

# Finding Polaris - Leader's Guide (Ages 8 -11)



## At the end of these Night Sky activities students will understand:

- The Plough or Big Dipper is a group of seven bright stars in the constellation Ursa Major
- The two Pointer Stars can be used to find Polaris
- Polaris is a star in the constellation Ursa Minor
- Polaris is a special star because it can be used to find north

## Astronomy background information

Polaris, also called the North Star or the Pole Star, is a well-known star because of its position in the sky. Polaris is not the brightest star in the sky so the easiest way to find it is by using two other stars in the distinctive constellation Ursa Major (the Great Bear).

The seven brightest stars in this constellation form a shape called the “Plough” in the U.K and the “Big Dipper” in the U.S. Three of the stars form the handle and the other four make up the blade of the Plough or the cup of the Dipper. On the opposite side of the handle are a pair of stars called Merak and Dubhe. Together they are often called the “Pointer Stars”.

Imagine a line between the Pointer Stars, then continue this line upwards about five times the distance between Merak and Dubhe. The first bright star you will come to is Polaris. It is part of a smaller constellation called Ursa Minor (the Little Bear).

Polaris is almost exactly lined up with the Earth’s North Pole. This means it is always in the same position in the sky and when we look towards Polaris we are looking towards true north. In ancient times Polaris was a vital aid for navigation.

## Night Sky App Essential Settings

Go to Night Sky Settings  and make sure the following Preferences are set.

**Turn On these Effects:**  
Real Sky Representation  
Show Glass Mythology

**Turn Off these Effects:**  
Show Satellites  
Show Ecliptic Line  
Show Constellation Lines  
Stop Text and Lines Disappearing  
Stop Glass Mythology Melting

## Accessible Learning:

- Text size can be increased in the Preferences section
- Star numbers can be reduced by sliding two fingers down the screen

