

10 Mizar in the constellation Ursa Major (the Big Dipper)

Distance

83 light years

Luminosity

33 times that of the sun

Colour

Brilliant white

Surface temperature

9,000 K

Diameter

2.4 times the diameter of the sun

(To Planet Trail scale: 3.4 m)

Mass

4.5 solar masses

Evening visibility

All year round

Mizar is the middle star in the handle of the Big Dipper (also known as the Plough). The star Alcor can be seen close by with the naked eye. Together the two are also known as the Horse and Rider. If your eyesight is good enough, you might be able to recognise Mizar and Alcor as two separate stars. Alcor is 82 light years away from us. It isn't yet clear whether it is gravitationally bound to Mizar or whether the two stars just happen to be close to each other.

Mizar is itself a binary star, something that becomes evident with a small telescope. The above data refers to the star Mizar A. Recent observations show that Mizar A and Mizar B themselves are multiple stars.

Ursa Major is relatively close to Polaris and therefore always remains above the horizon and is visible all year round. The Big Dipper (or Plough) is a prominent feature of the constellation Ursa Major. It can be used as a waymarker in the night sky. Extending the handle arc line leads to Arcturus, while the two outermost stars of the Big Dipper's bowl point towards Polaris.

Other bright stars in the constellation Ursa Major:

Alioth	Distance:	81 light years
Dubhe	Distance:	124 light years
Alkaid	Distance:	101 light years
Merak	Distance:	79 light years

10 Constellation Ursa Major (the Big Dipper)

The constellation Ursa Major (which translates from the Greek as the Great Bear), is an extremely striking, large constellation near the celestial pole. The seven bright stars within Ursa Major form the shape of a spoon with a handle and a bowl shape. This is why the constellation is also often referred to as the Big Dipper. It is the most well-known constellation, partly because of its location in a region with few stars and the fact that it is always positioned above the horizon. Ursa Major is surrounded by the constellations Draco, Bootes, Lynx and Camelopardalis. The constellation is depicted by a bear figure with an unusually long tail. The stars of the Big Dipper's handle form the tail. The stars which make up the bowl form part of the bear's body.

Greek mythology tells the following story about the constellation:

According to this version, the bear is Callisto – a lover of Zeus, the king of the gods. Callisto fell pregnant by Zeus and gave birth to a son called Arcas. Hera, the jealous wife of Zeus, turned Callisto into a bear and forced her to roam the forests. At the age of fifteen, Arcas met the bear while hunting. He didn't recognise the bear as his mother and wanted to shoot her. Zeus saved her by placing her in the sky.