homer, and an ancient Greek story explains why the Big and Little Bears have such long tails.

### **Q. How many constellations are there?**

A. As many as you wish to learn! 88 constellations are officially recognized today, and many of these are of ancient origin. Others, especially in the southern hemisphere, date from more recent times. But every culture tells stories about the sky, and passes its skylore down from generation to generation with many constellation figures.

### **Q. What is the difference between a constellation and an asterism?**

A. An asterism is a star-pattern that is not a constellation. Asterisms may be contained within a single constellation or consist of stars belonging to different constellations. The **Big and Little Dippers** are asterisms within the constellations of Ursus Major and Ursus Minor. The **Summer Triangle** and **Winter Hexagon** are asterisms that include stars from several constellations.