



Constellations

TABLE: The Constellations

The Latin names and meanings of the official 88 constellations are given below. The original 48 constellations of Ptolemy are indicated with an asterisk*. Ptolemy's constellation Argo the Boat was later divided into three parts (Carina, Puppis, and Vela, which are noted).

Latin Name	Meaning	Latin Name	Meaning	Latin Name	Meaning
Andromeda*	Daughter of Cassiopeia	Cygnus*	The Swan	Pavo	The Peacock
Antlia	The Air Pump	Delphinus*	The Dolphin	Pegasus*	The Winged Horse
Apus	Bird of Paradise	Dorado	The Swordfish	Perseus*	Rescuer of Andromeda
Aquarius*	The Water-Bearer	Draco*	The Dragon	Phoenix	The Phoenix
Aquila*	The Eagle	Equuleus*	The Little Horse	Pictor	The Painter
Ara*	The Altar	Eridanus*	The River	Pisces*	The Fishes
Aries*	The Ram	Fornax	The Furnace	Piscis Austrinus*	The Southern

					Fish
Auriga*	The Charioteer	Gemini*	The Twins	Puppis*	The Stern (of Argo)
Boötes*	The Herdsman	Grus	The Crane (bird)	Pyxis	The Compass
Caelum	The Chisel	Hercules*	The Son of Zeus	Reticulum	The Reticle
Camelopardalis	The Giraffe	Horologium	The Clock	Sagitta*	The Arrow
Cancer*	The Crab	Hydra*	The Water Snake (female)	Sagittarius*	The Archer
Canes Venatici	The Hunting Dogs	Hydrus	The Water Snake (male)	Scorpius*	The Scorpion
Canis Major*	The Big Dog	Indus	The Indian (American)	Sculptor	The Sculptor
Canis Minor*	The Little Dog	Lacerta	The Lizard	Scutum	The Shield
Capricornus*	The Goat	Leo*	The Lion	Serpens*	The Serpent
Carina*	The Keel (of Argo)	Leo Minor	The Little Lion	Sextans	The Sextant
Cassiopeia*	The Queen	Lepus*	The Hare	Taurus*	The Bull
Centaurus*	The	Libra*	The	Telescopium	The

	Centaur		Balance	m	Telescope
Cepheus*	The King	Lupus	The Wolf	Triangulum*	The Triangle
Cetus*	The Whale	Lynx*	The Lynx	Triangulum Australe	The Southern Triangle
Chamaeleon	The Chameleon	Lyra*	The Lyre	Tucana	The Toucan
Circinus	The Compasses	Mensa	The Table	Ursa Major*	The Great Bear
Columba	The Dove	Microscopium	The Microscope	Ursa Minor*	The Little Bear
Coma Berenices	Berenice's Hair	Monoceros	The Unicorn	Vela*	The Sails (of Argo)
Corona Australis*	The Southern Crown	Musca	The Fly	Virgo*	The Maiden
Corona Borealis*	The Northern Crown	Norma	The Square	Volans	The Flying Fish
Corvus*	The Crow	Octans	The Octant	Vulpecula	The Fox
Crater*	The Cup	Ophiuchus*	The Serpent-Bearer		
Crux	The Cross	Orion*	The Hunter		

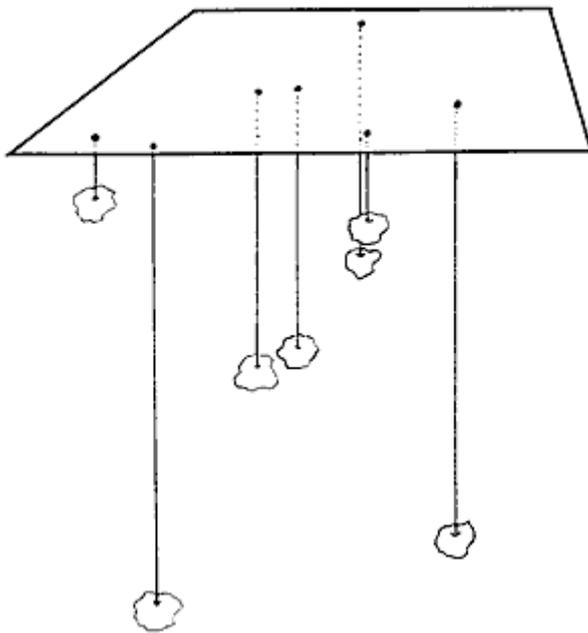
Activity Corner: Three-Dimensional Orion

by Sally Stephens, ASP Education Coordinator

Orion, the Hunter, is one of the few constellations that looks like what it is supposed to be (see picture). It is not hard to envision a hunter holding a shield and a sword, defending himself against a charging Taurus the Bull. But the stars that make up Orion lie at very different distances from the Sun. Their resemblance to a human figure is a chance alignment. Viewed from another angle, they would not look anything like a hunter. To illustrate this, we can make a three-dimensional model of Orion's stars in space.

Materials:

Large sturdy piece of cardboard (15" by 12")
Ruler
7 cotton balls
String
Glue or tape
Pin or scissors (to make holes)



Instructions:

Tie string around each cotton ball (which represents a star), leaving at least 20 inches of string trailing off from the cotton ball. Place cardboard so that the long side is facing you. That side will be called the "front". For each star, measure as far along the front edge from the right hand corner as indicated by the number in the column marked "Measurement from Right". Then, measure back along a line perpendicular to that edge, a distance equal to that in the column marked "Measurement from Front", and make a hole in the cardboard with a pin or the tip of a scissors at that point. Thread one string through the hole so that the cotton ball hangs down under the cardboard the same distance as in the column marked "Length of String". Tape or glue the string to the top of the cardboard so that the "star" will not move. When all the stars have been put in their place in space, hold the cardboard up so that the "front" is again facing you. You will see the stars of

Orion in their familiar pattern. Turning the cardboard will show the positions of the stars in space relative to one another. Also, note that the stars only look like a hunter when viewed from certain perspectives.

Name of Star	Measurement from Right	Measurement from Front	Length of String
Betelgeuse	13 3/4"	1 7/16"	1 15/16"
Rigel	3 3/4"	4 7/16"	13 5/8"
Bellatrix	6 1/4"	1 5/8"	2 3/4"
Mintaka	8"	10 13/16"	7 3/4"
Alnilam	9"	5 9/16"	8 3/8"
Alnitak	10 1/4"	5 1/8"	8 15/16"
Saiph	12"	5/16"	14 3/4"

Other Constellation Activities

Given a star chart without constellation figures marked on it (whether real star charts or made-up star patterns), students can invent their own constellations, looking for patterns in the stars that appeal to them. Students can then be asked to make up stories to go with their new constellations.

Older students can research the constellation patterns and stories that other cultures saw in the night sky and compare them to the more familiar Greek ones. This can be done by reading books and articles, or by interviewing family members or friends.

Maps of the stars in the constellations can be useful in the classroom. Slide sets, such as [Star Maps](#) (a [sample](#) of which is on the previous page) which show actual pictures of each constellation in the night sky and separate line drawings of the constellation figures, can help students identify the constellations as part of homework assignments or evening "star parties." This can be especially helpful for students without easy access to a planetarium.

For Further information about Constellations:

- Allen, R. *Star Names: Their Lore and Meaning*. 1899, 1965, Dover Books reprint.
- Krupp, E. *Beyond the Blue Horizon: Myths and Legends of the Sun, Moon, Stars and Planets*. 1991, Harper Collins.

- Proctor, P. *Star Myths and Stories*. 1972, Exposition Press.
- Ridpath, I. *Star Tales*. 1988, Universe Books.

Especially for Younger Children:

- Rey, H. A. *Find the Constellations*. 1976, Houghton-Mifflin. A classic guide with simplified diagrams and text.
- Schatz, D. *Astronomy Activity Book*. 1991, Simon and Schuster. Wonderful book of astronomy activities for the whole family or elementary and middle schools.