

7 Constellation Questions and Answers



Get the discussion started with these seven questions about stars in our Milky Way galaxy. We've provided the answers!

1. WHAT IS A STAR?

Stars are formed from clusters of gas (mostly hydrogen and helium) and dust, which give off heat and light from the churning nuclear forges inside their cores.

2. WHY ARE SOME STARS DIFFERENT COLORS?

The different colors of stars indicate how much heat a star gives off. **Red stars** are the coolest of the stars. **Yellow stars**, like our sun, are medium-heat stars. **White and blue stars** are the hottest.

3. HOW LARGE IS OUR SUN?

The diameter of the sun is about 864,938 miles. You could line up 109 earths—each with a diameter of 7,917.5 miles—across the face of the sun. That's huge! But the sun is just a medium-sized star among the hundreds of billions of stars in the Milky Way galaxy. Every star you see in the night sky is bigger and brighter than our sun.

Our sun is referred to as a "dwarf star," which, in comparison to "giants" and "supergiants," is a very small star. Supergiants may be a thousand times larger than our own sun. The sun appears larger than the rest of the stars only because it is so close to our planet.

4. HOW MANY STARS CAN WE SEE?

On a clear night, and with very good eyesight, a person may only be able to see 2,000 to 2,500 stars at one time, even though it may look like more. Astronomers estimate that in our Milky Way galaxy alone, there are about 300 billion stars.

5. WHAT IS A CONSTELLATION?

Constellations are groups of stars that you can connect like a dot-to-dot puzzle. By connecting these specific imaginary lines, you can see outlines that represent animals, people or objects. Some fun constellations to find are:

Aquila, "the eagle," from Greek mythology. It is the keeper of Zeus' lightning bolts and has the ability to make rain. Aquila can be seen through the glowing band of the Milky Way.

Gemini, which refers to the fraternal twins Pollux and Castor in ancient Greek mythology. The constellation is located in the Geminid meteor shows, which peaks in mid-December.

Pisces, translated as "the fishes." Another ancient Greek constellation, it comes from the story of Aphrodite and her son, Eros. This is the 14th largest constellation today.

Scorpius, "the scorpion," was sent to battle Orion, a hunter in ancient Greek mythology. Scorpius can be seen in the southern summer sky.

6. WHO MADE UP THE CONSTELLATIONS?

Of the 88 constellations recognized today, most originated with the ancient Greeks, although the true "inventors" of constellations are not known. Archaeological studies have found cave paintings in France that might depict astronomical symbols. Some scientists believe the Sumerians (c. 4500–c. 1900 BC) and Babylonians (1895 BC–539 BC) were the originators and passed along their knowledge of constellations to the ancient Greeks (700–480 BC).

7. WHAT ARE CONSTELLATIONS USED FOR?

Constellations have served many different purposes throughout the years. Because they appear in the sky at specific locations during different times of the year, constellations have been used to:

Remind farmers to plant and harvest crops.

Help travelers navigate through deserts and across oceans.

Used to represent heroes and mythical creatures that have been the subjects of folk tales down through the generations.