Little Dipper or Little Bear is located in the constellation Ursa Minor.
The stars Kochab, Pherkab, Eta Ursae Minoris, Zeta Ursae Minoris, Delta Ursae Minoris, 24 Ursae Minoris and Polaris form the asterism.
The most famous star in the asterism is Polaris, the North Star.
Polaris remains in very nearly the same spot in the sky year-round while the other stars circle around it.

Kochab and Pherkad are often referred to as the "Guardians of the Pole" because they appear to march around Polaris like sentries.

Columbus mentioned these stars in the log of his famous journey across the ocean, and many other navigators have found them useful in measuring the hour of the night and their place upon the sea.

Asterism - An asterism is a distinctive pattern of stars or a distinctive group of stars in the sky.

Constellation - A grouping of stars that make an imaginary picture in the sky.
There are 88 constellations.

THE STARS


THE ロBلECTS NEARBY


THE MAIN－THEMES FロR PIAND IN ASTERISM LITTLE DIPPER

LITTLE DIPPER


PロLARIS


Yildun


ETA URSAE MINDRIS


## Pherkad - Kachab



THE MロTIVES FロR PIAND IN ASTERISM LITTLE DIPPER

## பrgaE Mingris

A BAYER / FLAMSTEED INDICATION


## HIP

The Hipparcas and Tycha catalagues (val. 1-17)


## HD

Henry Draper Catalague


HR
HARVARD ロBSERVATロRY－THE BRIGHT STAR CATALロGUE

## TYE

TYCho Mission
The Hipparcos and Tycho Catalqgues（val．1－17）


SAD
SMITHSロNIAN ASTRロPHYSICAL ロBSERVATロRY


## Themes used in Little Dipper

LittLe Dipper

## THEMES பSED IN PロLARIS

PaLARIS
ALPHA URSAE Mingris
1 URSAE MINロRIS
NaRTH STAR
Pale Star
HIP 11767
HD 889ロ
HR 424
TYс 4628－237－1
THEMES USED IN YiLDUN

Yild UN
Hip 85822
VILDIUR
GILDUN
Pherkard
Delta பrsae Minaris
23 URSAE MINロRIS
TYC 4655－1ロ53－1
HR 6789
SAロ 2937
HD 166205

THEMES பSED IN ETA பRSAE MiNaris

Eta Ursae Minaris
21 URSAE Minaris
HIP 79822
TYロ－4567－1764－1

## THEMES USED IN PHERKAD－KロCHAB

## PHERKAD

Kロсhab
GUARDIAN af THE PaLE
HIP 75ロ97
Hip 726ロ7
GAMMA URSAE MINGRIS
Beta UrsaE Minaris
13 URSAE Mingris
7 பrsaE Minaris
TYC 4414－2314－1
TYC 4416－1799－1

