

Constellation Discovery Series:

URSA MAJOR

Translation: The large or great bear.

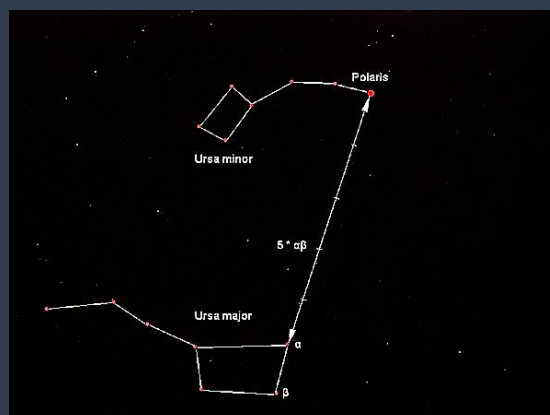
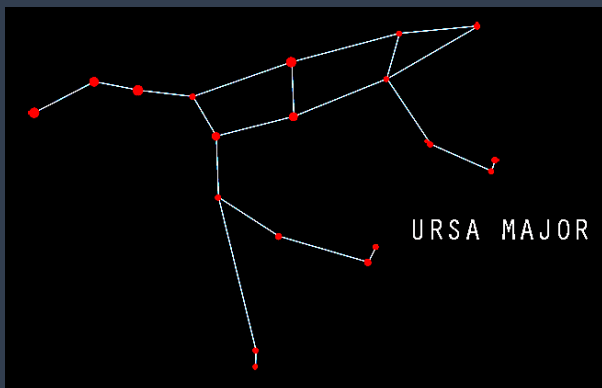
Visibility:

- Ursa Major is the third largest constellation and one of the brightest. Most of the constellation can be seen throughout most of the year, in most of the northern hemisphere. It is hard to see the rest of the bear, especially from light-polluted cities.

Additional Facts:

- The constellation of Ursa Major has been recognized as a bear, by many distinct civilizations.
- More commonly known as its asterism (a star pattern that makes up part of a constellation or that includes stars from more than one constellation) the Big Dipper.
- The two stars which form the outer bowl of the Big Dipper point towards the North Star, Polaris, which can be found as a part of another constellation, the Little Dipper.

Examples:



URSA MINOR

Translation: The little or lesser bear.

Visibility: It is easy to recognize because it contains the famous Little Dipper asterism.

Additional Facts:

- Ursa Minor is also notable for marking the location of the north celestial pole, as it is home to Polaris, the North Star, which is located at the end of the dipper's handle.
- Because the Earth's axis is precessing (similar to how a spinning top wobbles around), Polaris is only temporarily at the North Pole. In about 14,000 years, Vega will be the North Star and another 14,000 years after that, it will be Polaris again.
- Precession is caused by the gravitational attraction of the Sun and the Moon. It only happens because the Earth is not quite spherical.

Examples:



Myths:

One Roman myth involves both bears, Ursa Major and Ursa Minor.

A beautiful maiden, Callisto, hunting in the forest, grew tired and laid down to rest. The god Jupiter noticed her, and was smitten with her beauty. He woke her and fell in love with her. Jupiter's wife, Juno, became extremely angry with Callisto. Sometime later, Juno discovered that Callisto had given birth to a son and decided that Jupiter must have been the father.

To punish her, Juno changed Callisto into a bear so she would no longer be beautiful. Callisto's son, Arcas, was adopted and grew up to be a hunter. While Callisto continued to live in the forest.

One day Callisto saw Arcas and was so overjoyed at seeing her son that she rushed up to him, forgetting she was a bear. Arcas thought he was being attacked and shot an arrow at Callisto. Jupiter saw the arrow and stopped it from hitting Callisto.

To save Callisto and her son from further damage from Juno, Jupiter changed Arcas into a bear also, grabbed them both by their tails, and swung them both into the heavens so they could live peacefully among the stars. The strength of the throw caused the short stubby tails of the bears to become elongated.

Juno was even angrier with Jupiter and managed to exact still more revenge on poor Callisto and Arcas. She went to the gods of the sea and forbade them to let the two bears wade in their water or streams on their long and endless journey around the pole star.