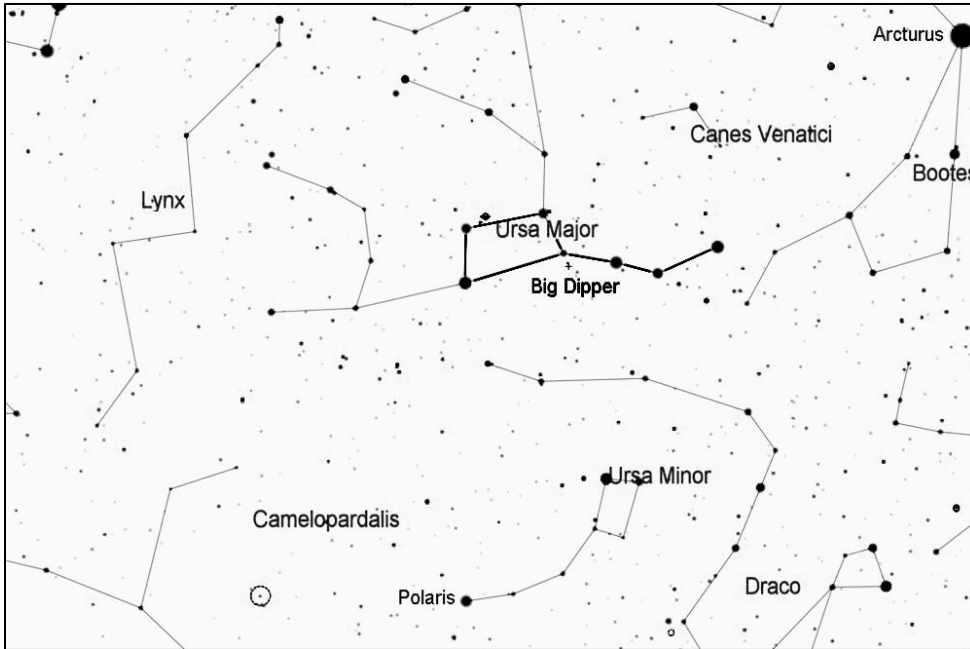


Messier 101, the Pinwheel Galaxy

Messier 101 is a large face-on spiral, filling an area of sky nearly as large as the full Moon. Through a medium-sized telescope, this galaxy appears as a faint circular glow with a bright center. With large scopes, the spiral arms and several bright knots within them can be seen, making this object an impressive sight. This galaxy is about 23 million light years away.



Start by finding the Big Dipper, one of the most recognizable star patterns in the sky. It is part of the constellation Ursa Major, the big bear. It is shown here upside down, high in the sky above Polaris, which is where it can be found during the evenings in spring and summer. For other seasons and times of night, rotate the chart as needed to match what you see in the northern sky.

Note that north is to the bottom in this chart. Find Mizar, the middle star in the handle of the Big Dipper. Using binoculars or a finderscope, you should see a chain of 4 stars to the northeast of Mizar. As shown below, follow this chain to the east (away from the bowl of the Big Dipper), then take a slight right turn and one more step of a similar size. This will bring you to the location of M101, which will appear as a large but dim circular glow through a telescope with a low-power eyepiece.

